

**AN ACTION PLAN TO INTEGRATE ABORTION CARE WITH HIV AND
FAMILY PLANNING SERVICES IN ETHIOPIA**

By

HAILE BEKELE ADANE

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SUPERVISOR: PROF. L ROETS

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Student number: 64142353

DECLARATION

I declare that **AN ACTION PLAN TO INTEGRATE ABORTION CARE WITH HIV AND FAMILY PLANNING SERVICES IN ETHIOPIA** is my own work and that all resources that I have used or quoted have been indicated and acknowledged by means of complete references and that this work has not been submitted before for any other degree at any other institutions.



SIGNATURE

HAILE BEKELE ADANE

DATE

DEDICATION

This work is dedicated to my wife, Elisabeth Takele, and my lovely children, Dagim Haile, Natan Haile, and Betselot Haile. Thank you very much for your patience, time, sacrifice and encouragement throughout my study.

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STUDENT NUMBER: 64142353

STUDENT: HAILE BEKELE ADANE

DEGREE: DOCTOR OF PHILOSOPHY IN PUBLIC HEALTH

DEPARTMENT: SCHOOL OF PUBLIC HEALTH, UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROFESSOR LIZETH ROETS

ABSTRACT

Integrated health services improve health system efficiency, horizontalization of vertical programmes, and appropriate use of human, financial and medical resources. The integration of maternal health services reduces the risk of unintended pregnancy and the transmission of HIV, especially in a country like Ethiopia, where the prevalence of HIV is high. Thus, delivering integrated abortion care and HIV-family planning (FP) services to clients in a one-stop service can improve maternal health.

The study aimed to develop an action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of the South Nation Nationality and People Region (SNNPR), Ethiopia. An explanatory sequential mixed-method approach was used to undertake the study over three phases. In the first phase, quantitative data were gathered from childbearing-aged women who received abortion care in public healthcare facilities and healthcare providers using face-to-face and self-administered questionnaires, respectively. The analysed data from phase one and a literature review were used to develop the draft action plan, while programme officers participated in the e-Delphi technique in phase three to validate the draft action plan for the integration of abortion care with FP-HIV services in the public health facilities of Ethiopia.

The change logic model was the theoretical framework applied to conduct the study. The inputs of the change logic model in this study included geographic accessibility, human resources, medical resources, infrastructure, fiscal resources, policies,

strategies, and guidelines, and behavioural change and communication. Facilities nearer to the community are preferable for maternal health services. In-service training and offering healthcare providers incentives improve integrated maternal health services. Ensuring a consistent supply of medical resources in public healthcare facilities also enhances the integration of abortion care with HIV-FP services. The availability of adequate service-providing areas, water supply, sanitary systems, electricity, and computer connectivity improves the integration of maternal health services. Allocating a budget and providing the service free of charge can enhance the integration of abortion with HIV-FP services. Availing and utilising regulatory documents and improving the community's awareness on integrated health services can enhance the integration of abortion care with HIV-FP services.

The developed action plan will be shared with stakeholders to implement integrated abortion care-HIV-FP services in public health facilities of Ethiopia.

Keywords: Integration of services, abortion care service, family planning service, HIV service, action plan

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ABBREVIATIONS

AIDS	Acquired Immune Deficiency Syndrome
ANC	Ante Natal Care
ART	Anti-Retroviral Treatment
CBHI	Community-Based Health Insurance
DMPA	Medroxy progesterone acetate
EDHS	Ethiopian demographic and health survey
ETB	Ethiopian Birr
EVA	Electric Vacuum Aspiration
FP	Family Planning
HAPCO	HIV/AIDS Prevention and Control Office
HEP	Health Extension Workers
HIV	Human Immunodeficiency Virus
IUD	Intra Uterine Device
LAM	Locational Amenorrhea
MOH	Ministry of Health
MOU	Memorandums of Understanding
MOYS	Ministry of Youth Service
MVA	Manual Vacuum Aspiration
MVA	Manual Vacuum Aspiration
NGOs	Non-Governmental Organisation
PHCU	Primary Health Care Unit
PLHIV	People living with HIV
PMTCT	Prevention of Mother-to-Child Transmission of HIV
SDGs	Sustainable Development Goals
SNNPR	South Nation Nationality and People Region
SPSS	Statistical Package for Social Sciences Software
STD	Sexually Transmitted Disease
SWOT	Strengths, Weaknesses, Opportunities, and Threats
UNDP	United Nations Development Program
UNFPA	United Nations Population Fund
UNICEF	United Nations Children's Fund

UNISA	University of South Africa
USAID	United States Agency for International Development
USD	United States Dollar
WHO	World Health Organisation

CHAPTER ONE

OVERVIEW OF THE STUDY

1.1 INTRODUCTION

Integrated health service refers to different health services being provided to clients at the same time, at the same facility, but not necessarily by the same healthcare providers (Colombini, Mayhew, Mutemwa, Kivunaga and Ndwiga 2016:2133). Integrating family planning (FP) and HIV services with abortion care services can enable women to have the desired number of children, avoid unwanted pregnancies, prevent sexually transmitted diseases, unsafe abortions and children born with the HIV virus (Nkhoma, Sitali and Zulu 2022:393; Demissie and Mmsi-Phoets 2021:7; Population action international 2012:1). Health service integration therefore contributes to the delivery of comprehensive healthcare that can ultimately improve health outcomes and system efficiencies, and facilitate sustainable development (USAID 2015:1).

Globally, between 2010 to 2014, an estimated 25% of pregnancies annually ended in abortions, and 85% of these occurred in middle and low-income countries. In the same period, the occurrence of abortion reduced from 39% to 28% in the developed world, while there was a rise from 21% to 24% in developing countries (Sedgh, Bearak, Singh, Bankole, Popinchalk, Ganatra, Rossier, Gerdt, Tunçalp, Brooke, Johnson, Johnston and Alkema 2016:6). Among all abortions between 2010 and 2014, an estimated 55% were safe, 31% were less safe, and 14% not safe (Adjei, Asante, Baafi and Letsa 2018:189).

In Ethiopia, the abortion rate was lower than the estimated rate of 34 per 1 000 women in the East Africa region (IPAS 2017:1). However, Ethiopia also had the highest unplanned pregnancy rate of 80 to 86 per 1 000 among women of reproductive age (Mohammed, Musa and Amano 56:2016; Sedgh, Singh and Hussain 2014:306). Unplanned pregnancies that often end in unsafe abortions (Central Statistics Authority and ICF international 2016:103) can be prevented with effective access to FP services, and by providing a one-stop service where abortion care is merged with FP services.

Ultimately, FP, voluntary HIV counselling and testing, as well as screening for sexually transmitted infections are essential for all women receiving abortion care (USAID 2015:6) to increase access and improve the quality of health care (Rutaremwā and Kabagenyi 2016:2; Manski, Dennis, Blanchard, Lince and Grossman 2012:2). Therefore, the need arose to develop an action plan to integrate abortion care with the existing HIV-FP service in public health facilities of Ethiopia.

1.2 BACKGROUND TO THE RESEARCH

Integrated health care is important in modern health systems as it increases efficiency, horizontalization of vertical programmes, effective use of human resources, and clients receive multiple services in one place (Rutaremwā and Kabagenyi 2016:2; Lenka and George 2013:297). Integrating FP into established HIV service delivery sites lead to greater cost-saving and productivity for women, who benefit from efficiently integrated healthcare settings (United Nation 2017:1). Similarly, integrating abortion care with the existing HIV-FP services will improve the well-being of women, families and communities (Zewdie, Yitayal, Kebede and Gebeyehu 2020:145; Samandari, Wolf, Basnett, Hyman and Andersen 2012:10).

The high maternal mortality rate due to complications from unsafe abortion mounted a concern for legal reform in Ethiopia (Bridgman-Packer and Kidanemariam 2018:20), which forced the government of Ethiopia to liberalise the abortion law in 2006 (MOH Ethiopia 2006:7). The Ministry of Health Ethiopia then issued guidelines on legal indications of safe abortion, stipulating that: (1) The pregnancy is as a result of rape or incest; (2) The continuation of the pregnancy endangers the life of the mother or the child; (3) The foetus has congenital malformation that affects healthy growth and development; or (4) The woman is physically or mentally deficient and incapable of raising the child (MOH Ethiopia 2006:5; MOH Ethiopia 2014:11).

FP service provision has a well-documented effect on slowing the rapid population growth, advancing the economy, preserving the environmental situation, and promoting the health of mothers and children (Satia and Chauhan 2018:128; Cleland, Conde-Agudelo, Peterson and Tsui 2012:154). Offering FP services to HIV-positive women is another critical component of maternal health service (Zewdie, Yitayal,

Kebede and Gebeyehu 145:2020; Manski et al., 2012:7). Moreover, abortion care is important to assist when HIV-positive women fall pregnant unintentionally or in cases stipulated by law (Ismail, Qureshi and Ojwang 2019:105; Manski et al., 2012:7). In this study, an action plan was developed to integrate abortion care with HIV-FP service and provide a one-stop service in public health facilities of southern Ethiopia.

1.3 PROBLEM STATEMENT

Worldwide, 210 million women become pregnant each year, and about one-third of pregnancies end in miscarriage, stillbirth, or induced abortions (Alemayehu, Addissie, Ayele, Tiroro and Woldeyohannes 2019:76). Restrictive abortion laws prevent women from seeking abortion care and hinder healthcare providers from delivering the service in legal health facilities (Johnson, Mishra, Lavelanet, Khosla and Ganatraa 2017:542). Restricting abortions limit the availability of abortion services and increases the cost of care and unsafe abortion practices (Johnson et al., 2017:542). It subsequently results in unsafe abortions and contributes to high maternal morbidity and mortality rates (Blystad, Haukanes, Tadele, Haaland, Sambaiga, Zulu and Moland 2019:126). Unsafe abortion practices lead to approximately 70 000 maternal deaths and 5 million permanent or temporary disabilities annually (Melese, Habte, Tsimma, Mogobe and Nassali 2018:2). These could be prevented if comprehensive abortion services were available (Reproductive health policies 2017:9).

In Ethiopia, unsafe abortions' contribution to maternal deaths reduced from 32% in 2005 to 6-9% in 2014 by averting complications from unsafe abortion practices (MOH Ethiopia 2014:2). In addition to the decrease in maternal deaths, safe abortion care can also contribute to improvements in maternal mortality and morbidity by integrating abortion care with HIV-FP services (MOH Ethiopia 2014:2). An estimated 294 100 abortions are still being provided outside health facilities (Moore, Gebrehiwot, Fetters, Wado, Bankole, Singh, Gebreselassie and Getachew 2016:10) in unsafe environmental conditions (IPAS 2017:2). Improved access to safe abortion care at integrated HIV and FP services can promote safe abortions (MOH Ethiopia 2016:103), specifically when it is due to an unintended or unwanted pregnancy (IPAS 2017:2).

An action plan to facilitate the integration of abortion services with already established HIV-FP services is required. It would provide a one-stop service in public health facilities and positively influence the maternal mortality and morbidity rates attributed to unsafe abortions in Ethiopia.

1.4 AIM AND OBJECTIVES

The aim of the study was to develop an action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of the South Nation Nationality and People Region (SNNPR), Ethiopia. In order to achieve the aim, the objectives of the study were to:

- Assess the uptake of integrated HIV and FP services among women attending abortion care in public health facilities of SNNPR, Ethiopia.
- Describe the opinion of women who received abortion care regarding the implementation of a one-stop service for FP, abortion care, and HIV services.
- Identify the challenges women experienced when receiving abortion care from integrated HIV-FP services in public health facilities of SNNPR, Ethiopia.
- Identify the opportunities women noticed when receiving abortion care from integrated HIV-FP services in public health facilities of SNNPR, Ethiopia.
- Describe service providers' opinions regarding the advantages and disadvantages of an integrated abortion and HIV-FP service.
- Develop an action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of SNNPR, Ethiopia.

1.5 RESEARCH QUESTIONS

The study attempted to answer the following research questions:

- What is the uptake of integrated HIV-FP services among women receiving abortion care?
- What are women receiving abortion care's opinions of the implementation of a one-stop service for FP, HIV, and abortion care?

- What challenges in integrated HIV-FP services do women experience while receiving abortion care?
- What are the opportunities for integrated HIV-FP service for women receiving abortion care?
- What are the advantages and disadvantages of integrating abortion care with HIV-FP service according to healthcare providers?
- What situations to be considered in the development of action plan to facilitate the integration of health services in Ethiopia?

1.6 RESEARCH PARADIGM

A paradigm is a way of thinking about and guiding how researchers are supposed to conduct a study (Fain 2017:104; Kivunja and Kuyini 2017:26). It is not a methodology but rather a philosophy that guides how the researcher views the study to be conducted (Gliner, Morgan and Leech 2017:8). The post-positivism, constructivism, advocacy/participatory, and pragmatism worldviews lead different researchers to employ qualitative, quantitative, or mixed-method approaches for their research (Creswell 2014:3).

Constructivism, as a meta-theory, assumes that humans tend to view their world by attributing meaning when interpreting their experiences (Dennick 2016:201). It emphasises that the researcher is to rely as much as possible on the participants' views of the situation being studied (Grover 2015:4). Thus, this study was approached from the constructivist point of view where present and past healthcare delivery experiences supported or contradicted the provision of integrated health services to enhance health outcomes (Thomas, Menon, Boruff, Rodriguez and Ahmed 2014:1).

1.7 THEORETICAL GROUNDING

The change logic model (W.K. Kellogg Foundation 2004:1) is a systematic and visual communication tool of the intended relationship between and understanding of available resources, programme goals, activities, outputs, and intended outcomes.

Hence, the change logic model was used as a basis for this study. Its application in this study's context is illustrated in Figure 1.1.

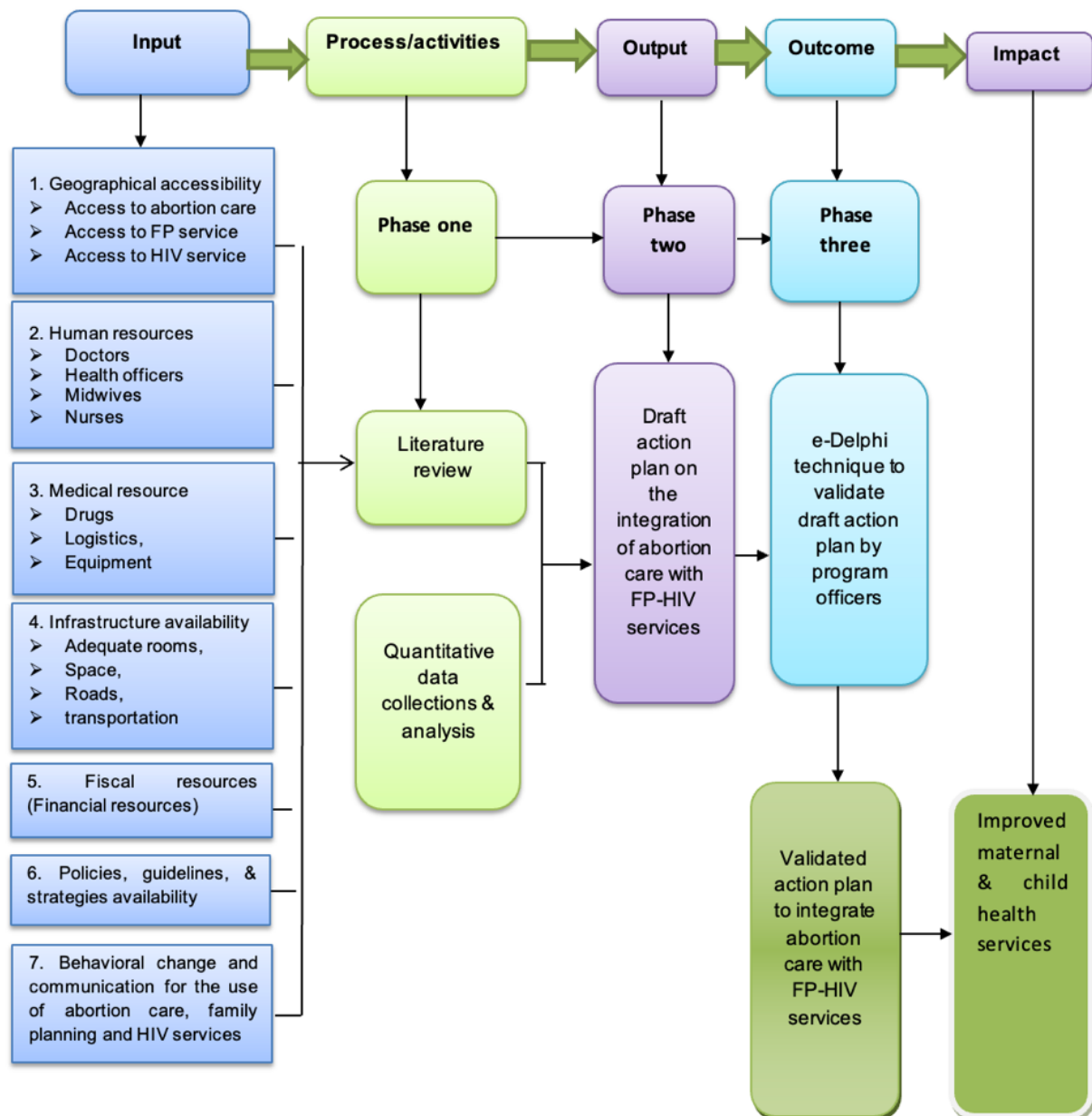


Figure 1.1: Change logic model

Adapted from W.K. Kellogg Foundation (2004:2)

1.7.1 Input

Input refers to all the resources that can contribute to the production and delivery of outputs. These include human resources, material resources, and financial resources that can be used at the programme or policy level (Rogers 2014:14) to achieve the

desired activities (W.K. Kellogg Foundation 2004:2). The inputs relevant to this study were (1) Geographic accessibility; (2) Human resources; (3) Medical resources and supplies; (4) Infrastructure; 5) Fiscal resources; (6) Policies, guidelines and strategies and; (7) Behavioural change and communication on the use of abortion, FP, and HIV services.

Geographic accessibility refers to the availability of health services at public health facilities and their distance from communities. It also includes transportation facilities like roads, ambulances, and other means of transport to provide abortion care at integrated HIV-FP service facilities (see Section 2.6).

Human resources refer to the availability of competent healthcare service providers, namely physicians, midwives, health officers, and nurses responsible for providing abortion care or/and integrated HIV-FP services (see Section 2.6).

Medical resources refer to medical supplies needed to offer comprehensive abortion care, FP, and HIV services. It includes (1) manual vacuum aspiration (MVA), dilatation and curettage (DandC), evacuation and curettage (EandC), misoprostol, mifepristol, and medabone, antibiotics, analgesics, lidocaine, oxytocin, and ergometrine maleate for abortion care; (2) oral contraceptives, male condoms, female condoms, vaginal foaming tablets, Depo-Provera injectable, intrauterine devices (IUDs), Implanon implant, Jadelle implant, and emergency contraceptive pills; (3) antiretroviral drugs (ART), condoms, and HIV test kits for the prevention and treatment of HIV/AIDS (see Section 2.6).

Infrastructure refers to the availability of adequate service-providing areas in public health facilities to deliver abortion care, FP, HIV counselling and testing, and integrated HIV-FP services (see Section 2.6).

Policies, strategies and guidelines refer to the availability and utilisation of different documents for the implementation of abortion care, FP, HIV/AIDS, and integrated health services (see Section 2.6).

Fiscal resources refer to the financial resources required for improving and sustaining the maternal and child health services (abortion care and HIV/FP services) in public health facilities of Ethiopia (see Section 2.6).

Behavioural change and communication is an input that positively influences the healthcare-seeking behaviours of individuals, communities, and societies (Ngigi and Busoslo 2018:85). It entails the use of leaflets, brochures, and posters to promote communication among couples, peers, and families (EngenderHealth 2011:5). The approach is an effective means of improving knowledge where myths, misconceptions, and a lack of information challenge service delivery for safe abortion care (Banerjee, Andersen, Warvadekar and Pearson 2013:149), FP (Teka et al., 2018:50), and HIV/AIDS services (MOH Ethiopia 2017:35) (see Section 2.6).

1.7.2 Process and/or activities

This refers to planning, organising and implementing programme activities to produce the desired output (Greenfield, Shelton and Balkovich 2016:5; Funnell and Rogers 2011:28). In this study, the process and/or activities included literature reviews, questionnaire development, data collection, analysis and interpretation, as well as the process of action plan development.

1.7.3 Output

Output refers to the direct products of the programme activities and may include types, levels and targets of services (W.K. Kellogg Foundation 2004:2) and the intended result or services to be delivered by the programme (Greenfield, Shelton and Balkovich 2016:5; Funnell and Rogers 2011:17). The output in this study is a draft action plan to facilitate the integration of abortion care with HIV-FP services in an attempt to provide a one-stop service to enhance maternal healthcare in Ethiopia.

1.7.4 Outcome

Outcome refers to the likelihood of achieving short- and medium-term effects from a programme or policy's output, such as a change in the organisation offering integrated

abortion and HIV-FP services in one place (Greenfield, Shelton and Balkovich 2016:5; Rogers 2014:14). The outcome in this study is the validated action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.

1.7.5 Impact

Impact focuses on the fundamental changes that positively or negatively occur in organisations, communities or systems as a result of programme accomplishments within 7 to 10 years (W.K. Kellogg Foundation 2004:2). The impact of the integration of abortion care with HIV-FP services could not be measured during the study period as it required a longitudinal study over years, and were thus outside the scope of this thesis.

1.8 DEFINITION OF CONCEPTS

Abortion is defined as the termination of a pregnancy before foetal viability, which is conventionally taken to be less than 28 weeks from the last normal menstrual period (WHO 2022:10). If the last menstrual period is not known, a birth weight of less than 1000g is considered an abortion. The abortion may occur either spontaneously or be induced (MOH 2014:8).

Family planning service is defined as a service provided for women and men who want to prevent pregnancy and space births. It entails pregnancy counselling and testing, and assists those who wish to become pregnant. It includes infertility services, sexually transmitted disease testing, and preconception services to improve the health of women, children, and infants (MOH Ethiopia 2020:25).

Health service integration can be defined as the provision of comprehensive care to ultimately improve health outcomes for populations by refining system efficiencies and promoting sustainable development (USAID 2015:1).

Human Immunodeficiency Virus (HIV) is a retrovirus belonging to the family of lentiviruses (Oladipo and Awoyelu 2015:81).

Induced abortion is the voluntary termination of a pregnancy before foetal viability (Behulu, Fenta, and Aynalem 2019:2).

Unsafe abortion is defined as a procedure performed in an environment lacking minimal medical standards or by persons lacking the necessary knowledge and skills or both (WHO 2015:17).

Integration refers to the provision of different health services to clients in the same facility, at the same time, but not necessarily by the same providers (Colombini, Mayhew, Mutemwa, Kivunaga and Ndwiga 2016:2133). The integration of health services could also occur at policy, operational and service delivery levels (Population Action International 2012:1).

Safe abortion care is defined as the process of terminating an unwanted pregnancy by skilled healthcare providers in an environment that satisfies minimal medical standards (Moore, Gebrehiwot, Fetters, Wado, Bankole, Singh, Gebreselassie and Getachew 2016:10).

Spontaneous abortion is defined as the involuntary loss of the products of conception before the completion of 20 weeks of pregnancy (Gebeyehu, Admassu, Sinega and Haile 2015:252).

Women of childbearing age refer to all women between the ages of 15 and 49 years (Adamchak, Okello and Kaboré 2016:27).

1.9 OPERATIONAL DEFINITIONS

In this study, the following operational definitions apply:

Abortion care in this study's context refers to the provision of care by healthcare providers, in a public health facility, to women whose pregnancy is terminated spontaneously or based on legal indications.

Healthcare providers refer to medical doctors, health officers, nurses and midwives providing an integrated HIV-FP service and/or abortion care in public health facilities.

Induced abortion in this study's context refers to an abortion that is initiated by healthcare providers to women of childbearing age based on the legal indications of safe abortion care.

Unsafe abortion in this study refers to the termination of a pregnancy by untrained persons in health facilities and outside health facilities.

Integrated service means a service provided to women in the public health facility in a coordinated manner as a one-stop service where women receive abortion care, FP, and HIV services.

Programme officers refer to government-employee healthcare professionals who are responsible for the coordination of abortion care or integrated HIV-FP services at the regional, zonal, and district levels.

Spontaneous abortion is defined in this study as the involuntary loss of a foetus without any intervention before the completed 28th week of gestation.

Women of childbearing age in this study's context are women between 18 and 49 years who seek abortion care at public health facilities.

1.10 RESEARCH APPROACH

Research approaches are plans that deal with broad and specific aspects of data collection, analysis, and interpretation (Creswell 2018:40). The research approach should match the design and methods of the research project (Grover 2015:1) (see Section 3.2).

1.10.1 Research design

A research design is an overall plan that helps researchers obtain answers to their research questions (Creswell 2018:309). The design, data collection methods and analysis assist researchers in finding solutions to research questions or hypotheses (LoBiondo-Wood and Haber 2014:165).

Mixed-method research, the design of choice in this study, involves collecting, analysing, and integrating both quantitative and qualitative data in a single project in one way or another. The researcher used a sequential mixed-method research design, conducted over three phases with different methodologies in each phase. Quantitative data were gathered via a questionnaire (see Annexure 2) with childbearing-aged women who received abortion care in public health facilities. Data from healthcare providers were collected using a self-administered questionnaire (Annexure 4). The analysed data from phase one, as well as literature from a thorough literature review, were utilised to develop the draft action plan in phase two. Programme officers participated in the e-Delphi process in phase three to validate the draft action plan and reach consensus on the final action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.

1.10.2 Mixed methods

Mixed-method research involves collecting, analysing, and combining both quantitative and qualitative data in a single project (Leavy 2017:9) (see Section 3.3.1). The three core designs in mixed-method research are convergent, explanatory sequential, and exploratory sequential (Leavy 2017:178). In this study, an explanatory sequential mixed-method approach was appropriate and utilised in the three phases described below.

1.10.3 Explanatory sequential mixed-method research

In an explanatory-sequential mixed-method approach, the collection and analysis of quantitative data are followed by qualitative data collection and analysis (Hesse-Biber and Johnson 2015:64). The approach is mostly chosen by researchers interested in

utilising the findings of the first phase to gather data or develop an outcome in the subsequent phases (Edmonds and Kennedy 2017:196). In this study, the researcher collected quantitative data from women receiving abortion care and healthcare providers in phase one. The data analysed in phase one and the literature review were combined and used to develop a draft action plan to integrate abortion care with HIV-FP services in phase two. In phase three (the qualitative phase), the e-Delphi technique was used by programme officers to validate the draft action plan to integrate abortion care with HIV-FP services.

1.10.4 Setting

Ethiopia is the tenth-largest country in Africa, covering 1 104 300 square kilometres, most parts situated in the horn of Africa. It is bordered on the north-northeast by Eritrea, on the east by Djibouti and Somalia, on the south by Kenya, and on the west-southwest by Sudan (MOH Ethiopia 2015:18). According to the 2007 population and housing census estimate, the total population in 2019 was more than 100 million. Administratively, the country is divided into nine regions and two administrative cities (Central Statistics Authority and ICF International Ethiopia 2016:2). The study was conducted in public health facilities of the SNNPR, Ethiopia. This region is one of the largest in Ethiopia, accounting for more than 10% of the country's land area, and an estimated population of over 20 million, almost a fifth of the country's population (SNNPR Health Bureau Report 2018).

The public health facilities in Ethiopia are classified as specialised referral hospitals, general hospitals, health centres, and health posts (Health Sector Transformation Plan 2015:142). According to the south region health bureau's 2018 annual reports, among 337 public health centres and 24 public hospitals found in the study area, 16 public hospitals and 105 public health centres were providing abortion services and HIV-FP in their facilities. This study was conducted in eight public hospitals and 50 health centres where abortion care and integrated HIV-FP services were provided in five zones of the region, namely: Wolaita, Hadiya, Gamogofa, Sidama, and Hawasa zones. The researcher conducted the study over three phases, using different data-gathering techniques to achieve the research objectives, as illustrated in Table 1.1.

Table 1.1: Illustrations of the different phases of the study design

Phases	Objective	Population	Sample	Design	Data collection technique
Phase 1	Assess the uptake of integrated HIV and FP services among women attending abortion care in public health facilities of SNNPR, Ethiopia.	46 276 women of childbearing age who received abortion care in 121 public health facilities in southern Ethiopia (SNNPR 2018 annual report)	<p>Site sample:</p> <p>58 public health facilities were proportionally selected according to the number of facilities per zone and randomly within each zone.</p> <p>Respondents:</p> <p>Stratified random sampling of 422 women of childbearing age who received abortion care within the selected 58 public health facilities.</p>	Quantitative descriptive study design	Questionnaires
	Describe the opinion of women who received abortion care regarding the implementation of a one-stop service for FP, abortion care, and HIV services.				
	Identify the challenges women experienced when receiving abortion care from integrated HIV-FP services in public health facilities of SNNPR, Ethiopia.				
	Identify the opportunities women noticed when receiving abortion care from integrated HIV-FP services in public health facilities of SNNPR, Ethiopia.				

Phases	Objective	Population	Sample	Design	Data collection technique
	Describe the service providers' opinions regarding the advantages and disadvantages of an integrated abortion and HIV-FP service.	1 860 healthcare providers (doctors, health officers, midwives, and nurses) rendering abortion care as well as HIV-FP services in 121 public health facilities (SNNPR 2018 annual report)	A stratified random sampling technique was used to select 310 healthcare providers within the selected 58 public health facilities: doctors (working only in public hospitals) (MOH Ethiopia 2014:27) (17), health officers (74), midwives (61) and, nurses (158).	Quantitative descriptive study design	Self-administered questionnaire was used to collect data from healthcare providers.
Phase 2	The analysed data from phase 1, thus from women who received abortion care and healthcare providers offering the service, as well as a literature review, were utilised to develop the first draft action plan to facilitate the integration of abortion care with FP- HIV service in public health facilities of SNNPR, Ethiopia.				
Phase 3	Validate the draft action plan to facilitate the integration of abortion with HIV-FP service in public health facilities of SNNPR, Ethiopia.	Programme officers working at regional, zonal and district offices were: 2 in SNNPR Health Bureau, 30 in 15 zone health departments, and 238 in 119 district health offices, making 270 programme officers (135 abortion care and 135 integrated HIV-FP).	14 volunteer programme officers were purposely selected by the gatekeepers (2 from the regional health bureau, 6 from the zonal health departments, and 6 from district offices) based on their experience and expertise to obtain comprehensive information at all levels.	Qualitative study design	e-Delphi technique using a validation tool embedded in the draft action plan

1.11 PHASE ONE: QUANTITATIVE PHASE

Quantitative research is a systematic investigation of phenomena by gathering quantifiable data and applying statistical methods in order to get results (Apuke 2017:41). Several statistical tests are available for analysing quantitative data to express the results numerically (Abbot and Bordens 2018:240). Unlike qualitative research, quantitative research relies on larger sample sizes (Leavey 2017:180) to generalise the findings to other populations (Apuke 2017:42) (see Section 3.5.1).

1.11.1 Population

The population consisted of (1) all public health facilities (hospitals and health centres) where abortion care and integrated HIV-FP services are provided; (2) women who received abortion care; and (3) healthcare providers who provided abortion care and/or HIV-FP service.

1.11.1.1 Public health facilities

The majority of public health facilities in Ethiopia provide HIV-FP services (South Nation Nationality and People Health Bureau report 2018), and 16 public hospitals and 105 public health centres (121 in total) provide both abortion care and HIV-FP services in the study area (SNNPR Health Bureau 2018 report) (see Section 1.10.2).

1.11.1.2 Abortion care users

Abortion care users are women of childbearing age who received abortion care in the region. There were reportedly 46 276 abortion care users at the time of data collection (SNNPR Health Bureau report, 2018) (see Section 3.5.4.3).

1.11.1.3 Healthcare providers

There were 1 860 healthcare service providers (physicians 104, midwives 366, health officers 446 and nurses 944) working in the study area. Among them, 761 (physicians 30, midwives 173, health officers 189, and nurses 369) were responsible for providing

abortion services. In comparison, 1 099 healthcare providers (physicians 74, midwives 193, health officers 257, and nurses 575) were responsible for providing HIV-FP services (SNNPR Health Bureau 2018 report).

1.11.2 Sampling and sample size

Sampling is the process followed to obtain a sample from a population (Gliner, Morgan and Leech 2017:137). A sample is a subset of the population representing the population in which the researcher is interested (Leavy 2017:176). The researcher used probability and non-probability sampling methods in phases one and three of the study, respectively.

The probability sampling method gives every member of the population an equal chance to be selected (Edmonds and Kennedy 2017:21) and represents the population from where they are drawn (Leavy 2017:176). The researcher used the probability sampling method to select health facilities, women who received abortion care, and healthcare providers (see Section 3.5.5).

1.11.2.1 Sampling of health facilities

Study facilities were selected from five zones in the region, namely Sidama, Gamogofa, Wolaita, Hadiya and Hawasa zones. Among the 121 public health facilities in these zones providing abortion care and HIV-FP services, 58 were proportionally selected according to the number of facilities per zone and randomly within each zone. Accordingly, two hospitals and 14 health centres from Sidama, two hospitals and 12 health centres from Gamogofa zone, two hospitals and 11 health centres from Wolaita zone, one hospital and nine health centres from Hadiya zone, and one hospital and four health centres from Hawasa zone were chosen. As a result, eight hospitals and 50 health centres were included in this study (see Section 3.5.5).

1.11.2.2 Sampling of abortion care users

A total of 422 abortion care users were randomly selected to include in the study. Clients were proportionally selected from 58 sampled public health facilities found in

five zones of the region based on the previous year's abortion care service provision in the health facilities. The sample size of women receiving abortion care was determined using a single population proportion formula (Nanjundeswaraswamy and Divakar 2021:12) (see Section 3.5.5.1).

1.11.2.3 Sampling of healthcare providers

Three hundred and ten healthcare providers were proportionally selected from five zones based on the number of healthcare providers per zone. A stratified simple random sampling method was used to determine the sample size of each group of healthcare providers from the selected 58 public health facilities. The sample size of each group of healthcare providers was computed as follows:

- Doctors $104/1860 \times 310 = 17$ (working in the selected hospitals)
- Midwives $366/1860 \times 310 = 61$ (working in selected hospitals and health centres)
- Health officers $446/1860 \times 310 = 74$ (working in selected hospitals and health centres)
- Nurses $944/1860 \times 310 = 158$ (working in selected hospitals and health centres)

A stratified sampling technique was applied to select healthcare providers from each health facility to include in the study. Accordingly, 85 healthcare providers from Sidama zone, 75 healthcare providers from Gamo zone, 70 healthcare providers from Wolaita zone, 53 healthcare providers from Hadiya zone, and 27 healthcare providers from Hawasa zone were selected. The sample size of service providers was determined by using a single population proportion formula (Nanjundeswaraswamy and Divakar 2021:12) (see Section 3.5.5.2).

1.11.3 Data collection instruments

Data collection instruments are tools with a scientific approach applied by the researcher to obtain measurable data (LoBiondo-Wood and Haber 2014:20). Quantitative data collection involves gathering data using questionnaires that can be scored numerically, reliably, and with relatively little training (Gliner et al., 2017:498). The researcher developed questionnaires after an extensive literature review was

conducted. Two different types of questionnaires were developed to collect quantitative data from women receiving abortion care and healthcare providers. A self-administered questionnaire was used to collect data from healthcare providers (see Annexure 4). A questionnaire was also used to collect data from women receiving abortion care (see Annexure 2), but it was completed by trained midwives in a face-to-face manner to enhance the response rate and accuracy of the data (see Section 1.11.5 and 3.5.6.1).

1.11.4 Pre-tests

The questionnaire was pre-tested on 12 randomly selected women who received abortion care in two public health centres and one hospital where the actual data were not collected (see Section 3.5.7). All abortion care users received the recruitment and information letter to ensure voluntary participation and informed consent. Similarly, the healthcare providers received the recruitment and information letter to ensure voluntary participation. The self-administered questionnaire was also pre-tested on 12 randomly selected volunteer healthcare providers in two public health centres and one public hospital where the actual data collection was not scheduled (see Section 3.5.7). All issues identified in the questionnaires in the pre-testing phase were amended before the actual data gathering commenced.

1.11.5 Data gathering

In phase one (the quantitative phase), questionnaires were used to collect data. The data collection process was initiated after ethics approval was obtained from the Research Ethics Committee, Department of Health Studies at the University of South Africa (UNISA) (see Annexure 5). A grant to conduct the study was also obtained from the Regional Health Bureau Human Research and Technology Transfer support core process (see Annexure 6). After approval was obtained from the South Regional Health Bureau Research and Ethics Committee, an institutional support letter was obtained from respective zonal health departments to be provided to heads of selected public health facilities. These letters informed them about the purpose of the study and requested they facilitate the data collection process (see Annexure 6).

The data collectors (trained midwives) obtained permission from the gatekeepers to gather the data from abortion care users. A list of women who received abortion care in the health facilities during the data collection period was obtained from the heads of respective health facilities, and then a simple random selection of study participants was done to enrol in the study (see Table 3.3). The data from women who received abortion care were collected by 12 trained midwives (see Section 3.5.10) who had served in health facilities for three years or longer and had experience in data collection. Potential participants were informed about the purpose of the study, and their voluntary participation was assured by signing the consent form (see Annexure 1). The completed forms were collected by data collectors. The midwives who collected the data used a questionnaire (see Annexure 2) to obtain information just before women were discharged from public health facilities. These questionnaires were filled by data collectors in a face-to-face manner since it was envisaged that women with very diverse levels of education would participate in the study (see Section 3.5.10). To maintain privacy and confidentiality, the information was obtained from the study participants in separate rooms arranged in the respective health facilities.

The data collectors (trained public health officers) also obtained permission from the gatekeepers to gather data from healthcare providers. The data from healthcare providers were collected using a self-administered questionnaire. Public health officers who were trained and had experience in gathering data using a self-administered questionnaire assisted in the process. The respondents were identified by the head of health facilities, and the self-administered questionnaire was distributed to the respondent to complete at a preferred time and place. Voluntary participation from healthcare providers was ensured by them signing the consent form (see Annexure 3). The completed self-administered questionnaires were returned to a special box arranged for that purpose in the office of the head of the health facilities (see Section 3.5.10).

1.11.6 Validity and reliability

Validity and reliability are usually complementary concepts. However, in some situations with high validity, lower reliability and vice versa may be seen (Neuman

2014:220). The variation usually occurs when the constructs are highly abstract and not easily observable (Neuman 2014:220).

Validity refers to the extent that an instrument measures what it intended to measure (Curley and Vitale 2016:76; Gliner, Morgan and Leech 2017:202). There are four types of validity in respect of a questionnaire, namely face, content, criterion-related, and construct validity (Bruce, Pope and Stanistreet 2018:166). The content and face validity of the questionnaires for women who received abortion care as well as healthcare providers were ensured by a statistician and public health expert. It was also promoted by pre-testing the questionnaire to evaluate its weakness and strength in capturing the required information (see Section 3.5.8.1).

Reliability refers to the extent to which a measuring instrument yields consistent results over time and across observers (Polit and Beck 2017:241). Abbott and Borden (2018:130) describe reliability as an instrument's ability to produce similar results when repeated measurements are taken under similar conditions. In this study, the reliability of measuring instruments was reviewed by a public health expert and statistician, and the South Africa scientific review committee (UNISA). The questionnaire was also pre-tested to determine its reliability (see Section 3.5.8.2).

1.11.7 Data analysis

Quantitative data analysis involves coding, grouping, and assigning meaning to the data, which are usually numeric and summarised employing statistical measures (Gliner et al., 2017:9). With the support of statisticians, the data were coded and entered into EpiData 3.1 software and then exported to Statistical Package for Social Sciences software (SPSS) version 25 for analysis (see Section 3.5.11).

1.12 PHASE TWO

The analysed quantitative data from women receiving abortion care and healthcare providers, as well as a thorough literature review of journal articles, guidelines, and policies on health service integration and utilisation were used to develop the draft action plan with an embedded validation tool.

1.13 PHASE THREE: QUALITATIVE PHASE

1.13.1 Population

There is one programme officer coordinating abortion care at each level, such as the regional health bureau, in 15 zonal health departments, and in 119 district health offices; thus, 135 abortion care coordinators. Likewise, there is one programme officer coordinating HIV-FP services at the regional health bureau in 15 zonal health departments, and 119 district health offices. Therefore, there are 270 programme officers in the region (SNNPR Health Bureau Report 2018).

1.13.2 Sampling and sample size

The purposive sampling method is typically used by qualitative researchers, and in the qualitative phase of mixed-method research (Leavey 2017:79). In sampling, the researcher often selects purposive participants who are considered typical of the study population (LoBiondo-Wood and Haber 2014:238). In this phase of the study, a purposive sampling method was used to recruit 14 programme officers (7 abortion care and 7 HIV-FP programme officers) to obtain their comprehensive input and research consensus on what to include in the final action plan (see Section 6.4).

Among the 14 volunteer programme officers, two were from the regional level, six from zonal levels, and six from district levels to ensure the representativeness of the panellists pertaining to their area of expertise at various levels. The selection of e-Delphi participants was done in collaboration with the regional health bureau, zonal health departments and district health offices' responsible person/s to facilitate the recruitment. They acted as gatekeepers to ensure experienced programme officers were invited to participate. The programme officers were asked for their voluntary participation through the recruitment letter. In the recruitment letter, the purpose of the study, objectives, time requested to complete the e-Delphi round, voluntary participation, and the option to decline participation at any time were well-indicated. The recruitment letter was sent to the programme officers via email by the gatekeepers. Voluntary participation and access to the draft action plan with the assessment validation tool were ensured by clicking the link at the bottom of the recruitment letter (see Annexure 8).

1.13.3 Research Technique: The Delphi technique

The Delphi is a technique used when consensus is an important aspect of research (Jason and Glenwick 2016:4). The opinion of a group is more valid and reliable than a personal opinion (Fisher, Erasmus and Vijoen 2020:830). Reliable consensus can be reached as the opinions of a group of experts over several rounds of feedback can be reached (Fisher, Erasmus and Vijoen 2020:826). The validation assessment tool in this study was developed based on the draft action plan and embedded into it to assist with the validation by guiding the e-Delphi panellists (see Section 5.6).

1.13.4 Trustworthiness

Trustworthiness refers to the credibility of the findings of qualitative research and the extent to which readers can trust the research and findings (Sloan and Quan-Haase 2017:354). Trustworthiness can be defined as evaluating the strength of qualitative research by assessing the criteria of credibility, dependability, confirmability, transferability, and authenticity (Grove, Gray and Burns 2015:513) (see Section 6.8).

1.13.5 Pre-testing and data collection

A validation assessment tool, based on the draft action plan, was developed and embedded in the action plan. The validation assessment tool was pre-tested by experienced programme officers selected by the gatekeepers of the respective health offices to ensure the tool's reliability. Two programme officers coordinating abortion care and two programme officers coordinating HIV-FP services who were not involved in the actual e-Delphi participated. The purpose of the study, objectives and time required were outlined to participants who were involved in the pre-test. Voluntary participation from participants was assured by them clicking the link at the bottom of the recruitment letter sent through their email address (see Annexure 8). Accordingly, the validation assessment tool embedded with the draft action plan was then administered to the panellists. Based on panellists' feedback and public health experts' comments, amendments were made before it was used in the actual e-Delphi process (see Section 6.12).

1.13.6 Data analysis

The analysed raw data were received from the software program used by Google Forms. All data obtained in the first round of the e-Delphi were used to amend and alter the draft action plan with the embedded assessment validation tool and circulated to the panellists for input in the second round. Each subsequent round was structured and prepared based on the results of the previous one in the form of a new questionnaire. The analysed data from each round were fed into the next round to decide experts' positions and opinions to reach 80% or higher consensus (see Section 6.13).

1.14 ETHICAL CONSIDERATIONS

Ethical principles, as described by Abbot and McKinney (2013:56), need to be adhered to in protecting human subjects in research, the institutions, the community, as well as the researcher. Ethical approval was obtained from the Research Ethics Committee Department of Health Studies at the University of South Africa (UNISA) (see Annexure 5). Permission to conduct the research was also obtained from all the selected health facilities according to the South Region Health Bureau Human Research and Technology Transfer Support Core Process (see Annexure 6). The heads of the selected district health offices received an institutional support letter from the respective zonal health departments to inform them about the study (see Annexure 6). To ensure ethical principles were adhered to, the following areas were critically considered: permission to conduct the study, beneficence and non-maleficence, privacy and confidentiality, justice, and informed consent (see Section 3.4).

1.15 STRUCTURE OF THE THESIS

The study was organised into seven chapters, as indicated in Table 1.2.

Table 1.2: Structure of the organisation of the thesis

Chapter 1	Overview of the study
Chapter 2	Literature review on: <ul style="list-style-type: none"> ➤ Change logic model ➤ Ethiopian healthcare services ➤ Abortion in Ethiopia ➤ Abortion services ➤ FP service ➤ HIV/AIDS service ➤ Integrated healthcare services
Chapter 3	1. The overall methodology of the study 2. Phase 1 <ul style="list-style-type: none"> ➤ Methodology followed ➤ Data analysis ➤ Data interpretation and presentation
Chapter 4	Phase 1: data presentation, analysis, and description of the research findings <ul style="list-style-type: none"> ➤ Abortion care users ➤ Healthcare providers
Chapter 5	Phase 2 <ul style="list-style-type: none"> ➤ Literature review on action plan development ➤ Principles and processes for action plan development ➤ Draft action plan with an embedded assessment validation tool
Chapter 6	Phase 3 <ul style="list-style-type: none"> ➤ Methodology ➤ Validation process and final action plan ➤ interpretation of the findings ➤ Action plan for the implementation of one-stop integrated abortion care, HIV and FP service in public health facilities of Ethiopia (The so-called AFH Service)
Chapter 7	Conclusions, limitations and recommendations

1.16 SUMMARY

In this study, the integration of abortion care with HIV-FP was explored. An action plan was designed to integrate abortion care with HIV-FP service in public health facilities

of southern Ethiopia. The integration of these services would contribute to the health of infants, children, women, and the general population. Chapter One briefly described the introduction, background, purpose, objectives, research design, and methodology of the research. The next chapter outlines the literature reviewed for the study.

CHAPTER TWO

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter presents the literature review, which provides background information on the examined topic and depicts the significance of the study. Literature was reviewed that supports the development of the research instruments (questionnaires), the methodology utilised, and the possible conceptual or theoretical frameworks (Polit and Beck 2017:96) applicable to the study (see Figure 2.1).

Table 2.1: Chapter layout and progress

Chapter 1	Overview of the study
Chapter 2	Literature review on: <ul style="list-style-type: none"> ➤ Change logic model ➤ Ethiopian healthcare services ➤ Abortion in Ethiopia ➤ Abortion services ➤ FP service ➤ HIV/AIDS service ➤ Integrated healthcare services
Chapter 3	1. The overall methodology of the study 2. Phase 1 <ul style="list-style-type: none"> ➤ Methodology followed ➤ Data analysis ➤ Data interpretation and presentation
Chapter 4	Phase 1: data presentation, analysis, and description of the research findings <ul style="list-style-type: none"> ➤ Abortion care users ➤ Healthcare providers
Chapter 5	Phase 2 <ul style="list-style-type: none"> ➤ Literature review on action plan development ➤ Principles and processes for action plan development ➤ Draft action plan with an embedded assessment validation tool

Chapter 6	Phase 3 ➤ Methodology ➤ Validation process and final action plan ➤ interpretation of the findings ➤ Action plan for the implementation of one-stop integrated abortion care, HIV and FP service in public health facilities of Ethiopia (The so-called AFH Service)
Chapter 7	Conclusions, limitations and recommendations

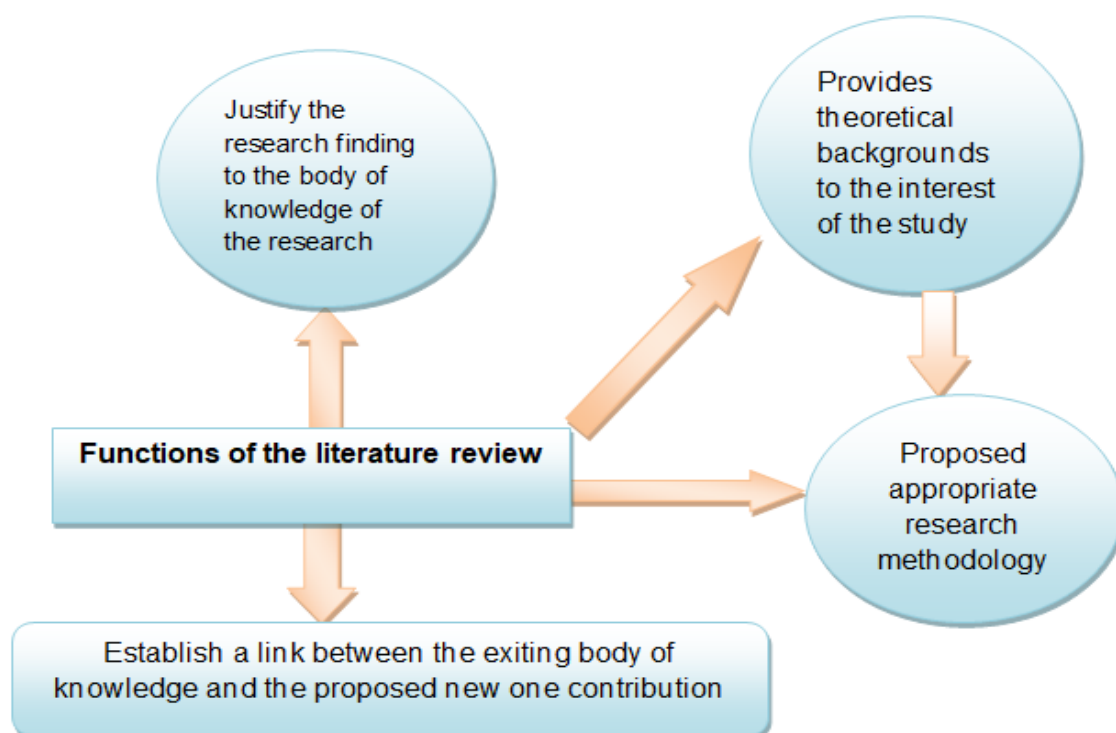


Figure 2.1: Functions of the literature review

Adapted from Ellis and Levy (2008:19)

Literature related to the (1) dimensions of healthcare service, (2) healthcare service in Ethiopia, (3) abortions, (4) the change logic model, (5) abortion care in Ethiopia, (6) FP services, (7) HIV/AIDS services, and (8) integrated healthcare services are discussed. The researcher consulted the database and search engines of Science direct, e-Book, Measure evaluation, PubMed, Directory of Open Access Journals, Global Health, Google Scholar and POPLINE. UNISA’s institutional repository, e-journals, e-books, textbooks and WHO reports were also reviewed. The literature review was conducted to obtain information using the keywords: ‘change logic model’,

'abortion', 'abortion care', 'abortion service', 'FP', 'FP services', 'contraceptives', 'HIV', 'AIDS', 'HIV/AIDS', 'integrated FP and HIV services', and 'integrated health services'.

2.2 DIMENSIONS OF HEALTHCARE SERVICES

Healthcare is concerned with the processes of engaging individuals and population groups in the existing healthcare delivery system. It is a multi-faceted concept and consists of five dimensions: 1) Affordability (reasonable costs to utilise health care); 2) Acceptability (health service delivery is by the will of individuals with a sense of service satisfaction); 3) Availability (adequacy of health service provision); 4) Accessibility (the distance of health facility to obtain care from service providers); and 5) Accommodation (not relevant to this study) (Neutens 2015:14).

2.2.1 Affordability

Affordability refers to the ability of an individual or family to cover the cost of healthcare (Kilonzo, Kamaara and Magak 2017:94). It is the responsibility of both high and low-income countries to provide affordable healthcare services to their communities (Hailu and Mohammed 2020:221; Niëns 2014:57). However, the cost of healthcare is becoming a global concern, affecting its utilisation (Dhawan, Heetderks, Pavel, Acharya, Akay, Mairal, Wheeler, Dacso, Sunder, Lovell and Gerber 2015:1; Feyisa, Yitbarek and Daba 2021:34; Mosadeghrad 2013:210). Most rural communities experience healthcare as expensive and unaffordable and consequently do not use healthcare services (Wang, He, Zheng, and Ji 2014:388). To overcome the increasing healthcare needs among the population and healthcare costs (Feyisa et al., 2021:34; WHO 2013:2), various countries are implementing different strategies to reduce out-of-pocket payments (Stellenberg 2015:1) and improve the quality of healthcare service (WHO 2018:11).

Community-based health insurance is one of the strategies to address the ever-increasing healthcare demands of the community and reduce out-of-pocket payments in Africa, including rural communities in Ethiopia, which has been growing in the past 10 years (Feleke et al., 2015:2).

2.2.2 Acceptability

Healthcare interventions and services are appropriate when these interventions are perceived to be satisfactory and acceptable for the community who needs the service (Sekhon, Cartwright and Francis 2017:88). The type of services provided often determines the use of a service and the characteristics of healthcare providers responsible for providing the service (Feyisa et al., 2021:34; Dillip, Alba, Mshana, Hetzel, Lengeler, Mayumana, Schulze, Mshinda, Weiss and Obrist 2012:113). The healthcare service must meet clients' sociocultural and economic expectations (Islam, Majdzadeh, Quddus and Ashraf 2019:4; Gottwald and Lansdown 2014:49) and satisfy the emotional response of the community (Sekhon et al., 2017:88). Therefore, the acceptability of healthcare is a vital issue for healthcare implementation, evaluation, and the development of healthcare interventions (Sekhon et al. 2017:88).

2.2.3 Availability

The presence of health workforces and physical assets such as healthcare providers and resources are important to deliver appropriate health services (Akinyemiju, McDonald and Lantz 2015:382). The primary healthcare units (PHCUs) at district levels play a vital role in providing care to rural communities (MOH Ethiopia 2019:79; Levesque, Harris and Russell 2013:18). However, there is an unequal distribution of healthcare facilities, with PHCUs sparsely found in pastoralist areas compared to agrarian communities (Woldemichael, Takian, Sari and Olyaeemanesh 2019:3).

The provision of healthcare is also challenged by a lack of equipment and consumable healthcare items, as well as inadequate numbers of healthcare providers (Scheffler et al., 2015:5). The limited facilities and resources affecting healthcare delivery in rural communities (WHO 2016:3) can be improved by allocating an appropriate budget, deploying the required number of motivated staff, and increasing the sense of accountability (Ademe, Tebeje and Molla 2016:287).

2.2.4 Accessibility

Accessibility refers to spatial and people-based healthcare services concerned with the availability and distribution of resources (Woldemichael, Takian, Sari and Olyaeemanesh 2019:3). Besides geographic distribution, healthcare services should be user-friendly (Stellenberg 2015:7). Healthcare services in the community can be evaluated based on a place-based or people-centred approach (Lucas, Van Wee and Maat 2016:478).

The place-based approach refers to the availability of health facilities, schools, and housing, which contribute to improvements in the community's health status (Dankwa and Pérez 2016:637). Therefore, it is concerned with empowering the community leadership to engage with various stakeholders in planning and utilising available resources (Woldemichael, Takian, Sari and Olyaeemanesh 2019:4). Conversely, the people-centred approach is concerned with providing essential healthcare to individuals, families, and communities (Woldemichael, Takian, Sari and Olyaeemanesh 2019:4) and engaging them in making decisions about their health requirements (WHO 2015:10).

Healthcare must always be provided in health facilities in a sustainable way (Health Sector Transformation Plan 2015:76). Barriers such as costs, cultural issues, communication problems, and geographical accessibility need to be addressed and prevented (Health Sector Transformation Plan 2015:76). Other important factors that affect accessibility are a lack of transportation (Feyisa et al., 2021:34; Bradley, Thompson, Byam, Webster, Zerihun, Alpern, Herrin, Abebe and Curry 2011:227) and a lack of qualified and competent healthcare providers (Ward, Humphreys, McGrail, Wakerman and Chisholm 2015:123). To address the accessibility problems identified in Ethiopia, the government decentralised the healthcare delivery system, encouraging partnerships with private sectors, and integrating HIV and FP services (Ayalew 2018:143; Woldemichael et al., 2019:2).

2.3 HEALTHCARE DELIVERY IN ETHIOPIA

Ethiopia is one of the countries in the world that adopted primary health care (PHC) as a national strategy since the mid-1970s (Assefaa, Charles, Gilksa, Deana, Tekleb, Lerac, Balchad, Getanehe, Wim Van Damme and Hilla 2020:894). PHC refers to essential healthcare and access to basic health services for individuals and communities at an affordable cost (MOH Ethiopia 2020:15). The government of Ethiopia provides PHC to the community through a three-tiered system: primary, secondary, and tertiary levels (WHO 2017:4). The PHCUs comprise five health posts (the lowest facility in the health system); the health centre serves as a referral facility for health posts and provides services to a population of 25 000; and the primary hospital is a referral facility to the health centre and provides services to an average population of 100 000 located at district levels (MOH Ethiopia 2016:9). The secondary healthcare level is a general hospital providing ambulatory as well as hospital-based services to an average population of 1 to 1.5 million and serves as a referral facility to primary hospitals (MOH Ethiopia 2019:12). The tertiary healthcare level is a specialised hospital or referral hospital used as a referral facility for general hospitals and provides services to an average 3.5 to 5 million people (MOH Ethiopia 2019:12). Furthermore, stakeholders, including social and private organisations, are also encouraged to actively participate in healthcare delivery in Ethiopia (Woldemichael et al., 2019:2).

As part of the implementation of PHC services, Ethiopia launched a health extension programme (HEP) in 2003 (Witter and Awosusi 2017:3). The HEP is one of the best-known strategies implemented by the government (Assefa, Gelaw, Hill, Taye and Van Damme 2019:24) through the deployment of health extension workers in rural parts of the country (Wang, Tesfaye, Ramana and Chekagn 2016:63). The care provided under the HEP includes 16 essential health extension packages under four major programme categories. These are 1) Hygiene and environmental sanitation (proper and safe excreta disposal system, proper and safe solid and liquid waste management, water supply safety measures, food hygiene and safety measures, healthy home environment, arthropods and rodent control, and personal hygiene). 2) Disease prevention and control (HIV/AIDS prevention and control, TB prevention and control, malaria prevention and control, and first aid). 3) Family health services

(maternal and child health, FP, immunization, adolescent reproductive health, and nutrition services). 4) Health education and communication, as vital issues in the implementation of all health extension packages (Wang et al., 2016:2). Two health extension packages were recently added to address the increasing burden of non-communicable diseases and mental problems in Ethiopia (Teklu, Alemayehu and Medhin 2020:59).

Despite the various measures to improve communities' access and the provision of PHC services, Ethiopia's demographic health survey indicated that two out of three women still did not receive healthcare services due to financial constraints, the inaccessibility of health facilities, and poor partner support (MOH Ethiopia 2016:141).

2.4 ABORTIONS

Abortion is defined as the expulsion of the conceptus tissue before 28 completed weeks of gestation (MOH Ethiopia 2014:7). One-third of pregnancies are estimated to end in miscarriage, stillbirth, or induced abortion (Alemayehu, Addissie, Ayele, Tiroro and Woldeyohannes 2019:76). Most induced abortions result from unintended pregnancies or unwanted pregnancies (Singh, Bankole and Darroch 2017:76).

2.4.1 Types of abortion

Abortion may be broadly classified as induced or spontaneous abortion based on its occurrence (Rastegari, Baneshi, Haji-Maghsoudi, Nakhaee, Eslami and Malekafzali 2014:e15765). The classifications are described as follows:

2.4.1.1 Induced abortion

Induced abortion refers to the termination of a pregnancy carried out either by trained healthcare providers as permitted by the law (MOH Ethiopia 2014:9) or by unskilled individuals in an environment that cannot conform to the minimum medical standards (Adeniran, Fawole, Abdul and Adesina 2015:22). In this study's context, induced abortion care is considered a procedure provided by a trained healthcare provider in public health facilities of Ethiopia.

Most women in developed nations have access to safe abortion care, in contrast to women living in developing countries. Thus, nearly half of all abortions across the globe are still deemed unsafe, and about 98% occur in the developing world (Francome 2015:1).

Unwanted pregnancies at the time of conception are more likely to end in abortion than wanted pregnancies (Maina, Mutua and Sidze 2015:1048). Some women with unintended pregnancies require abortion care as they cannot take care of their babies for economic reasons or may want to continue their education (Mulatu, Cherie and Negesa 2017:5; Oumer and Manaye 2019:69; Tesfaye, Hambisa and Semahegn 2014:7).

Induced abortions can be performed safely for women who wish to terminate a pregnancy. These abortions must be conducted by skilled healthcare providers in healthcare facilities, as permitted by the law (Erko, Abera and Admassu 2016:4) using either medical or surgical procedures (WHO 2018:27; WHO 2014:22). Mifepristone, followed by misoprostol, or mifepristone alone, can be used to terminate a pregnancy medically. Manual or electric vacuum aspiration or dilation and evacuation are surgical methods of choice for inducing abortions (WHO 2018:25). The provision of safe abortion care requires trained healthcare providers and adequate medical equipment and supplies (WHO 2018:39) (see Section 2.6.1).

The procedure to terminate a pregnancy is also dependent on the gestational age (Erko, Abera, and Admassu 2016:4). During the first trimester, manual or electric vacuum aspiration, as well as medical abortion using mifepristone or misoprostol, are appropriate termination options (WHO 2015:33). In the second trimester, the procedure can be done by dilatation and evacuation (D and E), and may be followed by medical abortion with mifepristone or misoprostol (WHO 2015:45).

2.4.1.2 Spontaneous abortion

Spontaneous abortion is also known as a miscarriage. It means an involuntary loss of the conceptus product before 20 weeks of gestation (Oliveira, Marques, Souza and Oliveira 2020:362). The phenomenon occurred in 10-15% of clinically recognised

pregnancies (Shinde, Melwani, Priya, Pradesh, Sethia, Khan and Dohare 2019:6). Miscarriages could occur naturally or accidentally (Oliveira, Oliveira, Marques, Souza and Oliveira 2020:362; Das 2014:54), and is often associated with alcohol ingestion, coffee drinking, cigarette smoking or advanced maternal age (Fernandez and Capmas 2019:2). Other factors include obesity, chromosomal abnormalities, endocrine causes, sperm DNA fragmentation, uterine malformations, infections, thrombophilias, immunological causes, failure of embryo selection (Abdenlazim, AbuFaza, Purohit and Farag 2017:21), and a previous miscarriage (Adeniran, Abdul and Fawole 2015:22). These factors may result in maternal morbidity and mortality (Adeniran, Fawole, Abdul and Adesina 2015:25).

2.4.2 Abortion services

Abortion services are safe when the methods are followed as stipulated by the WHO recommendations, appropriate to the gestational age (see Section 2.4.1.1) and provided that healthcare providers are trained on the process (WHO 2019:2) (see Section 2.6.1.2). The availability of safe abortion care facilities (Moore et al., 2016:2; MOH Ethiopia 2014:7) and the provision of care by trained healthcare providers can improve maternal health services (Holcombe et al., 2015:75).

Partner organisations such as IPAS Ethiopia and EngenderHealth, in collaboration with the Federal Ministry of Health Ethiopia, have also been strengthening and capacitating the healthcare providers' skills and knowledge by providing training (Dibaba et al., 2017:76). However, some public health facilities are not yet implementing safe abortion services (Holcombe, Berhe and Cherie 2015:75) due to a lack of trained healthcare providers (see Section 2.6.1), equipment and medical supplies for abortion care (see Section 2.6.1) (Taddele, Getachew, Taye, Getnet, Defar, Teklie and Gonfa, Humnessa, Teshome, Akale and Mormu 2019:7).

The Ethiopian Ministry of Health, together with WHO, UNICEF, and non-governmental organisations, have developed a comprehensive abortion care model. It guides safe abortions based on all legal indications, treatment of incomplete and unsafe abortions, counselling services, and the provision of contraceptive services (Samuel, Fetters, and Desta 2016: S61). Safe abortion care is performed in public health facilities as the law

permits (MOH Ethiopia 2014:11) using either medical abortion (misoprostol or mifepristone, or combined to be administered either orally, buccal, sublingual or vaginally) or surgical procedures (vacuum aspiration, dilatation and curettage) based on the gestational age of the conceptus products (WHO 2018:25; WHO 2012:2) (see Section 2.4.1.1).

The number of abortion care-seeking women increased between 2008 and 2014 at all health facility levels except at private hospitals and private clinics (Gebrehiwot et al., 2016:124). Approximately 3 610 women visited public facilities to receive abortion care in 2014 compared to 1 582 in 2008. The proportion of women receiving abortion care in public health facilities in 2014 increased to 56%, while the private sector reduced to 44%. The largest shift occurred in public health centres, where the proportion of women presenting for abortion care increased from 22% in 2008 to 40% in 2014 (Gebrehiwot et al., 2016:125). Similarly, the proportion of women who received safe abortion care increased compared to those seeking post-abortion care in public health facilities, from 32% in 2008 to 52% in 2014 (Dibaba et al., 2017:76).

In Ethiopia in 2014, an estimated 4 033 facilities were potential providers of abortion-related care. Of these facilities, 72% provided induced abortions, post-abortion care or both. Nearly all public hospitals (98%), 67% of public health centres, and 80% of private or NGO facilities provided these services. Most of the safe abortions (66%) were provided by private or NGO facilities, while the majority of post-abortion care (72%) was provided by public facilities (Moore et al., 2016:9). The Technical and Procedural Guidelines for Safe Abortion Services in Ethiopia (MOH Ethiopia 2014) facilitate communities' access to abortion care by increasing the number of healthcare providing public health facilities and private sector involvement in providing abortions care (Berhan and Birhan 2014:24).

2.5 CHANGE LOGIC MODEL

The Change Logic Model was found to be a relevant model to form the theoretical basis of the study (Kellogg Foundation 2004:4). The Change Logic Model was developed by the W.K. Kellogg Foundation to demonstrate the relationship between the plan of action and the desired results of a certain programme (W.K. Kellogg

Foundation 2004:5). A logical model presents a programme or project that communicates the intended relationship between programme goals, activities, outputs and intended outcomes. It graphically describes the theory or logic of how a programme is supposed to work (Cynthia Berry 2016:4).

The provision of healthcare service in an integrated fashion leads to desired outcomes (Chetty 2018:5; Kellogg Foundation 2004:11). In this study, the change logic model was used as a theoretical framework to develop an action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of Ethiopia. The input, activities/process, output, and outcome aspects of the change logic model were relevant in this study's context, and are described as follows:

Input refers to all the resources required to support programme operations, such as human, material, and financial resources (Auriacombe 2018:42; Rogers 2014:14) to accomplish the intended activities (W.K. Kellogg Foundation 2004:2) (see Section 2.6).

Process and/or activities refer to actions needed to change the input to produce the desired output (Auriacombe 2018:42; Funnell and Rogers 2011:28). It employs reviewed literature, developed questionnaires, collected data, analyses, and interpretations to produce the desired output and process/activities in the study.

Output refers to the intended result of the programme activities (Auriacombe 2018:42; Berry 2016:7). In this study, the output is the draft action plan to facilitate the integration of abortion care with HIV-FP services in an attempt to provide a one-stop service to enhance maternal healthcare in Ethiopia (see Figure 2.2).

Outcome refers to the direct, measurable effects of a programme's efforts over short and medium terms, such as changes in receiving integrated abortion and HIV-FP services (Berry 2016:7; Rogers 2014:14). In this study, the outcome is the validated action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.

Impact is the positively or negatively occurring long-term effects that result from programme accomplishments (7 to 10 years) (Berry 2016:10; W.K. Kellogg Foundation 2004:2). The impact of this study could not be measured during the study period as it required a longitudinal study over years, and was thus outside the scope of this thesis.

Figure 2.2 illustrates the change logic model that was applied to describe the development of a validated action plan for integrating abortion care with HIV-FP service in the public health facilities of Ethiopia. This was done using the programme fundamentals of inputs, process/activities, output, outcome, and impact.

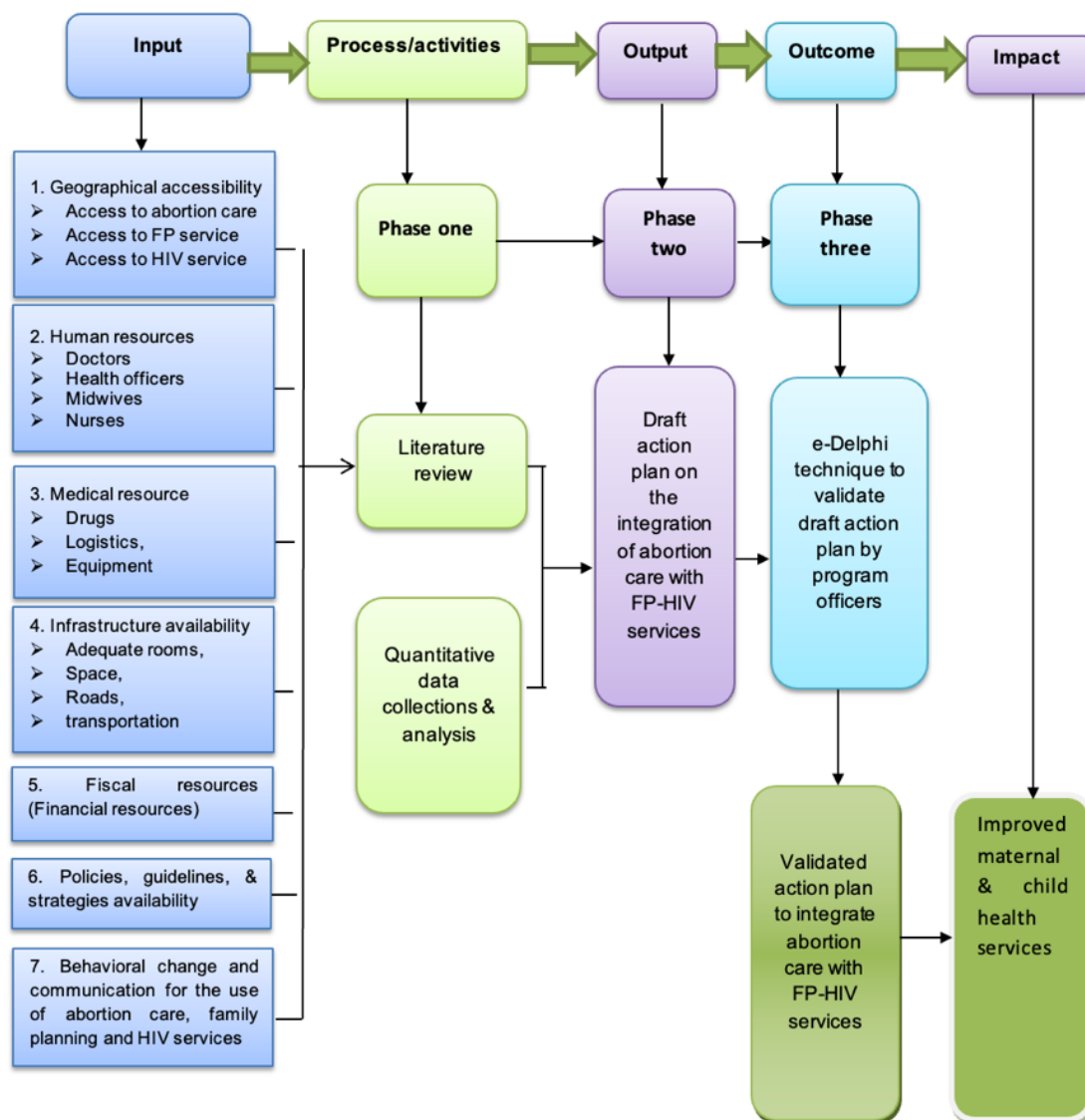


Figure 2.2: The Change Logic Model

Adapted from W.K. Kellogg Foundation (2004:2)

2.6 APPLICATION OF THE CHANGE LOGIC MODEL

The input, activities/process, output and outcome of the change logic model were relevant to this study. The inputs in this study's context were identified as geographic accessibility, human resources, medical resources and supplies, infrastructure availability, fiscal resources, guidelines, policies, and strategies availability, as well as behavioural change and communication. These inputs were discussed under the headings of abortion care, FP, HIV, and integrated services.

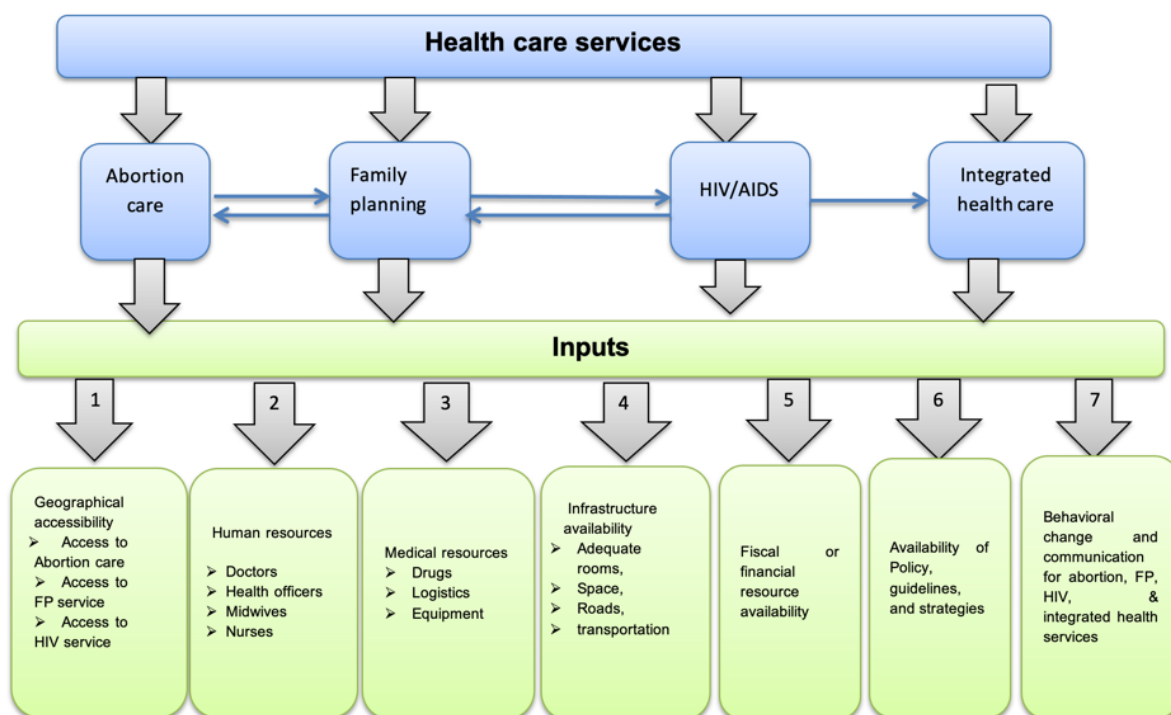


Figure 2.3: Healthcare services and inputs for the integration of abortion care with HIV-FP services

A. Abortion care

2.6.1 Inputs for abortion care

To provide comprehensive abortion care, the availability of resources such as infrastructure, financial resources, medical resources and supplies, and trained and skilled healthcare providers are often considered necessary inputs (Singh, Bankole

and Darroch 2017:23). In this particular context, inputs applicable to abortion care are geographic accessibility, human resources, medical resources and supplies, infrastructure, fiscal resources, policies, strategies and guidelines, and behavioural change and health information.

2.6.1.1 Geographic accessibility

The availability of healthcare facilities offering maternal health services such as abortion care, FP, and HIV/AIDS are essential for women (Zewdie, Yitayal, Kebede and Gebeyehu 145;2020 WHO 2012:65). Abortion care services are often difficult to access in rural communities due to a lack of facilities ready to provide the services legally, or topographic difficulties in accessing the existing few (Erko, Abera and Admassu 2016:4). A facility located within a five-kilometre radius (within a 2-hour walking distance) from the community has widely been shown to improve health service use (Teka et al., 2018: 581; Alebachew and Waddington 2015:20). As the distance to health facilities increases, women are required to travel long distances to access essential health services (Dibaba, Dijkerman, Fetters, Moore, Gebreselassie, Gebrehiwot and Benson 2017:76) on foot or use a locally available transportation system like “karaze”. These often result in delays in accessing the services (Kea, Tulloch, Datiko, Theobald and Kok 2018:6).

In Ethiopia, the number of public health facilities providing basic abortion care services increased significantly in the last few years, from 149 (25%) in 2008 to 823 (117%) in 2014 (Dibaba et al., 2017:76). However, the increase was seen only in the Oromiya regional state and the rest achieved between 21–92% of the recommended level of 87% (Dibaba et al., 2017:76). These large variations across regions could create difficulties for women in need of the services (WHO 2015:17). Therefore, to achieve the recommended level of safe abortion care in all regions, increased accessibility of abortion care facilities is required for all communities to improve maternal healthcare (Dibaba et al., 2017:76).

2.6.1.2 Human resources

Human resources constitute the most vital component of health systems (Abay, Dibaba, Gebreyohannes, Ararso, Mengistu and Hadis 2018:45) and trained human resources to provide abortion care is critical. In Ethiopia, health professionals such as health officers, midwives, and nurses are expected to provide abortion care at the public health centres' level, and medical doctors provide the service at public hospitals (MOH Ethiopia 2014:27). Although the health workforce density in Ethiopia has been showing an increasing trend, the doctor/health officer/nurse/midwife to population ratio in Ethiopia is still at the level of 0.7 per 1 000 population (MOH Ethiopia 2015:46). This has remained far behind the minimum standard of 2.3 per 1 000 population for doctors, nurses, midwives, and health officers combined, to provide essential healthcare to the communities (MOH Ethiopia 2015:46).

All abortion care providers need to have sufficient knowledge to ensure quality services as per the national standards and guidelines (Madziyire, Moore, Riley, Sully and Chipato 2019:4; WHO 2012:8). It is also a mandatory requirement during their pre-service training (MOH Ethiopia 2014:24). In recent years, Ethiopia developed technical and procedural guidelines for safe abortion services, focusing on healthcare providers' skill gaps (MOH Ethiopia 2014:24). These guidelines also included issues related to the attitudes and beliefs of service providers towards abortion care (MOH Ethiopia 2014:24). Therefore, pre-service training focuses on available policies, strategies, and guidelines on abortion care and ensure healthcare providers have the knowledge and skills to provide comprehensive abortion care (Beza, Chekol, Damtew, Eshetu, Hailemeskel, Omollo, Randolph, Gebremeskel, Endale, Smith and Rivkin 2019:17).

In-service training is an essential requirement for healthcare providers to update their skills and knowledge periodically through on-the-job training (Dibaba et al., 2017:76). Doctors, health officers, midwives, and nurses involved in providing abortion care need to receive regular in-service training (WHO 2015:33). In-service training can improve healthcare providers' confidence and competence (WHO 2015:68) to address the health problems of women receiving abortion care (Holcombe, Berhe and Cherie 2015:90).

In addition to competency training, it is important to determine how healthcare providers use their knowledge and skills in practice (Samuel, Fetters and Desta 2016:S64). Ongoing coaching, supportive supervision, monitoring, and evaluation (WHO 2018:39) are powerful tools that enhance healthcare providers' clinical practice (WHO 2018:40). Coaching and mentoring by experts from higher levels can make the healthcare providers strong and confident (WHO 2015:68), and ensure the sustainability of service delivery (Samuel, Fetters and Desta 2016:S64). Coaching and mentoring, improved incentive packages, and rewards can enhance the healthcare providers' motivation to render health services, particularly in rural and underserved communities (WHO 2015:68).

2.6.1.3 Medical resources and supplies

The WHO recommends certain essential equipment and supplies to provide safe abortion care (WHO 2015:31). These include manual or electric vacuum aspiration kits, dilatation and curettage (D and C) sets, mifepristone, and misoprostol (WHO 2015:33). To terminate a pregnancy in the first three months, electric or manual vacuum aspiration and/or medical abortion with mifepristone or misoprostol are preferred methods over sharp curettage. It reduces the risk of uterine perforation, pelvic infection, and cervical injuries (WHO 2018:24). In the second trimester, mifepristone or misoprostol and dilatation and curettage kits are needed for safe abortion care (WHO 2015:12). These resources must be available in every public health facility to ensure women are receiving the service using the required medical resources and supplies (WHO 2015:12).

The Ethiopian Ministry of Health supports health facilities providing abortion care with basic medical equipment and supplies that have to be replenished regularly (MOH Ethiopia 2014:29). Medical resources and supplies that are essential for effective abortion services include sterile and disposable gloves, tap water, antiseptic solutions (Tesfaye and Oljira 2013:35), cotton balls or gauze sponges, analgesics, anaesthetics, forceps and scissors (MOH Ethiopia 2014:30). Other essentials include uterine sounds to measure the length of the uterine size, speculums, tenaculums, needles, syringes, pregnancy test kits, blood pressure apparatus, and stethoscopes (Tafese, Woldie and Megerssa 2013:248). Antibiotics, intravenous replacement fluids, blood for

transfusions (Singh, Remez, Sedgh, Kwok and Onda 2018:29), drugs for intravenous and intramuscular injections, as well as emergency resuscitation equipment, must be available for use in case women are at risk of abortion complications (Singh et al., 2017:42).

2.6.1.4 Infrastructure

As part of quality healthcare (Sjöström 2016:10), health facilities need to have improved infrastructure to provide maternal health services (Chaturvedi, Ali, Randive, Sabde, Diwan and De Costa 2015:3). In Ethiopia, the construction of new facilities and expansions of existing ones are considered strategies to improve the maternal and child health services, particularly in rural communities. The availability of a good water supply system, sanitation facilities, electric power supply, and telephone and internet connectivity are also essential in the existing health facilities to provide quality maternal health care (MOH Ethiopia 2015:81).

Women in their first trimester can receive the service on an outpatient basis. However, all second-trimester clients are required to stay in the facilities as they may need close follow-up care (MOH Ethiopia 2014:17). Manual or electric vacuum aspiration and medical abortions are less intensive procedures (Singh, Bankole and Darroch 2017:20) and should be performed in facilities with good infrastructure (Chaturvedi, Ali, Randive, Sabde, Diwan and De Costa 2015:3). A wide range of services such as HIV/AIDS and FP services can also be provided in an integrated fashion to women who receive abortion care if the facilities have good infrastructure (Samuel, Fetters and Desta 2016:S70; Lenka and George 2013:297).

Good infrastructure could help women feel comfortable (MOH Ethiopia 2014:17). The affordability of transportation systems could also enhance the use of available health services (WHO 2015:5). Good transportation systems are vital as clients want privacy from others (even family members) when receiving emergency and non-emergency maternal healthcare during transportation (WHO 2018:41; WHO 2012:9).

Most public health centres and some public hospitals use delivery rooms for abortion care (Samuel, Alemayehu and Powell 2013:18). These could, therefore, compromise clients' privacy and the provision of healthcare delivery (Francome 2015:116).

2.6.1.5 Fiscal resources

One of the factors affecting maternal healthcare is the service cost itself (Banke-Thomas, Abejirinde, Banke-Thomas, Maikano and Ameh 2019:2). Aspects that require an appropriate budget are skilled healthcare providers, equipment (such as different sizes of electric and manual vacuum aspirators), oxygen cylinders for emergency resuscitation, medical supplies and medicines, as well as ultrasound machines (Banke-Thomas et al. 2019:2; WHO 2012:63).

The underlying rationale that complications result from unsafe abortion care and lead to higher service costs compared to safe abortion care is attributed to the management of sepsis (Francome 2015:9), particularly in developing nations like Ethiopia (WHO 2012:26). Manual or electric vacuum aspiration and medical abortion with misoprostol or mifepristone are less invasive procedures and relatively less costly (WHO 2018:1).

The payments associated with abortion care (Ilboudo, Greco, Sundby and Torsvik 2015:505; Penfold, Wendot, Nafula and Footman 2018:166) may deplete the household resources (Ilboudo et al., 2015:501). This occurs either directly or indirectly through transportation, food, accommodation, and absenteeism from work (Coast, Lattof, van der Meulen Rodgers and Moore 2019:2). Consequently, health services need to be affordable for all women and must be financed by the government (WHO 2012:8). Reducing the financial barriers to care, especially for the poor and adolescents, increases healthcare utilisation. Eliminating unnecessary costs, such as reducing unnecessary laboratory tests, can also increase the demand and use of abortion services (Ilboudo et al., 2015:505).

2.6.1.6 Policies, strategies and guidelines

Policies, strategies, and guidelines are all enabling factors and must be in place to ensure abortion services are safe and accessible (WHO 2015:6). Globally, about 75%

of governments have adopted policy measures for reducing maternal and newborn deaths (UNIAIDS 2017:3). These policy frameworks entail strategies such as improved antenatal care, postnatal care, newborn care, FP services, and comprehensive abortion service coverage (United Nations 2017:3). Africa took the lead to adapt at least one policy measure to address maternal and newborn mortality, followed by Latin America, the Caribbean and Asia (United Nations 2017:3). In 1993, Ethiopia adopted the first health policy aiming to reach a larger group of the population through promotive, preventive, curative, and rehabilitative health services, emphasising maternal and child healthcare (MOH Ethiopia 2015:2).

Policies, strategies, and guidelines are inputs to identify abortion-related issues in this study's context. Abortion laws and policies can be corrective or protective, specific or non-specific, and limiting or facilitating abortion care (Erdman and Johnson 2018:35). Abortions were legally prohibited in almost every country until the end of the 19th century. Restrictions were mostly imposed by colonizers such as Britain, France, Portugal, Spain, and Italy (Berer 2017:14), but many countries have since (including Ethiopia) reformed their abortion laws (Berer 2017:15; Erdman and Johnson 2018:120; MOH Ethiopia 2006). However, the legislation of many countries was written in vague terms, and there is uncertainty about abortion services (Erdman and Johnson 2018:120; Johnson, Lavelanet, and Schlitt 2018:35). The revised 2014 abortion law in Ethiopia explicitly indicated the role and responsibility of various levels of healthcare providers working in public and private health sectors to provide safe abortions care (MOH Ethiopia 2014:7).

Abortion care policies and strategies should be available, and healthcare providers must have access to them. Similarly, guidelines that ensure the implementation of safe abortion services must be ready and easily available (WHO 2015:1) to ensure access to safe abortion care and protect individuals' sexual and reproductive rights (Erdman and Johnson 2018:121). However, abortion laws and guidelines are not readily available at facility levels (Johnson, Lavelanet and Schlitt 2018:35).

2.6.1.7 Behavioural change intervention

Abortion is a very sensitive issue concerning religious, moral, cultural, and political dimensions (Alemayehu, Addissie, Ayele, Tiroro and Woldeyohannes 2019:76). To this end, health education on abortion care can be used as an effective tool to prevent the occurrence of unwanted pregnancy and unsafe abortion practices. Health education on abortion care is important in improving individuals' knowledge and breaking misconceptions in the community (Banerjee, Andersen, Warvadekar and Pearson: 2013:149). The individual can be educated through one-on-one communication and the public at large using mass media (Banerjee et al., 2013:142). Mass media is believed to be an effective method to increase awareness among community members. However, women often do not use the service due to shame, fear, and an inability to make decisions for their own health (Bingham, Drake, Goodyear, Gopinath, Kaufman and Bhattarai 2011:245-263).

HIV and FP are offered in an integrated way in Ethiopia and are fully described in a study conducted by Ayalew (2018:22). HIV and FP services are only briefly described in this study. The inputs of the change logic model are discussed under FP, as follows:

B. Family planning

FP helps families achieve the desired number of children with appropriate spacing and timing to ensure healthy families (Nair, Ashok and Solanke 2016:3147-3152). They thereby avoid unplanned or unwanted pregnancies and prevent unsafe abortions (Central Statistics Authority and ICF International 2016:103).

While 57% of women of reproductive age who experienced sexual intercourse use a modern method of FP worldwide (United Nations 2015:1), about 150 million still had unmet needs for FP (Debas, Donkor, Gawande, Jamison, Kruk and Mock 2015:112). The demand for FP has also grown in recent years due to the FP 2020 London initiative. It enhances women's rights to decide by themselves how many children they want to have during their reproductive period (Satia and Chauhan 2018:1).

In Ethiopia, modern contraceptive use among married women has steadily increased over the past two decades (Central Statistics Authority and ICF International 2019:8), from 14% in 2005 to 41% in 2019. However, the use of modern FP methods varies across regions (3.4% in Somali to 50% in Addis Ababa). The acceptance rate of modern FP in southern Ethiopia (SNNPR) was 45% based on the country's preliminary report of a national survey conducted in 2019 (Central Statistics Authority and ICF International 2019:11). The inputs for FP services to provide care to women who received abortion services are described below:

2.6.2 Inputs for FP

Inputs applicable to FP services in this study's context are geographic accessibility, human resources, medical resources and supplies, infrastructure, fiscal resources, policies, strategies, guidelines, and behavioural change and health information. These are described below:

2.6.2.1 Geographic accessibility

FP services can be influenced by the accessibility of health facilities providing essential maternal health services (Yao, Murray and Agadjanian 2013:2). Facilities nearer to the community or a shorter walking distance are preferable for FP services (see Section 2.6.1.1). Accordingly, the unmet need for FP services is high in rural communities: 25% in rural settings versus 11% in urban areas (Central Statistics Authority and ICF International 2016:108). This could be mainly due to poor access to healthcare services (Byrne, Hodge, Jimenez-Soto and Morgan 2014:5).

The primary source (84%) of modern contraception in Ethiopia is the public sector, followed by the private sector (14%); the remaining 2% are non-governmental organisations (NGOs) and other sources (Central Statistics Authority and ICF International 2016:106). The expansion of the community-based distribution of FP services (USAID 2012:19) and the availability of mobile clinics can improve the accessibility of FP services to the community (MOH Ethiopia 2020:38). In addition, integrating HIV and abortion care can also enhance FP utilisation (MOH Ethiopia 2020:30). Ultimately, improved access to modern contraceptives in Ethiopia is

important, especially in disadvantaged communities to promote maternal health care (Adeniyi, Ajayi, Moyaki, Ter Goon, Avramovic and Lambert 2018:140).

2.6.2.2 Human resources

Human resources are among the most important inputs for the delivery of maternal healthcare. Two vital aspects of quality FP services are the availability of health workforces and the need for competency training for the available health workforce to provide quality maternal healthcare (MOH Ethiopia 2016:17).

An adequate number of healthcare providers (WHO 2015:3; EngenderHealth 2011:29) with an appropriate skills mix (Doctors, Health officers, Midwives and Nurses) is essential to provide FP services in public health facilities (MOH Ethiopia 2015:45). Programme managers and contraceptive logistic suppliers are also important in the delivery of FP services (MOH Ethiopia 2020:53; EngenderHealth 2011:29). However, the availability of doctors, health officers, nurses, and midwives to the population ratio in Ethiopia is 0.7 per 1 000 population, which is much lower than the minimum standard of 2.3 per 1 000 (MOH Ethiopia 2015:45). To narrow this gap, the government of Ethiopia is markedly increasing the production and deployment of healthcare professionals to public health facilities to deliver essential health services (Alebachew and Waddington 2015:20). The available healthcare providers in public health facilities should also be socio-culturally acceptable to the community (MOH Ethiopia 2014:53). Therefore, increased availability of healthcare providers in the health facilities can promote the uptake and quality of FP services (WHO 2017:3).

The availability of competent healthcare providers who are committed and professionally qualified is important for the health system to function effectively (MOH Ethiopia 2014:42). To ensure healthcare providers are competent to provide quality services, medical and nursing schools should equally focus on the theoretical and practical aspects of their education (Muganyizi, Ishengoma, Kanama, Kikumbih, Mwanga, Killian and McGinn 2014:142). Competency-based training could also enable healthcare providers to render quality FP services (WHO 2017:11) as the quality of care is strongly influenced by the availability of trained human resources (Gupta, Verma, Kaur, Iyengar, Singh and Singh 2019:14). Therefore, in-service

training and professional development are essential to improve their theoretical knowledge and skills to deliver comprehensive and quality FP services (MOH Ethiopia 2020:67).

2.6.2.3 Medical resources and supplies

Universally, a large share (84%) of FP commodities is covered by governments, and the rest are paid for by private sectors and NGOs (United Nations 2017:4). Contraceptives that should be available in health facilities are oral contraceptives, condoms, vaginal foaming tablets, Depo-Provera injectable, Noristerat injectable, Cyclofem monthly injectable, Copper-T 380-A IUCD, Implanon implant, Jadelle implant, and emergency contraceptive pills (MOH Ethiopia 2020:37). These are necessary to provide an adequate service to clients based on informed choices (Walle and Woldie 2017:38).

A service availability and readiness assessment study in 2018 indicated that only 7% of public health facilities in Ethiopia had fulfilled all FP commodities. The most available FP method was condoms (81%), and the least was progestin-only contraceptive pills (35%) (Ethiopian Public Health Institute 2018:21). Moreover, a speculum (WHO 2014:16), blood pressure apparatus, weight scale, flashlight, uterine sound, scissors, tenaculum, antiseptic solutions, gloves, examination table, thermometer, and needle and syringe are medical resources that affect the provision of contraceptive services (Ethiopian Public Health Institute 2018:6; Tafese, Woldie and Megerssa 2013:248).

Contraceptive pills, short-acting injectables, long-acting injectables, and IUDs are described as follows:

a) Oral contraceptive pills

Modern combined oral contraceptives contain progestin derived from progesterone, testosterone, or spironolactone (Ali, Farron, Dilip and Folz 2018:475; Shoupe and Mishell 2016:62). These are generally safe options for most healthy and sexually active women up to the age of 35 years (Shoupe and Mishell 2016:22).

b) Short-acting injectables

Medroxyprogesterone acetate (DMPA) is one of the most popular contraception methods (Zalenskaya, Chandra, Yousefieh, Fang, Adedipe, Jackson, Anderson, Mauck, Schwartz, Thurman and Doncel 2018:2) used once in three months (Skiles, Cunningham, Inglis, Wilkes, Hatch, Bock and Barden-O'Fallon 2015:21). Its use has noticeably increased from 3% in 2000 to 23% in 2016 (Central Statistics Authority and ICF International 2016:105). The public sectors are the main source (82%) of short-acting injectables, followed by the private sector (17%) in Ethiopia, and only 1% from NGOs and other sources (Central Statistics Authority and ICF International Ethiopia 2016:105).

c) Long-acting injectables

Long-acting injectables are hormonal contraceptives that protect against pregnancy by increasing cervical secretion to inhibit sperm motility and can be used safely while breastfeeding. It is reported to be more than 99% effective (WHO 2018:66; Jain and Muralidhar 2011:628). However, there is evidence of contraceptive failure due to interactions between the levonorgestrel-releasing Jadelle implant and the ART drug Efavirenz (Mason, Medley, Yeiser, Nightingale, Mani, Sripipatana, Abutu, Johnston and Watts 2017:213). An integration of services, therefore, becomes even more important.

d) Intrauterine contraceptive devices (IUDs)

IUDs are inserted into the woman's uterus to prevent an unwanted pregnancy (Animen, Lake and Mekuriaw 2018:922). The device is made of plastic and is T-shaped, with a monofilament nylon string attached at the end for removal that inhibits the implantation of conception in the uterus (Shoupe 2016:1-9). The T copper ions create spermicidal activity, and their effectiveness in preventing unintended pregnancy ranges from 95-98% (WHO 2018:155; Jain and Muralidhar 2011:628). The method is very popular and used globally by 12 million women and is preferable for all age groups (Shoupe and Mishell 2016:21). Even though the method is preferable, effective and insertion cannot affect the normal menstrual cycle, some women may experience an

increased menstrual flow (Shoupe and Mishell 2016:161). Ultimately, women may select it as a contraceptive choice if the service is integrated with abortion care.

2.6.2.4 Infrastructure

FP service facilities need to have good service-providing rooms (MOH Ethiopia 2020:67; EngenderHealth 2011:4), located in a suitable environment (Mpunga, Lumbayi, Dikamba, Mwembo, Mapatano and Wembodinga 2017:276). In this study, infrastructure refers to the availability of facilities with good service-providing rooms and transportation access to healthcare facilities. The infrastructure of the FP facility includes the physical structure of service-providing areas, such as adequate rooms, electricity, improved water sources, and adequate sanitation facilities (Assaf, Wang and Mallick 2017:4). The availability of transportation systems to and from healthcare facilities also increases access and use of FP services (Yao, Murray and Agadjanian 2013:1). Therefore, improving healthcare facilities' physical and transportation infrastructure can enhance the uptake of FP services (MOH Ethiopia 2015:64).

In Ethiopia, research findings revealed that 88-100% of public hospitals and 57% of public health centres have a regular source of light, either from electricity or a generator. More than three-quarters of public hospitals and 71% of health centres have an improved water source in their facilities, and over two-thirds of public hospitals and health centres have emergency transport systems (MOH Ethiopia 2015:49).

2.6.2.5 Fiscal inputs

Fiscal resources refer to resources that are important for the improvement of maternal and child healthcare, including FP services (Alebachew, Mitiku, Carlyn and Berman 2018:17). Financial investment in FP services contributes to socio-economic development across the country (Kassa 2018:1), preventing unnecessary deaths among women of childbearing age (MOH Ethiopia 2020:19), and helping to achieve the sustainable development goals (SDGs) (MOH Ethiopia 2016:3).

FP is a prioritised maternal health service given due attention by the government of Ethiopia and is offered free of charge in public health facilities (Alebachew, Mitiku,

Carlyn and Berman 2018:4). By exempting the service, an increase in the contraceptive prevalence rate (CPR) among married women or women in sexual relations was expected (from 42% in 2014 to 55% by 2020), and a reduction in unmet needs for FP (from 24% in 2014 to 10% by 2020) (Alebachew, Mitiku, Carlyn and Berman 2018:5). The majority (75%) of FP service costs goes to contraceptive commodities and consumable products (MOH Ethiopia 2016:24).

The cost of human resources and facility overheads are financed through the central treasury of the government. Exempted service commodities, medicines, and medical supplies are financed through external funding agencies, such as Global Fund, PEPFAR (Alebachew, Mitiku, Carlyn and Berman 2018:5), and UNFPA (UNFPA 2015:11).

The cost of FP per woman of reproductive age in Ethiopia is estimated to be US\$0.47 per year, which is lower than the spending costs of other developing countries per person per year of US\$2–5 (MOH Ethiopia 2016:24). The government of Ethiopia is committed to increasing the budget allocation for FP service every year; however, a 50% funding gap remains in covering the programme costs (MOH Ethiopia 2017:1). Thus, to ensure high coverage and sustainable FP services for the community, an improved healthcare financing system (Alebachew, Mitiku, Carlyn and Berman 2018:5) and adequate financial resources are required from the government (MOH Ethiopia 2020:18).

2.6.2.6 Policies, strategies and guidelines

Policy measures have played an important role in reducing maternal and child deaths, particularly in Africa, Latin America, the Caribbean, and Asian countries (see Section 2.6.1.5). Low and middle-income countries continue to improve their FP programmes, in line with their national health strategies and commitments to regional and global FP2020 initiatives (Kraft, Oduyebo, Jatlaoui, Curtis, Whiteman, Zapata and Gaffield 2018:42). In this initiative, 39 low and middle-income countries made commitments to expand access to FP services in the community (Kraft et al., 2018:42). The Ministry of Health in Ethiopia also developed the health sector transformation plan in 2015,

aligned with the FP2020 commitment to increase contraceptive prevalence to 55% by 2020 (Central Statistics Authority and ICF International 2016:103).

Several policies, guidelines, and strategies were developed to improve access to FP services in Ethiopia. These included the Population Policy (1993), the National Youth Policy (2004), Youth Reproductive Health Strategy (2016-2020), The National FP Service Guideline (2011), the Reproductive Health Strategic Plan (2021 to 2025), and the revised National FP Guideline of 2020.

FP guidelines are necessary for client consultations during FP services (MOH Ethiopia 2020:64; Tafese, Woldie and Megerssa 2013:252). It helps to update healthcare providers' clinical knowledge of safe drug administration, and manage emergency FP services (Jay and Kavita 2018:18). However, studies indicated that guidelines for FP services are less available to healthcare providers, and the healthcare providers are not consistently using available guidelines during FP consultations (Tafese, Woldie and Megerssa 2013:253).

2.6.2.7 Behavioural change intervention

Awareness of FP methods and services affects the use of contraceptives (Teka et al., 2018:50). Individuals, families, and communities need the information, ability, and inspiration to demand the service (MOH Ethiopia 2020:51). The health information that is communicated to individuals and the community through local media, outreach visits, and peer education should be tailored to the target audience (MOH Ethiopia 2020:32; EngenderHealth 2011:5; Mendes 2014:52). It may influence their use of modern contraceptives, avoid unwanted pregnancies, and misconceptions related to cultural and religious pressures (Kahsay, Tegegne, Mohammed and Kiros 2018:10).

Community figures who influence social behaviour in the community through messages and information should focus on changing norms, attitudes, and ideas on the roles of men and women seeking contraceptive services (Murithi, Santillán, Dhillon, Sebany, Farley, Ndhlema, Chintu and Jackson 2016:19). Healthcare providers should also support those community figures and update themselves using

available up-to-date job aids and/or tools to enable them to appropriately screen, counsel, and provide FP services (MOH Ethiopia 2020:52; EngenderHealth 2011:14).

C. HIV/AIDS

HIV is a retrovirus, which is the etiologic agent of acquired immune deficiency diseases (AIDS) (Klatt 2018:9). The infection is often acquired through causal sexual intercourse with infected sexual partners (MOH Tanzania 2015:3), responsible for about 90% of HIV transmissions in sub-Saharan Africa (MOH Tanzania 2015:3). In addition, mother-to-child transmission of HIV is the most well-known source of this viral infection among children younger than 15 years (Merga, Woldemichael and Dube 2016:1). This form of transmission occurs via the infected mother to the foetus in the uterus and during delivery, or later through breast milk. The remaining possibility of this viral transmission is through infected blood and blood products (Merga, Woldemichael and Dube 2016:1).

Screening pregnant women for HIV infection is a critical step in preventing the transmission of HIV from mothers to children (Girum, Wasie and Worku, 2018:320; Stover, Shrestha, Tsambe and Mathe 2019:6). HIV/AIDS in children can be devastating for the socio-economic status of the family and the community (Merga, Woldemichael and Dube 2016:1).

The first HIV case was reported in Ethiopia in 1984, one to two years after most sub-Saharan countries (MOH 2014:1). Since then, HIV has spread fast, taking the lives of millions and leaving hundreds of thousands of children orphaned (MOH Ethiopia 2017:1). Ethiopia managed to achieve a substantial reduction in new HIV infection rates (from 3.4 million in 1996 to 1.8 million in 2017), yet about 1.2 million people in Ethiopia live with HIV/AIDS (Geolu, Tigussie, Mudata, Abdu, Molla, Assefaw, Chewaka, Yemaneh and Girma 2018:2). The decline is far from the anticipated half a million mentioned in the 2020 HIV prevention plan (Global AIDS update 2018:26). Good governmental leadership and commitment are required to lower new HIV infection and death rates associated with HIV/AIDS (HAPCO Ethiopia 2018:7). Community mobilisation, HIV counselling and testing, prevention of mother-to-child transmission of HIV and ART are necessary for the fight (MOH Ethiopia 2015:27).

2.6.3 Inputs on HIV/AIDS

The inputs required for the prevention and treatment of HIV/AIDS services are described as follows:

2.6.3.1 Geographic accessibility

The HIV/AIDS and FP services are linked and provided in the same facilities (see Section 2.6.2.1). The HIV epidemic is characterised by geographic areas and population groups (HAPCO Ethiopia 2018:3). Eastern and southern Africa are home to 6.2% of the world's population but host half of the world's people living with HIV/AIDS (UNAIDS 2016:99).

The prevalence of HIV is seven times higher in urban areas than in rural areas (2.9% versus 0.4%). The prevalence is 3.6% among women in urban areas compared with 0.6% among women in rural areas of Ethiopia (HAPCO Ethiopia 2018:3). It has also been determined commercial sex workers, drug users, prisoners, men who have sex with men, and long-distance truck drivers are the most vulnerable groups of HIV infection (UNAID 2016:7).

Identifying geographic areas and population groups with a high level of HIV/AIDS distribution and improving healthcare facilities to provide HIV/AIDS services can contribute to the prevention and treatment of HIV/AIDS (Das, Opoku, Kharfen and Allston 2018:2).

2.6.3.2 Human resources

The availability of human resources for HIV and FP services is similar since these two services are often provided in an integrated manner. The accessibility of a competent health workforce is thus paramount to quality healthcare (Onnis 2019:6). Competent healthcare providers are also required for HIV diagnostic procedures (Kennedy, Yeh, Johnson and Baggaley 2017:2) since HIV testing is a critical step in identifying people living with HIV, enrolling them to treatment, care and support services, and preventing new HIV infections (see Section 2.6.1.1) (MOH Ethiopia 2017:5).

The presence of different healthcare professionals (PEPFAR, USAID and MSH 2016:2), such as doctors, health officers, nurses, pharmacy personnel, laboratory technicians or technologist, and case managers (MOH Ethiopia 2017:3) are essential across the continuum of HIV/AIDS care (PEPFAR, USAID and MSH 2016:2).

2.6.3.3 Medical resources and supplies

To provide uninterrupted HIV/AIDS services, a continuous supply of certain essential medical equipment and supplies needs to be in place (MOH Ethiopia 2017:43). These resources are necessary to prevent HIV infection, identify HIV cases, conduct clinical and laboratory monitoring, and manage opportunistic infections (MOH Ethiopia 2017:43). In this study's context, medical resources include condoms, ART drugs, and HIV test kits, as described below:

a) Condoms

The female condom is a strong, soft, transparent polyurethane sheath with flexible rings at both ends. It is inserted into the vagina before sexual intercourse and protects against pregnancy and sexually transmitted diseases (WHO 2018:261). The male condom has also been proven to protect against unwanted pregnancy and sexually transmitted diseases, including HIV (Nair, Ashok and Solanke 2016:3147-3152).

Despite coverage limitations, the condom programme is Africa's priority in HIV prevention (UNAID 2016:6). An estimated six billion male condoms were required in sub-Saharan Africa in 2015. The demand ranged from 55.4 condoms per person aged 15–64 years per year in Botswana, to 13.2 condoms per person per year in Ethiopia (UNAID 2016:32).

Condoms have been distributed through various outlets. The most common outlets are health facilities, pharmacies, shops, workplaces (MOH Ethiopia 2018:10), social marketing, and civic organisations (UNAID 2016:119). The distribution mainly targets female sex workers, long-distance truck drivers, and people living with HIV (PLHIV) (MOH Ethiopia 2018:10).

b) Antiretroviral therapy or treatment (ART)

Ethiopia initiated ART for HIV/AIDS in 2005 (HAPCO 2017:1). This service has addressed the needs of HIV-infected persons who required treatment in the last few years (Girum, Wasie and Worku 2018:320). In recent years, the Ethiopian government has focused on providing ART for 90% of HIV-positive individuals in 2020 through test and treatment strategies (UNAIDS 2017:11; HAPCO 2017:1).

Patients with HIV who require treatment are managed by ART; these drugs are currently available in fixed-dose combinations (MOH Kenya 2018:101). The fixed-dose combinations contain two or more different drugs, such as Tenofovir + lamivudine (or Emtricitabine)+Dolutegravir or (TDF + 3TC (or FTC) + DTG) and Tenofovir + lamivudine + efavirenz or TDF + 3TC + EFV (WHO 2019:7). It can be given as fixed-dose on a daily basis to adults, pregnant and lactating women, and adolescents (MOH Ethiopia 2017:50; Mariane Wariki, Ota, Mori, Wiysonge, Horvath and Read 2017:2).

c) HIV testing kits

A valid HIV test kit is mandatory for HIV counselling and testing services (MOH Ethiopia 2017:20) to operate a serial blood sample testing strategy (MOH the United Republic of Tanzania 2015:31). Rapid HIV test kits have the advantage of simple applications, low operational cost, are non-invasive, and there are shorter periods in updating the kits (Bassey, Bond, Adedeji, Oke, Abubakar, Yakubu, Jelpe, Akintunde, Ikani, Ogundiran and Onoja 2015:1). However, in rare cases, false negatives and false positives are drawbacks of rapid HIV test kits (Osaro-matthew, Frank-Peterside, Okonko, Ughala and Obike-Martins 2015:2). The different HIV test kits commonly used for screening and confirmation purposes (Mwisongo, Peltzer, Mohlabane and Tutshana 2016:649) in Ethiopia are SD Bioline, First response, Advance quality, Determine, G-Ocean (Mwisongo et al., 2016:649), and Beijing Wantai (WHO 2015:80). The government of Ethiopia is also planning to introduce an oral fluid testing kit to allow self-testing before clients become ill and access services closer to their home (Belete, Deressa, Feleke, Menna, Moshago, Abdella, Hebtessilassie, Getaneh, Demissie, Zula and Lemma 2019:2).

2.6.3.4 Infrastructure

The HIV/AIDS programme is provided in the same facilities as FP services (see Section 2.6.2.4).

2.6.3.5 Fiscal resource

HIV/AIDS activities need appropriate financial resource allocation to ensure comprehensive care (Aylew 2018:45). Development assistance cumulatively financed about \$108 billion for HIV/AIDS activities in low and middle-income countries (LMICs) from 2005 to 2016. This financial resource from the international community was crucial in fighting against HIV/AIDS (Haakenstad, Moses, Tao, Tsakalos, Zlavog, Kates, Wexler, Murray and Dieleman 2019:e394). In order to manage HIV/AIDS activities properly, a further \$25 billion a year is required from international communities to end HIV/AIDS by 2030 (Oberth, Torres, Mumba and O'Connor 2017:232).

In Ethiopia, most HIV/AIDS resources have been mobilised by the Federal HIV/AIDS Prevention and Control Office (FHAPCO) (MOH Ethiopia 2018:12). The resources are often obtained from the United States President Emergency Plan for AIDS Relief (PEPFAR), and the Global Fund to Fight AIDS, Tuberculosis, and Malaria (Haakenstad et al., 2019:e392). However, support from these international organisations is reducing and threatens the sustainability of HIV/AIDS responses in the country (MOH 2018:12).

In recent years, funds for HIV/AIDS care and support reduced (USAID, PEPFAR, and HEALTH POLICY PLUS 2018:2), but ever-increasing programme costs remained, posing a critical challenge (USAID, PEPFAR, and HEALTH POLICY PLUS 2018:3). Accordingly, mobilising funds from domestic sources is becoming a priority to supplement reduced international funding (USAID 2018:3).

2.6.3.6 Policies, strategies and guidelines

Policies, strategies, and guidelines are inputs in this study to identify HIV-related policies, strategies, and the use of guidelines. Ethiopia started responding to the prevention and treatment of HIV/AIDS in early 1985. Since then, the Ministry of Health has developed different HIV/AIDS-related policy frameworks, strategic plans, and guidelines (HAPCO Ethiopia 2018:7). These documents enable the government, stakeholders, and beneficiaries to avoid deep-rooted taboos related to sexual behaviour and drug use, attitudes towards diseases, stigma and discrimination, poverty, and religious beliefs to discuss the issue openly (MOH Ethiopia 2014:111).

Policies, strategies, and guidelines that have been developed by the Federal Ministry of Health Ethiopia include: Guidelines for HIV Counselling and testing in Ethiopia (MOH Ethiopia 2007), Guidelines for the implementation of the antiretroviral therapy programme in Ethiopia (MOH Ethiopia 2007), Ethiopian strategic plan for intensifying multi-sectoral HIV/AIDS response (HAPCO Ethiopia 2004), National Nutrition and HIV/AIDS Implementation Reference Manual (NHAPCO Ethiopia 2008), National guidelines for comprehensive HIV prevention, care and treatment (HAPCO Ethiopia 2014), Ethiopia's country operational plan strategic direction summary (PEPFAR 2018), and HIV Prevention in Ethiopia National Road Map 2018 (HAPCO Road map 2018).

A study conducted in Ethiopia assessed the availability and utilisation of guidelines and strategies related to HIV/AIDS. The findings revealed that 43.8% of public hospitals and 17.8% of public health centres had standard HIV/AIDS precautions, and only 33% of public facilities utilised available national guidelines (Deribew, Biadgilign, Berhanu, Defar, Deribe, Tekle, Asheber and Dejene 2018:535).

2.6.3.7 Behavioural change intervention

Behavioural interventions include a range of health programmes that use various communication channels (e.g. mass media, community-level, and interpersonal) to convey behavioural messages designed to reduce the risk of contracting HIV (MOH Ethiopia 2017:35). The HIV/AIDS behavioural intervention programme includes HIV

preventive activities related to social, cultural, environmental, and socio-economic factors (Klatt 2018:45), focusing on young and adolescent girls (MOH Ethiopia 2017:35).

Globally, people's interaction with information and communication technology is dramatically changing (UNAID 2016:74). A standalone media approach is unlikely to produce desired results; instead, alternative information materials on health programmes for communities have shown improvement in the delivery of health services (UNAID 2016:74).

A study conducted in Ghana indicated that communicating HIV/AIDS-related messages through television, radio, and print media to the community increased the uptake of HIV testing, particularly among married women and men (Sanoa, Sedziafab, Amoyawa, Boatenga, Kuirec, Boamahd and Kwona 2016:684-688). Similarly, in Ethiopia, women who had access to televisions, radios, and newspapers at least once a week had better knowledge of mother-to-child HIV transmission and prevention than those without access (Luba, Feng, Gebremedhin, Erena, Nasser, Bishwajit and Tang 2017:6).

D. AN INTEGRATED HEALTH SERVICE

The concept of integration refers to bringing separate people or things together in a unified manner (Colombini, Mayhew, Mutemwa, Kivunaga and Ndwiga 2016:2133). Likewise, integrated health service has been widely used to describe bringing different components of the healthcare services together in an organised manner (Haregu, Setswe, Elliott and Oldenburg 2014:9), including human resources, health services, infrastructures, and information systems (Lenka and George 2013:298).

Integrated healthcare systems increase efficiency, horizontalisation of vertical programmes, effective use of human resources, and clients receive a one-stop service. Multiple needs are addressed simultaneously, at the same place, or access is attained to a continuum of services through a referral system (Rutaremwā and Kabagenyi 2016:2).

The integration of HIV and FP services improves maternal healthcare, where the risks of both unintended pregnancy and HIV transmission are high (Warren, Hopkins, Narasimhan, Collins, Askew and Mayhew 2017:91). Adequate evidence has documented improved maternal health services through the integration of HIV and FP services (Hope et al., 2014:236). This integration is widely adopted by many countries as a mechanism of promoting maternal healthcare (Hopkins and Collins 2017:83). When providing integrated healthcare, client-provider consultations must be conducted in a friendly manner (Mutemwa, Mayhew, Warren, Abuya, Ndwiga and Kivunaga 2017:iv91-iv101).

International donors consider integrated healthcare as a good strategy to address a large number of unwanted pregnancies in HIV-positive women and protect the vertical transmission of HIV from mothers to children (Adamchak, Okello and Kaboré 2016:24-29). Adequate commodities, good infrastructure, good clinical knowledge among providers, motivated staff, and technical support systems must be in place to promote maternal healthcare through the integrated mode of care (Mutemwa et al., 2017:iv91-iv101). Therefore, the need arose to develop an action plan to integrate abortion care into the existing integrated HIV-FP service in Ethiopia and improve maternal health services.

2.6.4 Inputs for an integrated health service

The inputs for integrated health service in this study's context are described as follows:

2.6.4.1 Geographic accessibility

People have to access health service delivery points without travelling long distances (see Section 2.6.1.1) (Waddington 2015:20). The geographic distance of a healthcare facility affects the accessibility of integrated healthcare services (Dos Anjos Luis and Cabral 2016:172). In fragmented health service delivery, women are required to travel more and experience a loss of continuity of care and lost productivity in their work (WHO 2018:2). The inputs for geographic accessibility to abortion, FP, and HIV services also apply to integrated healthcare services (see Sections 2.6.1.1, 2.6.2.1, and 2.6.3.1).

2.6.4.2 Human resource

In providing an integrated health service to clients, healthcare providers (whether they are new or existing staff) need to have either pre-service or in-service training (see Section 2.6.1.2) (Nkhoma, Sitali and Zulu 2022:393). Respectful, compassionate and careful services must be considered when providing an integrated health service (Luis and Cabral 2016:173) to satisfy women receiving integrated care in the same health facility by the same or different healthcare providers (Lambdin, Mbwambo, Josiah and Bruce 2015:1). Moreover, health resources are scarce in low-income countries, especially human resources (Heyeres, McCalman, Tsey and Kinchin 2016:2). Therefore, integrating health services minimise the shortage of human resource by reorganising the activities in the health system (Heyeres et al., 2016:2) and providing multiple tasks in the same location (Demissie and Mmusi-Phetoe 2021:102).

Studies have found in five countries, two-thirds of healthcare providers did not have adequate training and did not know the guideline on how to offer integrated healthcare services (Ng, Pacque-Margolis, Kotellos and Brantley 2012:2).

2.6.4.3 Medical resources and supplies

Health facilities have a responsibility to obtain adequate and appropriate medical resources and supplies. The healthcare providers must also use it properly and communicate to clients how medical resources are utilised (Combes and Arespachoga 2013:13). In this study, the medical resources and supplies necessary to integrate healthcare were briefly described under abortion care, FP, and HIV services (see Sections 2.6.1.3, 2.6.2.3 and 2.6.3.3).

2.6.4.4 Infrastructure

Adequate physical infrastructure and basic facilities are necessary for delivering quality services in a coordinated fashion (Ethiopian Public Health Institute 2018:4). Satisfactory space in health service delivery points can promote the increased uptake of integrated healthcare services (An et al., 2015:415). Therefore, good physical infrastructure, coupled with the reorganisation of routine health services, can increase

service uptake (An et al., 2015:415). In this study, infrastructure requirements for abortion, HIV and FP services are similar to those needed for integrated health service delivery (see Sections 2.6.1.4, 2.6.2.4, and 2.6.3.4).

2.6.4.5 Fiscal resource

Integrating abortion care with HIV and FP services can be cost-effective, especially in resource-limited settings like Ethiopia (Siapka, Obure, Mayhew, Sweeney, Fenty, Initiative and Vassall 2017:iv87). Providing healthcare services separately can create inaccessibility to different services at one time, poor quality services, and increase unnecessary service costs (WHO 2018:2). Frequent visits to healthcare facilities for different needs can increase the cost of healthcare (Al-Saddique 2018:1). In recent years, healthcare costs have been increasing as new medical technologies like ultrasounds, CT scans, and MRIs were introduced to the healthcare system (Al-Saddique 2018:2). To overcome this phenomenon, different strategies, such as free services for the poor, restructuring healthcare, delivery and engaging key stakeholders, are being implemented (Al-Saddique 2018:2). Health service integration could ultimately contribute to a reduction in high healthcare costs (Islam, Majdzadeh, Quddus, AHG and Ashraf 2019:4) and improve the quality of service delivery (Maruthappu, Hasan and Zeltner 2015:254). Therefore, integrating healthcare could significantly improve the delivery of sustainable and quality care at affordable costs (Maiuro 2015:4).

2.6.4.6 Strategies, policies and guidelines

Policymakers' interest in integrated services has been growing (Borgermans and Devroey 2017:1) to develop strategies to maximise efficiency and increase the community's opportunities to access healthcare (Al-Saddique 2018:2; Dudley and Garner 2011:2). Governmental and international policy recommendations also strongly support integrated healthcare services (Al-Saddique 2018:2; Johnson, Varallyay and Ametepi 2012:1). Policies, strategies and guidelines are inputs and processes in this study that can facilitate the implementation of integrated service delivery at public health facilities of Ethiopia.

2.6.4.7 Behavioural change intervention

Integrated health services help clients access available tools and information to improve their health behaviour (MOH Ethiopia 2020:14). The inputs for behavioural change and communication are explicitly described under abortion, FP and HIV services; these also apply to integrated healthcare services (see Sections 2.6.1.7, 2.6.2.7, and 2.6.3.7).

2.7 BENEFITS AND CHALLENGES OF INTEGRATED HEALTH SERVICES

Researchers have documented some benefits and challenges pertaining to integrated health services at the system, provider and client levels (Milford, Greener, Beksinska, Greener, Mabude and Smit 2018:184). The benefits and challenges of service integration are described as follows:

2.7.1 Benefits of integrated health services

HIV/AIDS and FP service integration reduces the risk of unintended pregnancies, unsafe abortions, and sexually transmitted diseases (Adeniyi, Ajayi, Moyaki, Goon, Avramovic and Lambert 2018:140; USAID 2012:1). Integrating abortion care with HIV and FP services also enhances maternal health status (Zewdie et al., 2020:145; Samandari et al., 2012:10). The benefits of service integration at the client level are improved privacy and confidentiality, so clients receive various services and reduce stigma and discrimination since services are provided in the same area by the same or different providers that do not require many referrals (USAID, PEPFAR, and Health Policy 2015:18; Winestonea, Bukusib, Cohenc, Kwarob, Schmidtd and Turanc 2012:149-163). The integration of health services ensures the effective provision of healthcare (Warren, Mayhew and Hopkins 2017:102). It also enhances the healthcare providers' job satisfaction in providing a better-quality service to the community (Mutemwa, Mayhew, Colombini, Busza, Kivunaga and Ndwiga 2013:18), and healthcare providers obtain more feedback from clients receiving the integrated service. The integrated health service also enhances healthcare providers' clinical skills, communication skills, and interactions among staff (Nkhoma, Sitali and Zulu 2022:396). Furthermore, integration reduces workload because it reduces frequent

client visits and increases potential cost benefits at the health system level (Milford et al., 2018:187).

2.7.2 Challenges of integrated health service provision

Even though the integration of health services has numerous benefits, there are also challenges in integrating service delivery. The common challenges include system inefficiencies, where the health system itself is overburdened by a lack of infrastructure, a shortage of logistical supplies, trained healthcare providers (Mutemwa et al., 2013:18), a lack of adequate spaces, and time constraints to provide counselling services (Newmann, Zakaras, Tao, Onono, Bukusi, Cohen, Steinfeld and Grossman 2016:211). Structural integration is not sufficient to ensure appropriately integrated health service delivery. Good staff management, developing providers' skills and knowledge, capacitating decision-makers, teamwork and work-sharing are also important to combat the challenges of integrated healthcare (Mayhew, Hopkins and Warren 2017:iv1-iv5).

2.8 SUMMARY

This chapter discussed the literature review conducted for the study. The literature review contributed to the development of the data-collection instruments in phase one (see Annexures 2 and 4). The literature review outlined the inputs in the Change Logic Model of theoretical frameworks. The inputs included geographic accessibility (the availability of service delivery units), health workforces (doctors, health officers, midwives, and nurses), medical resources and supplies (drugs, logistics, and equipment), infrastructure (the availability of rooms, roads, and transportation), policy, guidelines and strategies. Behavioural change and communication on abortion, FP, HIV/AIDS, and integrated health services were discussed. The next chapter describes the study's overarching research design and methodology, and phase one's methodology, data collection and analysis processes.

CHAPTER THREE

OVERARCHING RESEARCH DESIGN AND METHODOLOGY AND PHASE 1: RESEARCH METHODOLOGY, DATA GATHERING, AND ANALYSIS

3.1 INTRODUCTION

This chapter describes the overall research methodology used to conduct the research. It outlines the research approach, research design, and research methods. The chapter also emphasises the study's research methodology, data collection, and analysis strategies.

Table 3.1: Chapter layout and progress

Chapter 1	Overview of the study
Chapter 2	Literature review on: <ul style="list-style-type: none"> ➤ Change logic model ➤ Ethiopian healthcare services ➤ Abortion in Ethiopia ➤ Abortion services ➤ FP service ➤ HIV/AIDS service ➤ Integrated healthcare services
Chapter 3	<p>1. The overall methodology of the study</p> <p>2. Phase 1</p> <ul style="list-style-type: none"> ➤ Methodology followed ➤ Data analysis ➤ Data interpretation and presentation
Chapter 4	Phase 1: data presentation, analysis, and description of the research findings <ul style="list-style-type: none"> ➤ Abortion care users ➤ Healthcare providers
Chapter 5	Phase 2 <ul style="list-style-type: none"> ➤ Literature review on action plan development ➤ Principles and processes for action plan development ➤ Draft action plan with an embedded assessment validation tool

Chapter 6	Phase 3 <ul style="list-style-type: none"> ➤ Methodology ➤ Validation process and final action plan ➤ interpretation of the findings ➤ Action plan for the implementation of one-stop integrated abortion care, HIV and FP service in public health facilities of Ethiopia (The so-called AFH Service)
Chapter 7	Conclusions, limitations and recommendations

As indicated in Table 3.1, the first part of the chapter focuses on the overall research methodology. The latter part emphasises the research methodology, data gathering and analysis process employed in phase one.

The study aimed to develop an action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of the SNNPR, Ethiopia. To achieve the research objectives (see Section 1.4), questionnaires were used to collect data from women who received abortion care and healthcare providers in the public health facilities of Ethiopia (phase one). The analysed data from phase one and the literature review were used in phase two to develop the draft action plan. In phase three, programme officers validated the draft action plan using the e-Delphi technique.

3.2 RESEARCH PARADIGM AND APPROACH

3.2.1 Research paradigm

The research paradigm is a framework that guides the research process and determines how the research will be conducted (Fain 2017:104; Kivunja and Kuyini 2017:26). It is a set of ideas, beliefs, or common understandings shared between scientists about how problems should be understood and addressed and within which theories and practices can function (Gliner, Morgan and Leech 2017:8). Even though there is no agreement on the acceptable number of classifications of paradigms, the commonly used classifications available in literature are 1) positivism (also known as logical positivism paradigm); 2) interpretivism paradigm (also known as “constructivism” paradigm); and 3) pragmatism paradigm (Ugwu, Ekere and Onoh 2021:119). The common components of classifications of each research paradigm are

1) epistemology (refers to the theory of knowledge or how reality is being known by the researcher), 2) ontology (concerned with the phenomenon in terms of its nature of existence or the study of reality), and (3) methodology (concerned with research strategy followed in conducting the research data collection methods) (Ugwu, Ekere and Onoh 2021:117).

The constructive paradigm is an efficient philosophical paradigmatic tool useful to provide many benefits when implemented in conducting research in various fields of study (Adom, Yeboah and Ankrah 2016:1). Researchers often address the processes of interaction among individuals and focus on the specific contexts in which people live and work in order to understand the historical and cultural settings of the participants (Adom, Yeboah and Ankrah 2016:6). Understanding people's feelings and perceptions of the social world help researchers gain in-depth meaning and particular motivation for behaviour (Yong, Maizaitulaidawati and Kamarudin 2021:5859). Therefore, this study was approached from the constructivist point of view that the perceptions of abortion care users, healthcare providers and programme officers supported or contradicted the development of an action plan and provision of integrated health services (Thomas, Menon, Boruff, Rodriguez and Ahmed 2014:1).

3.2.2 Research approach

Research approaches are plans and procedures that move from a broader assumption to the specific methods of data collection, analysis, and interpretation (Creswell and Creswell 2018:40). As described by Creswell (2014:31), the selection of a research approach depends on the nature of the research problem, the stakeholders to be involved, and the method used to conduct the study. The cost, time, and effort required are also considered to determine whether the research approach should be qualitative, quantitative or mixed (Bruce, Pope and Stanistreet 2018:154).

In this study, a mixed-method approach was employed. In phase one, quantitative data were collected from women who received abortion care and healthcare providers from public health facilities in South Ethiopia using questionnaires. In phase two, the analysed data from phase one and the literature review of articles, guidelines, and policies on health service integration were used to develop the draft action plan with

an embedded assessment validation tool. In phase three (qualitative phase), the e-Delphi technique was used to validate the draft action plan and facilitate the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.

3.3 RESEARCH DESIGN

A research design refers to the overall strategy employed to integrate the different components of a study. It also provides a specific direction for researchers to conduct research (Creswell and Creswell 2018:42). The design should fit the intended research phenomenon (Creswell and Creswell 2018:42), instruments to be used, variables to be included (Abbott and Bordens 2018:67), and data analysis processes. These ultimately address research questions or hypotheses (LoBiondo-Wood 2014:165). In this study, a mixed-method explanatory sequential design was selected to develop an action plan to enhance the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.

3.3.1 Mixed Methods

Mixed-method research involves collecting, analysing, and integrating both quantitative and qualitative data to investigate a phenomenon in a single project (Leavy 2017:164). The method is useful when either a quantitative or qualitative approach alone would have inadequately explained the research problems (Bruce, Pope and Stanistreet 2018:5). Thus, combining both quantitative and qualitative methods are necessary to address the research questions (Edmonds and Kennedy 2017:178). Quantitative and qualitative data can be simultaneously combined or one after the other (Bruce, Pope and Stanistreet 2018:5) to produce a clear understanding of the phenomenon being studied (Leavy 2017:263). In this study, the quantitative and qualitative methods were used consecutively.

3.3.2 Explanatory sequential mixed method

An explanatory sequential approach is one where both quantitative and qualitative data-gathering methods are used phase by phase (Edmonds and Kennedy 2017:196; Creswell and Creswell 2018:42:57). It can begin with quantitative methods, followed

by qualitative methods to explain the quantitative findings in detail (Leavy 2017:173). The approach is particularly useful for a researcher interested in using the findings from one phase of a study in another phase (Edmonds and Kennedy 2017:196). The first method of data collection, analysis, and interpretation provides a general picture of the research under study and allows researchers to refine or explain the study by the later method (Edmonds and Kennedy 2017:196). In this study, as illustrated in Figure 3.1, the quantitative data were collected and analysed in the first phase. The findings were then used to develop a draft action plan in phase two. In phase three, the e-Delphi process was used to validate the action plan to facilitate the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.

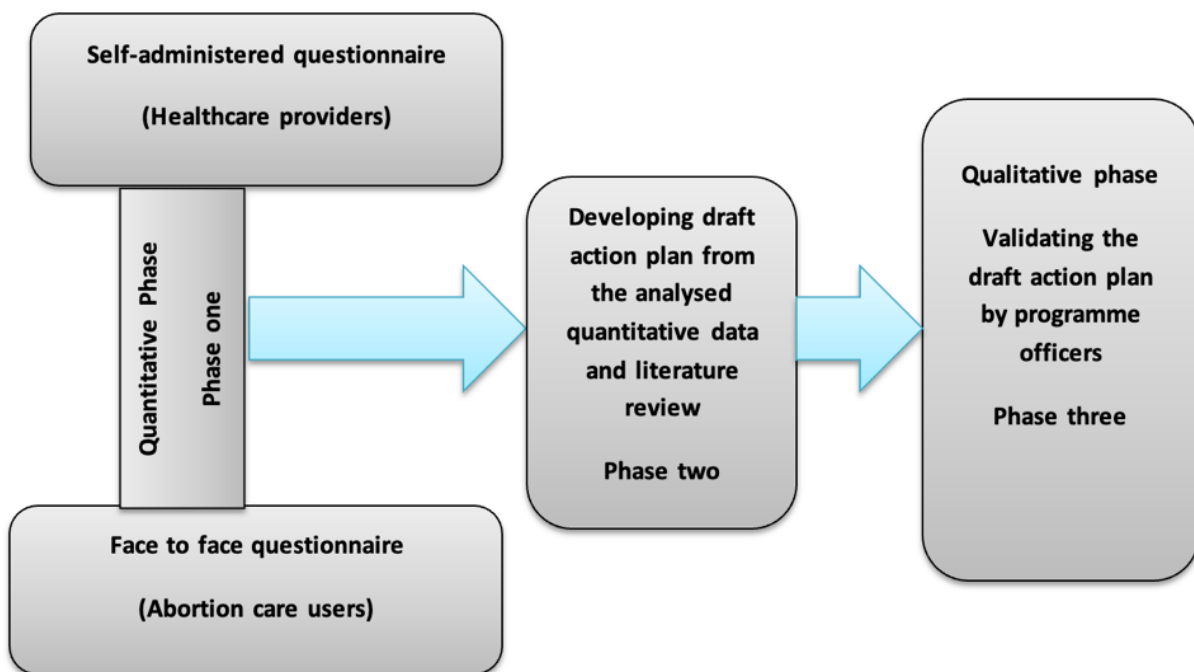


Figure 3.1: Explanatory sequential mixed-method designs

Adapted from Subedi (2016:573)

Mixed-method research employs quantitative and qualitative approaches simultaneously or one after the other to produce stronger research findings than quantitative or qualitative approaches alone (Malina, Nørreklit and Selto 2015:61).

3.3.3 The advantages and disadvantages of mixed research methods

The mixed-method approach uses more than one method; usually qualitative and quantitative methods. Even though mixed-method research is increasing in popularity and benefit, it does not mean this approach has no disadvantages (Chandrasekharan 2019:754). The advantages and disadvantages are described as follows:

3.3.3.1 Advantages of mixed-method research

Quantitative and qualitative data are used to explore the experience of different study participants (Bordons and Abbott 2018:337; Wisdom and Creswell 2013:4) and provide a comprehensive understanding of the phenomenon under investigation (Leavy 2017:9; Mahato, Angell, Van Teijlingen and Simkhada 2018:45). Mixed-method research also has the benefit of one complementing the gap in another and providing adequate evidence of intended study findings (Lüdemann and Otto 2019:82; Leavy 2017:164). Therefore, in this study, the quantitative data obtained from women who received abortion care and healthcare providers offering the service were used, together with available literature, to develop a draft action plan. Panellists engaged in an e-Delphi technique, a qualitative consensus-seeking method, to validate the draft action plan. The combination of all data sets was used as comprehensive input to ensure that a validated action plan was developed to integrate abortion care with HIV-FP service in the public health facilities of Ethiopia (Leavy 2017:164).

3.3.3.2 Disadvantages of mixed-method research

Despite the strengths mentioned above, mixed-method research has some limitations. One of the disadvantages of using both quantitative and qualitative methods in a study is that it is more time-consuming compared to using one method only (Mahato, Angell, Van Teijlingen and Simkhada 2018:47). Although data gathering was time-consuming, the researcher used the time gap between the quantitative and qualitative methods to strengthen the data by reviewing literature to contribute to the development of the draft action plan. For this reason, it was not seen as a disadvantage, as the advantage outweighed the hindrance.

The other shortcoming of using mixed-method research was the need to sample different people with expertise in quantitative and qualitative research methods, capable of integrating the findings in a single project (Mahato, Angell, Van Teijlingen and Simkhada 2018:47). Analysing the data obtained from mixed research methods can be challenging as experts are required with experience in analysing both quantitative and qualitative data simultaneously or one after the other (Wisdom and Creswell 2013:4). To overcome these challenges, the researcher conducted an extensive literature review on how to integrate and analyse data obtained from mixed research methods. The researcher also consulted a senior public health expert and statistician capable of analysing and integrating the two approaches and presenting the integrated findings. Hence, the mixed-method research benefits outweighed the disadvantages and were therefore chosen as the design of choice in this study.

3.4 ETHICAL CONSIDERATIONS

Any study that poses physical or psychological harm to participants is not considered acceptable (Polit and Beck 2017:123). Researchers need to be cautious about the selection and development of the research methods to protect participants during the data collection period (Leavy 2017:31). Even though studies conducted on human participants often involve some degree of risk (Fain 2017:28; Bruce, Pope, and Stanistreet 2018:86), careful consideration of ethical issues is mandatory to minimise the risk. Thus, examining the potential risk-benefit ratio before conducting the study is critical (Polit and Beck 2017:208; Bruce, Pope and Stanistreet 2018:86), and the predicted benefit should meaningfully outweigh the potential risk of the study (Fain 2017:29).

To ensure ethical issues were adhered to, the following areas were critically considered:

3.4.1 Permission to conduct the study

Ethics approval to conduct the study was obtained from the Health Studies Research Ethics Committee, Department of Health Studies at the University of South Africa (see Annexure 5). Approval was also obtained from the South Regional Health Bureau

Human Research and Technology Transfer Support Core Process (see Annexure 6). The support letter from the regional health bureau was delivered to respective zonal health departments to inform district health offices and public health facilities of the legality of the research, with them providing permission to conduct the study (see Annexure 7).

Heads of the health facilities who act as gatekeepers were informed about the research topic, the purpose, objectives, methodologies and ethical issues related to the study. They were also notified of the proposed study participant sample, expectations from respective facilities, the relevance of the research, and the required time to collect the data (see Annexure 1). Verbal and written consent was obtained from volunteer abortion care users to assure their willingness for voluntary participation (see Annexure 1). Similarly, the purpose of the study was shared with healthcare providers along with the self-administered questionnaire, and their willingness to participate was assured by obtaining their verbal and written consent to complete the questionnaires (see Annexure 3).

The programme officers in the e-Delphi rounds also received the recruitment letter through the web-based platform “Google Forms”. Their consent was provided by clicking the link at the end of the recruitment letter (see Annexure 8) before proceeding to the e-Delphi validation assessment tool. The respondents’ rights were respected, and they could withdraw from the study at any time without penalty (Gliner, Morgan and Leech 2017:251).

3.4.2 Beneficence and non-maleficence

Beneficence and non-maleficence are two internationally accepted principles supporting both healthcare practice and research (Bordons and Abbott 2018:203; Curtis and Drennan 2013:61). The principle of beneficence is linked with maximising benefit (Gliner, Morgan and Leech 2017:237) while non-maleficence entails avoiding, preventing, and minimising potential risks to participants (Polit and Beck 2017:211). Protecting the well-being of the study participants (Bordons and Abbott 2018:203) and maintaining the principles of beneficence and non-maleficence are critical to obtaining valid research outcomes (Gliner, Morgan and Leech 2017:237). In this study, the

researcher was responsible for minimising harm and maximising benefit as the research complies with the moral principles of respect for persons, avoidance of harm, beneficence, and justice. Informed consent guarantees participants' right to self-determination and to be treated appropriately (Gliner, Morgan and Leech 2017:251). The researcher upheld the principles of beneficence and non-maleficence by providing an information letter that outlined all aspects of the study for abortion care users (see Annexure 1) and healthcare providers (see Annexure 3). Similarly, a recruitment letter sent via email to programme officers contained information about data collection, interpretation, presentation, and publishing of the study (see Annexure 8).

The recruitment and information letter for abortion care users and healthcare providers, as well as a recruitment letter for programme officers, assured their participation in the study was voluntary. They were informed the study posed no health risk, participants would not obtain any benefit by participating in the study, and their right to withdraw from the study at any time would be respected.

3.4.3 Privacy and confidentiality

According to Resnik (2018:149), privacy and confidentiality are two terms usually interpreted as if they are synonymous, but they are different with related meanings. Privacy refers to control over the timing, level, and conditions under which information about oneself is shared with the researcher (Fain 2017:38; Curtis and Drennan 2013:114). Confidentiality means information gathered from respondents and participants in a relationship of trust will not be disclosed or revealed to a third party (Polit and Beck 2017:223).

Privacy is an important concern in research. It focuses on protecting and not disclosing to any third party the names, people, and places where the research is conducted (Abbott and McKinney 2013:406; Gliner, Morgan and Leech 2017:239). Privacy can be maintained through anonymity (participants were not known even by the researcher) and confidentiality (Fain 2017:37,140; Gliner, Morgan and Leech 2017:251). Individuals participating in studies are often concerned about their privacy as they do not want to feel regret, discomfort, and embarrassment after disclosing their private issues (Gliner, Morgan and Leech 2017:251). The questionnaires were

completed by data collectors and the researcher in a private room to avoid disturbances and ensure respondents' privacy. The completed questionnaires were coded to ensure the confidentiality of the information. No identifiable data were included in the questionnaires, and the collected data were only shared with the supervisor and no other party or person.

Data collectors distributed questionnaires to the healthcare providers, who had two weeks to complete the questions in their own time and at a place preferred by them. The sealed and completed questionnaires were collected from a specially prepared box placed in the office of the head of public health facilities by data collectors to maintain respondents' privacy.

Data were obtained from the e-Delphi panellists in phase three using the web-based platform "Google Forms". Thus, only the raw data were received, and no identifiable information. The panellists received the recruitment letter via email with a link to access the validation assessment tool. Thus, by clicking on the link, they gained access to the draft action plan with the assessment validation tool. They were allowed to complete the draft action plan with an assessment validation tool at a time and place convenient to them. The raw data were then sent back to the researcher through "Google Forms"; thus, the data were received in bulk and could not be traced to any panellist, ensuring privacy and anonymity.

Confidentiality deals with the individual identity that attaches to information that is kept secret between the individual respondent or participant and the researcher. This information will not be shared with others without permission (Neuman 2014:155; Creswell and Creswell 2018:176). The issue of confidentiality usually arises when the researcher has information about the research subjects (Gliner, Morgan and Leech 2017:247). This information can be kept anonymous and coded to ensure data cannot be linked to any individual participant (Leavy 2017:35).

The questionnaires for abortion care users and healthcare providers were coded to protect their identities and maintain the confidentiality and anonymity of the data. The confidentiality of the study panellists in the e-Delphi was maintained by using no

identifiers. The programme officers then validated the draft action plan to integrate abortion care with HIV-FP services using the web-based platform “Google Forms”.

The questionnaires, raw data, and signed consent forms were kept in a locked cabinet to ensure confidentiality and safeguard these from potential harm.

A password-protected file was used to store all the information collected by questionnaires (abortion care users and healthcare providers) and the set of raw data received from “Google Forms” (Delphi panellists) in a personal computer to secure the information.

3.4.4 Justice

As described by the Belmont Report, justice concerns participants’ right to fair treatment and privacy (Gliner, Morgan and Leech 2017:491). Everyone participating in the study should be treated with justice and receive equal care, compassion, and respectful service (Christensen, Johnson and Turner 2015:123). Based on the principle of justice, all potential participants must be treated fairly and receive similar treatment in a similar situation (Burns and Grove 2015:107). In this study, the researcher selected respondents through gatekeepers in the first and third phases, based on the predefined research methodology. They had a choice whether to participate without any negative results.

3.4.5 Informed consent

3.4.5.1 Abortion care users and healthcare providers

Respondents need to be informed about the purpose of the research (Fain 2017:38; Abbott and McKinney 2013:57), and participation in the study is voluntary (Bordens and Abbott 2018:205). The respondents were provided with an information letter (see Annexure 1) containing information about the study's purpose, the estimated duration, their right to decline to participate and withdraw from the research once participation had begun, and their willingness to participate. They were also informed about potential risks, discomfort or adverse effects, and the prospective research benefits, as explained by Bordens and Abbott (2018:205). Respondents who volunteered and

could read and write gave written informed consent. Fingerprints were used to obtain signed informed consent from participants who could not read and write (see Annexure 1). Similarly, healthcare providers who volunteered to participate in the study signed the consent form (see Annexure 3) before data collection commenced.

3.4.5.2 Delphi panellists

A recruitment letter (see Annexure 8) requesting voluntary participation from programme officers was shared via email with possible panellists, as explained under the population (see section 6.2). The recruitment letter described the purpose of the study, the purpose of the Delphi process, their responsibility as panellists in the e-Delphi, that participation was voluntary, and how privacy, anonymity, and confidentiality would be maintained. The e-Delphi panellists assured their voluntary participation by clicking the link in the recruitment letter, giving them access to complete the draft action plan with the assessment validation tool. They could also decide not to participate by not submitting their responses online.

3.5 PHASE ONE

3.5.1 A quantitative approach

A quantitative approach involves measuring variables and testing relationships between variables to divulge patterns, associations, or causal relationships (Leavy 2017:9). It also helps to verify, invalidate, or offer acceptance to existing theories (Leavy 2017:9). With this kind of approach, researchers are required to review literature (Fain 2017:157; Gliner, Morgan and Leech 2017:21), mostly developing data gathering instruments to obtain data that can be analysed and expressed in numeric forms using statistical procedures to answer the research questions (Polit and Beck 2010:17; Bordens and Abbott 2018:240). Who, how much, what, where, when, how many, and the how questions can be answered in quantitative research (Apuke 2017:41) with minimal time and effort (Eyisi 2016:94). With a quantitative approach, the results can be used to generalise the research findings to the population since the data collection and analysis follow a scientific approach (Eyisi 2016:94).

In phase one, quantitative data were collected from women who received abortion care and healthcare providers who rendered the care to address the research objectives.

3.5.2 Objectives related to phase one

The following objectives were relevant to the first phase of the study:

- Assess the uptake of integrated HIV and FP services among women attending abortion care in public health facilities of SNNPR, Ethiopia.
- Describe the opinion of women who received abortion care regarding the implementation of a one-stop service for FP, abortion care, and HIV services.
- Identify the challenges women experienced when receiving abortion care from integrated HIV-FP services in public health facilities of SNNPR, Ethiopia.
- Identify the opportunities women noticed when receiving abortion care from integrated HIV-FP services in public health facilities of SNNPR, Ethiopia.
- Describe service providers' opinions regarding the advantages and disadvantages of an integrated abortion and HIV-FP service.

3.5.3 Setting

The setting refers to the physical location or the situation where the data collection occurs (Edmonds and Kennedy 2017:62). It can be in the natural environment of the study participants or a specially designed place organised by a researcher (Borden and Abbott 2014:165). Selecting a suitable setting for the study is crucial to obtain the required information from study participants to attain the desired findings (Fain 2017:180; Leavy 2017:32).

This study was conducted in the SNNPR, Ethiopia. South Ethiopia is one of the largest regions of Ethiopia, with an estimated population of over 20 million (see Section 1.10.3). In this phase, data from women who received abortion care and healthcare providers who rendered the care were gathered at public healthcare facilities in southern Ethiopia.

3.5.4 Study population

A population may be referred to as a group of people or objects with similar characteristics (Leavy 2017:76; LoBiondo-Wood and Haber 2014:33) from which a sample can be drawn to represent the defined population (Edmonds and Kennedy 2017:9). The study population comprised:

- All public health facilities (hospitals and health centres) where abortion services and integrated HIV-FP services are provided
- Women who received abortion care in public health facilities
- Healthcare providers who rendered abortion care and/or HIV-FP services in the southern region of Ethiopia

3.5.4.1 Population of public health facilities

The study was conducted in the public health facilities of SNNPR, Ethiopia. There were 51 public hospitals and 250 public health centres in the study area. All public health facilities in the region provided FP and HIV/AIDS-related services, but some public health facilities did not provide abortion care due to a lack of qualified healthcare providers and equipment (SNNPR 2018 annual report). However, 121 public health facilities (16 public hospitals and 105 public health centres) provided abortion care and integrated HIV-FP services in the study area (SNNPR Health Bureau report 2018).

3.5.4.2 Population of healthcare providers

A total of 1 860 healthcare providers (physicians 104, midwives 366, health officers 446, and nurses 944) working in public health facilities within the study area formed the population (SNNPR 2018 annual report).

3.5.4.3 Population of abortion care users (women)

Women of childbearing age (18-49 years old) who received abortion care in the southern region in 2018 – reported to be 46 276 (SNNPR Health Bureau report, 2018) – formed part of the study population.

3.5.5 Sampling

Sampling is the process of selecting some participants or subjects from the population (Leavy 2017:76) with similar characteristics to the population from where they are drawn (Abbott and Bordens 2018:287). Broadly, there are two types of sampling methods, probability and non-probability (Gliner, Morgan and Leech 2017:143; Leavy 2017:78). In probability sampling, every element in the population has an equal chance to be included in the study (Abbott and Bordens 2018:164). Conversely, non-probability sampling methods include subjects in the study based on their specific needs and availability (Edmonds and Kennedy 2017:20).

Among 15 administrative zones in the region, the study was conducted in five zones where the majority (51.5%) of both abortion care and HIV-FP services were provided (SNNPR Health Bureau report 2018). In this study, the probability sampling technique was used. A proportional number of public hospitals and health centres were taken from five zones based on the availability of facilities providing both abortion care and HIV-FP services. The number of public health facilities in each zone was taken proportionally according to the number of facilities in each zone. In each zone, a simple random sampling technique was employed to select the public health facilities to be included to ensure a representation of facilities in a proportional manner (see Figure 3.2). Two hospitals and 14 health centres from Sidama zone, two hospitals and 12 health centres from Gamo zone, two hospitals and 11 health centres from Wolaita zone, one hospital and nine health centres from Hadiya zone, and one hospital and four health centres from Hawasa zone were selected. Thus, eight hospitals and 50 health centres were included in this study (see Figure 3.2).

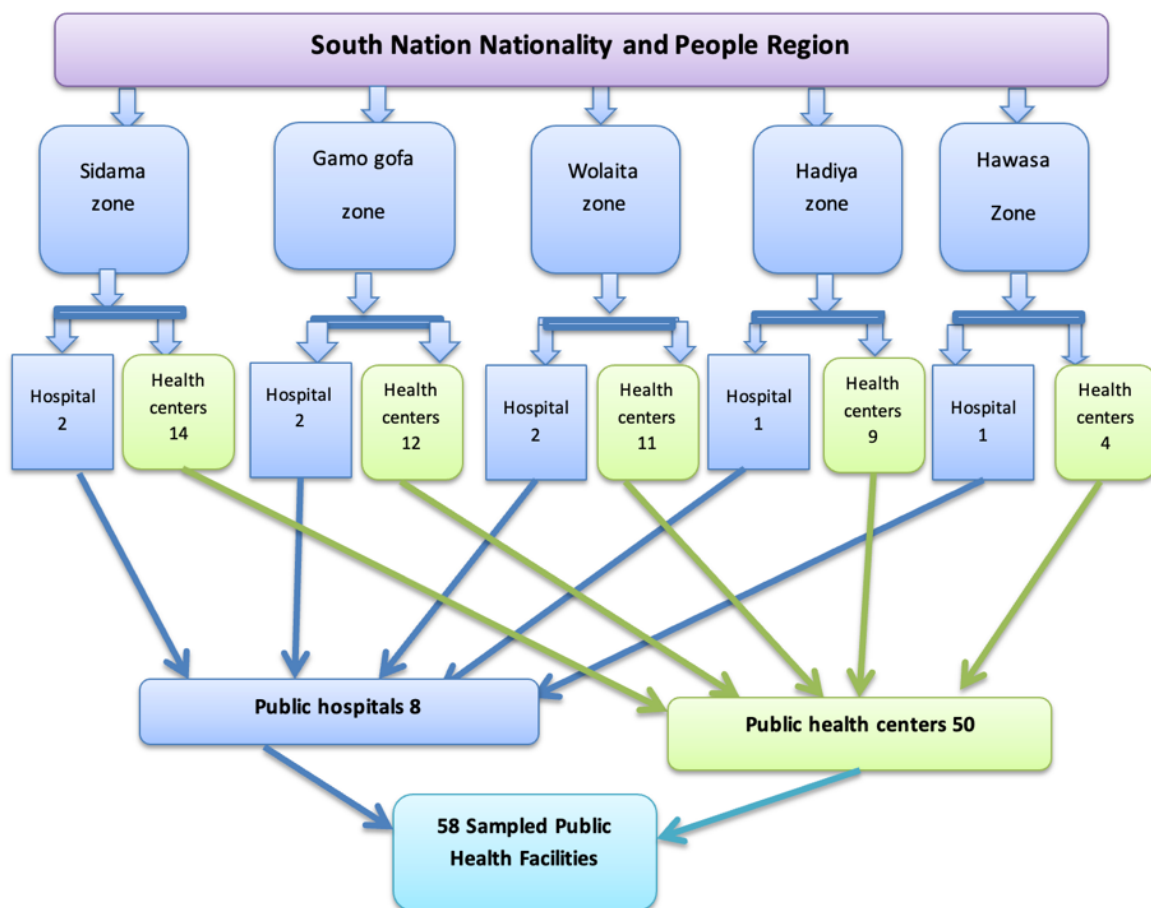


Figure 3.2: Schematic presentation of sampled public health facilities in the study areas

Source: SNNPR 2018 annual report

All participants (abortion care users and healthcare service providers) were sampled with the assistance of the heads of the participating health facilities who acted as gatekeepers (see Section 3.5.5).

3.5.5.1 Sampling of abortion care users (women)

Women of childbearing age (18-49 years) who received abortion care in public health facilities took part in the study. The respondents were randomly selected in each facility proportionally to the number of clients using the service in the facilities. A total of 422 abortion care users from the five zones were selected, as illustrated in Figure 3.3.

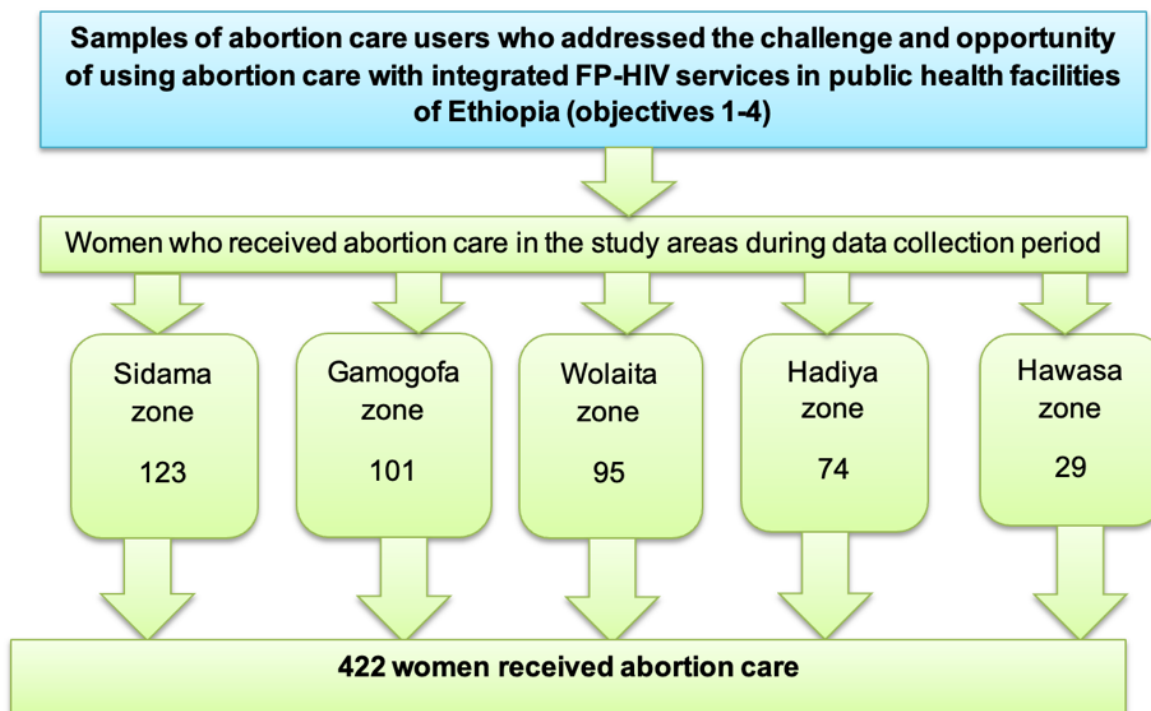


Figure 3.3: Sampling of abortion care users

Source: SNNPR 2018 annual report

The required sample size was determined using a single population proportion formula. Since there was no similar study on the provision of integrated abortion care with HIV-FP in public health facilities, a 50% proportion was used to obtain the maximum sample size (Bordens and Abbott 2018:237).

The following single population proportion formula was used to determine the sample size of 422 abortion care users:

$$n = \frac{Z (\alpha / 2)^2 P (1-P)}{d^2}$$

Where:

n= sample size

Z= value corresponds to a 95% level of significant=1.96

d = Margin of error = 5%

P = proportion= 50% then

$$= (1.96)^2 \times (0.5) (1-0.5) / (0.05)^2$$

Non-response rate of (10%) making the total sample size 422

The annual report of SNNPR in 2018 indicated 46 276 women received abortion care in SNNPR, Ethiopia. Since the number of women who received abortion care in 2018 was greater than 10 000, the calculated sample was taken without any adjustment.

A simple random sampling technique was thus employed to select the 422 women from the 58 study facilities between 10 November 2020 and 25 January 2021. One hundred and twenty-three respondents from two hospitals and 14 health centres of Sidama zone, 101 from two hospitals and 12 health centres of Gamo zone, 95 from two hospitals and 11 health centres of Wolaita zone, 74 from one hospital and nine health centres of Hadiya zone, and 29 from one hospital and four health centres of Hawasa zone were selected to participate in the study (see Figure 3.3).

3.5.5.2 Sampling of healthcare providers

Healthcare providers, namely doctors, health officers, midwives, and nurses were selected to participate in this phase of the study. The respondents were selected from each of the 58 sampled public health facilities proportionally to the number of healthcare providers in each facility. A stratified simple random sampling method was used to select doctors (17), midwives (61), health officers (74), and nurses (158), totalling 310 healthcare providers included in the study (see Figure 3.4).

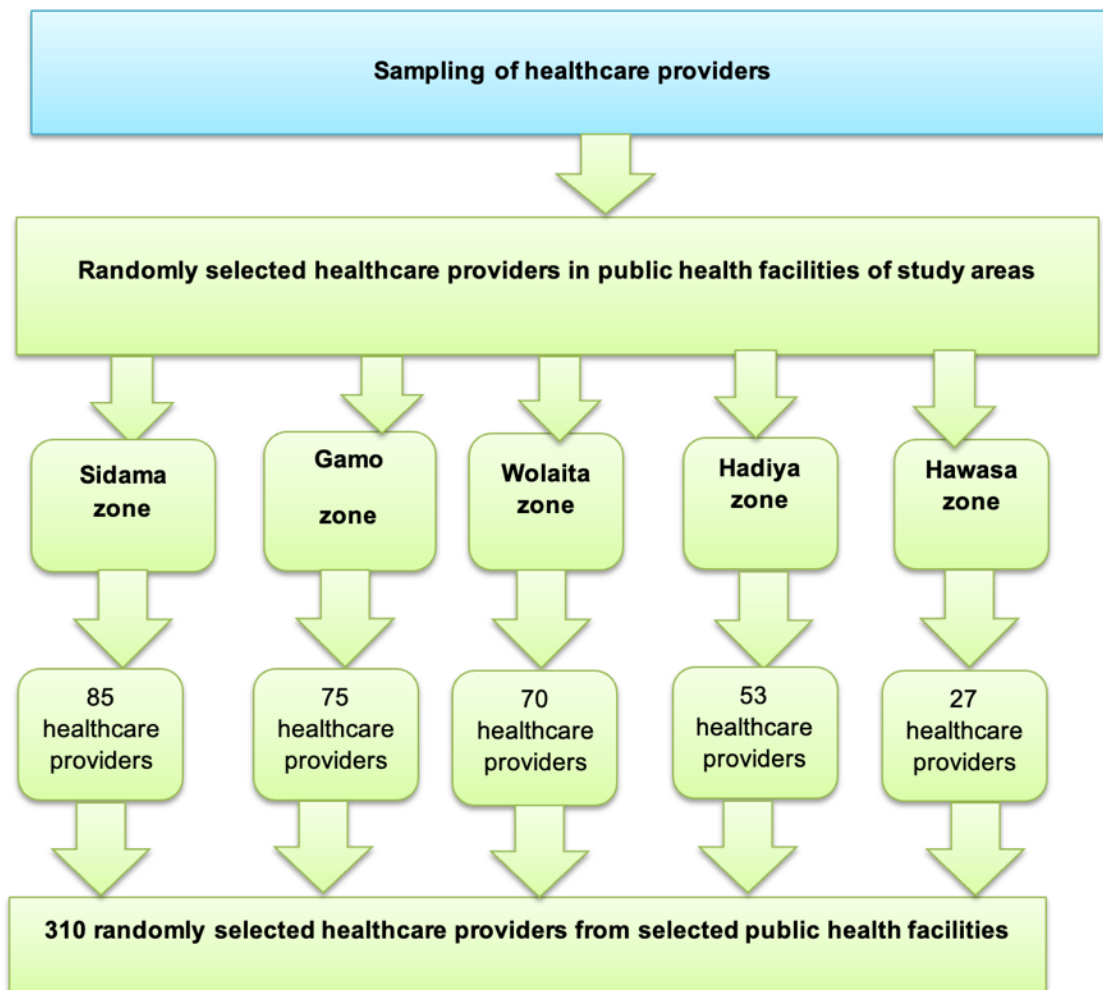


Figure 3.4: Sampling of healthcare providers

Source: SNNPR 2018 annual report

A single population proportion was used to determine the sample size of healthcare providers (see Section 3.5.5.1). The population of abortion care and integrated HIV-FP service providers in the study areas were less than 10 000; that is, 1 860 (SNNPR 2018 annual report). The application of a finite sample size is suggested by Crano and Brewer (1986) and is recommended when the sample size is greater than 10% of the population from which the sample is drawn (Bordens and Abbott 2014:284). Hence, the sample size of healthcare providers was adjusted with the following formula:

$$\begin{aligned}
 nf &= \frac{n}{1 + (n/N)} \\
 &= 291
 \end{aligned}$$

Where:

nf = desired sample size

n = sample size (384)

N = the estimate of the population size (1860)

Non-response rate of 10%

The final sample size became 310

As Figure 3.4 illustrates, 85 healthcare providers were selected from two hospitals and 14 health centres in the Sidama zone, 75 from two hospitals and 12 health centres in the Gamo zone, 70 from two hospitals and 11 health centres in the Wolaita zone, 53 from one hospital and nine health centres of Hadiya zone, and 27 from one hospital and four health centres of Hawasa zone.

A proportional number of healthcare providers were also included in the sample using a stratified simple random sampling technique. Therefore, 17 doctors, 61 midwives, 74 health officers, and 158 nurses were included from eight public hospitals and 50 public health centres using stratified simple random sampling:

Doctor $104/1860 \times 310 = 17$

Midwives $366/1860 \times 310 = 61$

Health officers $446/1860 \times 310 = 74$

Nurses $944/1860 \times 310 = 158$

Table 3.2: Healthcare providers in the study by professional categories

Study areas	Number of study facilities		Healthcare providers' professional categories				
	Hospitals	Health centres	Doctors	Midwives	Health officers	Nurses	Total
Sidama	2	14	4	17	20	44	85
Gamo	2	12	4	15	18	38	75
Wolaita	2	11	4	14	17	35	70

Study areas	Number of study facilities		Healthcare providers' professional categories				
	Hospitals	Health centres	Doctors	Midwives	Health officers	Nurses	Total
Hadiya	1	9	3	10	13	27	53
Hawasa	1	4	2	5	6	14	27
Total	8	50	17	61	74	158	310

3.5.6 Data collection instrument

Questionnaires as data-gathering instruments (Leavy 2017:101) assist researchers in answering research questions (Fain 2017:283; Jason and Glenwick 2016:15) and were used in this phase of the study. It is a popular technique for collecting data in quantitative studies (Leavy 2017:101). The advantages of using questionnaires are: it is cheaper to gather quantitative data, allow respondents to maintain their anonymity, used to gather a lot of information using open-ended and closed questions, quick to collect information, requires less skill, and allows one to compare and contrast the results against other related research (Bruce, Pope and Stanistreet 2018:158). As the questionnaires in phase one of the study contained both closed and open-ended questions and needed to gather a lot of information in a short period, it was deemed the best data collection tool for this phase. On the contrary, the disadvantages of questionnaires are incomplete responses, incorrect filling of questions or clarity problems (Gliner, Morgan and Leech 2017:228) and interviewer bias (Bruce, Pope and Stanistreet 2018:158). However, to overcome the challenges, the researcher developed both questionnaires (the one used for abortion care users and the one for healthcare providers) after conducting a thorough literature review (see Chapter Two). The questionnaires were reviewed by a scientific committee in the Department of Health Studies, pre-tested, and the opinions of a statistician and senior public health expert (see Annexure 14) were incorporated to improve the quality of the questionnaires before the actual data collection resumed.

The questionnaire for abortion care users had five sections, focusing on (1) demographic information, (2) access to healthcare services, (3) abortion care and reproductive history, (4) FP and HIV services, and lastly, (5) integrated abortion care with HIV-FP services. A total of 53 questions were included in the questionnaire (see Annexure 2). The self-administered questionnaire for healthcare providers also consisted of five sections, obtaining (1) background information, (2) information on professional development (in-service training) opportunities, (3) abortion care-related services, (4) HIV-FP-related services, and lastly (5) integrated healthcare-related service. A total of 58 questions were included in the questionnaire (see Annexure 4).

Although three different types of questionnaires can be used to obtain information from respondents (Gliner, Morgan and Leech 2017:226), a face-to-face completed questionnaire was used to collect data from abortion care users (see Section 4.3), and self-administered questionnaires were issued to healthcare providers (see Section 4.4).

3.5.6.1 Face-to-face administered questionnaire

Face-to-face administered questionnaires involve reading the questions in a questionnaire to respondents and writing down the answers provided (Bordens and Abbott 2018:280). It is advantageous as the response rate is high, and it is easy to obtain the required information (Gliner, Morgan and Leech 2017:129) because it can be done in an environment suitable to the respondents (Bordens and Abbott, 2018:280). It is also the most frequently used means of data collection (Fain 2017:215).

Furthermore, the face-to-face approach has the advantage of obtaining in-depth and comprehensive information by using visual aids and reminders. Data collectors can easily understand respondents' ideas through their facial expressions and body language, besides their verbal responses (Polit and Beck 2017:402; Marshall 2016:1). It was suitable to collect data from abortion care users and obtain information that some clients might not have been able to provide themselves due to various educational statuses. Therefore, the face-to-face administered questionnaire was the chosen data collection method for women who received abortion care in this study.

The disadvantages of a face-to-face administered questionnaire are: it is an expensive means of data collection in terms of both time and cost compared to other forms of questionnaires (Leavy 2017:78; Abbott and McKinney 2013:206) because it also involves training data collectors to interview respondents (Gliner, Morgan and Leech 2017:227). The training must specify how the data collectors should approach the respondents, identify and introduce themselves, and thank the respondents for participating (Leavy 2017:141). To overcome this problem, the researcher trained 12 data collectors to shorten the duration of data collection. Experienced data collectors were recruited and trained (see Section 3.5.9) not to waste time and administer the questionnaire to respondents in a friendly manner.

3.5.6.2 Self-administered questionnaire

A self-administered questionnaire is usually completed by respondents who read and respond to the questions themselves (Polit and Beck 2017:361; Abbott and McKinney 2013:406). The advantages of self-administered questionnaires are that they are quicker, cheaper, and avoid interviewer biases. It is appropriate to administer many questionnaires at the same time to different respondents (Polit and Beck 2017:401; Bruce, Pope and Stanistreet 2018:347). The researcher used a self-administered questionnaire to collect data from healthcare providers as it was useful in collecting data from different healthcare providers in a short period, and they could easily understand the questions and provide their responses at their own convenience. However, vague, incomplete or wrongly filled questions due to misunderstandings are disadvantages of this approach (Rada 2019:11).

In this study, the self-administered questionnaire was prepared after a thorough literature review and the opinions of public health experts with experience administering this type of questionnaire were considered. The questionnaire was developed in a simple manner as there would be no one to explain the questions to respondents. Instructions on the questionnaire were clearly stated in simple language. Therefore, a self-administered questionnaire was the chosen data collection method for healthcare providers in this phase of the study.

3.5.7 Pre-testing

It is important to pre-test questionnaires to identify weaknesses, vagueness, and enhance the clarity of the questions to ensure the desired information can be collected (Polit and Beck 2017:392; Curtis and Drennan 2013:240). This increases the acceptability of data collection instruments (Polit and Beck 2017:393; Borden and Abbot 2018:144).

The questionnaires used in this phase were (1) developed after a thorough literature review was conducted, (2) reviewed by a scientific review committee of the Department of Health Studies at the University of South Africa (UNISA), (3) and input was received from a senior public health expert and statistician to ensure the questions were clear and compiled in such a way that the research questions could be answered. After ethics approval to conduct the study was obtained (see Annexure 5), the questionnaires were pre-tested as follows:

One public hospital and two public health centres were randomly selected to pre-test the questionnaires. The randomly selected facilities were not selected for the main study but were providing abortion care and integrated HIV-FP services in southern Ethiopia. All COVID-19 precautionary measures (using face masks, physical distancing, washing hands with water and soap, and using sanitisers) were maintained during pre-testing to protect the data collectors, study subjects, and other community members.

The face-to-face administered questionnaire was pre-tested by well-trained data collectors. Twelve abortion care users were randomly selected by gatekeepers of the healthcare facilities. All respondents received the information letter and consent form to ensure voluntary participation (see Annexure 1). Similarly, the gatekeepers randomly selected six volunteer abortion care providers and six HIV-FP healthcare providers to pre-test the questionnaire. Twelve healthcare providers received the information letter and consent form to ensure voluntary participation (see Annexure 3). Trained data collectors who had experience handling a self-administered questionnaire were used to distribute the questionnaires to randomly selected healthcare providers.

Based on the feedback obtained from abortion care users, healthcare providers, data collectors, and supervisors, questions deemed unclear during the pilot testing were clarified, rephrased, and modified for the actual data collection period. Data collectors played an indispensable role in improving the wording and phrasing of the data collection instrument. The actual data collection process was initiated after multiple observations and input were received from pre-test respondents.

Table 3.3: Questions that were modified after pre-testing the questionnaires

	Section	Question number	Pre-tested questions	Modified questions
Face-to-face administered questionnaire (for abortion care users)	A	10	How much is the total monthly income of your family (household)?	How much is the total average monthly income of your family (household)?
	C	10	If the answer was yes, under what conditions does the current Ethiopian penal code allow abortion on request (safe abortion care)? (Mark all that is/are relevant, please)	The fetus has an incurable and serious deformity, as 5 th choice added
	E	10	Please indicate what you think can help to improve the integration of abortion care with FP and/or HIV services in public healthcare facilities. (Mark all that is/are relevant, please).	Strengthening of internal referral system recommended as the 6 th choice and increasing the number of healthcare providers in the public health facilities recommended as the 7 th choice added.
Self-administered questionnaire (for healthcare providers)	A	05	What is your religion? Orthodox, Christian, Muslim, protestant, and Catholic were mentioned	Protestant and orthodox are under the Christianity denomination, so 'Christian' was removed from the choice.
	C	B09-B13	please name the policies, strategies, and guidelines relevant to integrated abortion, FP,	The space provided to list the policies, strategies and guidelines was extended.

	Section	Question number	Pre-tested questions	Modified questions
			HIV, and integrated healthcare services that you are aware of	
	C	01	What type of abortion care are you providing in the healthcare facility where you are working? 1, Comprehensive abortion care 2. Safe abortion care only 3. Spontaneous abortion	spontaneous abortion care changed by post-abortion care

3.5.8 Validity and reliability of questionnaires

Validity and reliability are the two fundamental features when evaluating measurement instruments or tools. As indicated by LoBiondo-Wood and Haber (2014:125), the quality of the research instrument is determined by its validity and reliability.

3.5.8.1 Validity

Validity refers to the extent to which an instrument is supposed to measure what it intended to measure or the measure to which a study's findings accurately depict the phenomenon being studied (Curley and Vitale 2016:76; Gliner, Morgan and Leech 2017:202). The validity of questionnaires can be described as face, content, criterion-related, and construct validity (Bruce, Pope and Stanistreet 2018:166). However, criterion and construct validity were not used in this study, since criterion validity considers the presence of agreement between one measure and another measure that is accepted as valid (referred to as the gold standard) (Bruce, Pope and Stanistreet 2018:166). This is often not possible as there are no gold standard instruments to test questionnaires, like these focusing on the integration of abortion care with HIV-FP services (Bruce, Pope and Stanistreet 2018:173). Construct validity is also often a hypothetical concept that cannot be observed directly (Gliner, Morgan and Leech 2017:205). Therefore, the questionnaires in this study were tested for content and face validity, as described below.

Content validity refers to the degree to which an instrument has an appropriate sample of items that sufficiently covers what the researcher intended to measure (Abbot and Bordens 2018:132; Gliner, Morgan and Leech 2017:202). It also focuses on the way the measuring instrument assesses and reflects the relevant content being measured (Polit and Beck 2017:450). Pre-testing the questionnaire is one of the approaches used to obtain information about the presence of adequate items in the measuring tool. A senior public health expert offered their scientific judgment on the developed items, and whether the measuring tools covered an appropriate proportion of the study areas the researcher intended to measure (Gliner, Morgan and Leech 2017:258). In this study, the researcher developed the questionnaires after conducting extensive literature reviews. Public health specialists reviewed the measuring instruments for abortion care users and healthcare providers before and after pre-testing the questionnaires. After repeated reviews, items that were irrelevant to the study were removed or modified or/and new items were incorporated. An adjustment was also made to pre-tested questionnaires before the actual data collection phase commenced.

Face validity refers to the plausibility of a measuring instrument accurately appearing to measure what it is designed to measure (Bordens and Abbott 2018:133; Gliner, Morgan and Leech 2017:202; LoBiondo-Wood and Haber 2014:578). The face validity of the questionnaire is the most basic and easiest type of validity to achieve (Neuman, 2014:216) and ensures respondents understand the questionnaires clearly and respond appropriately (Bordens and Abbott 2018:133; Curtis and Drennan 2013:324). In this study, face validity was ensured during the questionnaires' development and evaluated by a senior public health expert. It was also evaluated by the scientific review committee of the Department of Health Studies at UNISA.

The value of all research is determined by the extent to which questions of internal and external validity are addressed (Edmonds and Kennedy 2017:4). These validity criteria are measures of scientific rigour (LoBiondo-Wood and Haber 2014:125).

External validity refers to generalisability; that is, the extent to which the results can be generalised to the relevant populations or settings from which samples are drawn (Gliner, Morgan and Leech 2017:154). Generalisability could also refer to the transfer

of findings to other similar populations where samples are not drawn (Leavy 2017:114; Edmonds and Kennedy 2017:8). However, external validity could be influenced by the selection of research subjects, study conditions, and types of observations (Gliner, Morgan and Leech 2017:157). Using appropriate sampling methods increases the likelihood of achieving external validity (Edmonds and Kennedy 2017:134). To maintain external validity in this study, appropriate sampling methods were employed, and well-trained data collectors were used to obtain appropriate information from the research subjects.

Internal validity refers to the extent to which the results of the study are a true reflection of reality rather than extraneous variables (Burns and Grove 2015:226). It means the relationship between the independent and dependent variable is causal (Gliner, Morgan and Leech 2017:56); where the dependent variables can make a real change or difference in the dependent variable (Gliner, Morgan and Leech 2017:120; LoBiondo-Wood 2014:172). To ensure the study's internal validity, a thorough observation of variables should be started from the design stage (Abbott and Bordens 2018:117). The application of appropriate statistical methods should also be employed (Bordens and Abbott 2014:114) to get a valid and trustworthy research outcome (Curtis and Drennan 2013:136). Unless the internal validity of the study is well established, it is very difficult to generalise the result to other populations or settings (LoBiondo-Wood and Haber 2014:179). Therefore, in this study, the researcher ensured the observed findings were obtained from the causal relation of the independent variable on dependent variables and not by other confounding factors using statistical analysis.

3.5.8.2 Reliability

Reliability refers to the extent to which a measuring instrument yields consistent results over time and across observers (Polit and Beck 2017:241). Abbott and Borden (2018:130) explain the reliability of a measure is assured by producing similar results when repeated measurements are taken under similar conditions.

Repeatability is necessary for validity measurements, but it does not necessarily mean an instrument that produced consistent data is valid (Gliner, Morgan and Leech

2017:200). Nevertheless, a good measure should have both validity and reliability (Leavy 2017). Therefore, the validity and reliability of data determine the quality of scientific rigour (Bordens and Abbott 2018:130). In this study, the questionnaires underwent thorough reviews and were pre-tested (see Section 3.5.7).

3.5.9 Data collectors' recruitment and training

The midwives who acted as data collectors were recruited by the researcher and respective zonal health departments' officials based on their data collection experience and ability to speak the local languages. Twelve data collectors were recruited to collect data from abortion care users. Similarly, five public health officers were recruited by the researcher and respective zonal health department officials based on their experience in handling self-administered questionnaires to gather data from healthcare providers. To avoid social desirability bias, the data collectors were not recruited from the facilities where data would be collected.

The 12 recruited midwives were trained for two days by the researcher on how to collect the data from women who received abortion care using the questionnaire. The training was conducted by the researcher in a venue in Sodo town from 2-3 November 2020. The researcher described the purpose of the study, its objectives, informed consent, and the methodology. The instructions, inclusion and exclusion criteria, and questions of each section of the questionnaire were discussed. Data collectors exercised and improved their data collection skills in small groups and through role-plays on the second day of the training session. The researcher also provided a half-day orientation to data collectors who distributed and collected self-administered questionnaires. The data collectors who gathered data from the healthcare providers were informed about the purpose of the study, objectives, informed consent, methodology, and the data collection process.

Five supervisors were trained to oversee data collection. Supervisors were also informed about the purpose of the study, objectives, informed consent, the research methodology, and supervision expectations.

During training, all COVID-19 precautionary measures were applied, ensuring the protection and safety of the data collectors, respondents, public health facility staff, and local communities (IMPACT 2020:2). This entailed the use of face masks, sanitisers, physical distancing, and handwashing as prescribed (Cirrincione, Plescia, Ledda, Rapisarda, Martorana, Moldovan, Theodoridou and Cannizzaro 2020:11). All data collectors had the task of participating in the study after the researcher was convinced of their knowledge and skill in the data collection process.

3.5.10 Data gathering

Data collection is a systematic way of obtaining information relevant to the research purpose or objectives of the study (Burns and Grove 2015:47). The data collection process was initiated after ethics approval was obtained from the Health Research Ethics Committee, Department of Health Studies at UNISA (see Annexure 5). A letter granting permission to conduct the study in the respective public health facilities was also obtained from the Southern Region Health Bureau Human Research and Technology Transfer support core process (see Annexure 6). Heads of health facilities who were the gatekeepers received an institutional support letter (see Annexure 6). They also assisted the data collectors and researcher to access abortion care users and healthcare providers, selecting respondents in accordance with sampling techniques (see Section 3.5.5).

Voluntary participation from abortion care users was assured. They signed the consent form after the recruitment and information letter on the purpose of the study, the responsibility of respondents, and ethical assurance (see Annexure 1) was provided. Trained data collectors collected the signed consent forms before data gathering commenced. The data were obtained before abortion care users were discharged from the respective health facilities where they received care.

Experienced and trained data collectors (see Section 3.5.9) were used to distribute the self-administered questionnaire to eligible healthcare providers to complete without compromising service delivery (during off-duty time). Healthcare providers returned the completed questionnaire in the specially prepared sealed box placed in the office of the heads of health facilities.

Supervisors (see Section 3.5.9) closely oversaw the daily data collection process from women who received abortion care and healthcare providers. The daily collected data were reviewed to ensure the required information was properly gathered. Supervisors also provided daily feedback to respective data collectors and the researcher.

3.5.11 Data analysis

In quantitative research, it is important to know how and why things vary from each other and how they are related. These all are investigated by using statistical analyses. With the support of a statistician, the collected data were initially checked for completeness and consistency. Thereafter, the data were coded, classified, and assigned meaning to calculate statistical procedures (Gliner, Morgan and Leech 2017:9). The open-ended responses were also coded by grouping similar responses in the same categories to ease analysis. The data were then entered into EpiData 3.1 software and exported to IBM SPSS version 25 for analysis. A descriptive analysis of the frequency and percentages of different variables and the bivariate and multivariate logistic regression were employed to investigate the presence of an association between independent variables and outcome variables (health service integrations) with 95% CI. All statistical tests were considered significant at $\alpha < 0.05$ (Polit and Beck 2017:410).

3.6 SUMMARY

This chapter discussed the overall research design, methodology, and ethical considerations of the study. The latter part specifically emphasised the methodology followed in phase one. The analysed data and interpretation are presented in Chapter Four.

CHAPTER FOUR

PHASE 1: DATA ANALYSIS, PRESENTATION, AND DESCRIPTION OF THE RESEARCH FINDINGS

4.1 INTRODUCTION

In this quantitative phase, data were obtained from women who received abortion care and healthcare providers rendering abortion care or HIV-FP services. The collected data were used to develop an action plan to integrate abortion care with HIV-FP services in public healthcare facilities in Ethiopia. The data analysis, interpretation, and presentation of the findings are portrayed in tables and graphs. The research progress is presented in Table 4.1.

Table 4.1: Chapter layout and progress

Chapter 1	Overview of the study
Chapter 2	Literature review on: <ul style="list-style-type: none"> ➤ Change logic model ➤ Ethiopian healthcare services ➤ Abortion in Ethiopia ➤ Abortion services ➤ FP service ➤ HIV/AIDS service ➤ Integrated healthcare services
Chapter 3	1. The overall methodology of the study 2. Phase 1 <ul style="list-style-type: none"> ➤ Methodology followed ➤ Data analysis ➤ Data interpretation and presentation
Chapter 4	Phase 1: data presentation, analysis, and description of the research findings <ul style="list-style-type: none"> ➤ Abortion care users ➤ Healthcare providers

Chapter 5	Phase 2 ➤ Literature review on action plan development ➤ Principles and processes for action plan development ➤ Draft action plan with an embedded assessment validation tool
Chapter 6	Phase 3 ➤ Methodology ➤ Validation process and final action plan ➤ interpretation of the findings ➤ Action plan for the implementation of one-stop integrated abortion care, HIV and FP service in public health facilities of Ethiopia (The so-called AFH Service)
Chapter 7	Conclusions, limitations and recommendations

To address the objectives of phase one of the study, 413 volunteer abortion care users and 306 healthcare providers offered data for interpretation. The collected data were checked, cleaned and entered into EpiData version 3.1 software and then exported to IBM SPSS version 25 for analysis. The data entry and analysis were done together with a statistician with a master’s degree in biostatistics and epidemiology, and a lecturer at the University of Wolaita Sodo (see Annexure 14). The findings of the descriptive statistics were expressed as frequencies and percentages. Bivariate and multivariable logistic regression analysis was employed to observe the relationship between the dependent and independent variables. All independent variables with a p-value below 0.2 in bivariate analysis were fitted into the multivariable logistic regression analysis. The magnitude of the association between variables was measured using the Odds ratio, with 95% CI, and all statistical tests were considered significant at alpha <0.05 (Bruce, Pope and Stanistreet 2018:355).

4.2 RESPONSE RATE

The length of the questionnaire, clarity of questions, less personal data, the promise of anonymity, and a known estimated end time (30 minutes) can positively affect response rates (Bordens and Abbot 2014:267). In this study, the sequence of questions was well-arranged to enhance the flow of ideas from one question to the

next. No identifying information was requested as the questionnaires were coded. These factors were intended to enhance a high response rate in this study.

The data from abortion care users were collected by well-trained data collectors who met face-to-face with the respondents to complete the questionnaires on their behalf (see Section 3.5.6.1). As indicated in Table 4.2, out of 422 abortion care users, data were obtained from 413 respondents; the overall response rate was thus 97.9%. Similarly, the self-administered questionnaire was distributed to 310 healthcare providers, and completed questionnaires were received from 306 respondents, making the response rate 98.7% (see Table 4.2).

Table 4.2: Response rates (N=413)

Respondents	Number of administered questionnaires		Number of completed questionnaires collected	
	Number	Percent	Number	Percent
Abortion care users	422	57.7	413	97.9
Healthcare providers	310	42.3	306	98.7
Total	732	100	719	98.2

The high response rate may be attributed to the selection of experienced data collectors, the provision of quality training, and the researcher and supervisors conducting effective supervision (see Section 3.5.10).

The various characteristics indicated in Table 4.3 describe and present the data.

Table 4.3: Characters used to describe and interpret the results

N	The total number of respondents enrolled in the study.
n	The number of respondents who participated in specific questions of the questionnaire.
F	The frequency of responses for a certain question from the total number of respondents or a subgroup of the respondents in the study.
f	Percentage of respondents who provided a certain response/s in single decimal, presented either in the form of figures or tables.

4.3 FINDINGS

4.3.1 Abortion care users (N=413)

Respondents' demographic information, healthcare access, reproductive history, as well as FP and HIV/AIDS service use are presented under the following sub-headings.

4.3.1.1 Age of abortion care users (N=413)

As illustrated in Table 4.4, the mean age of abortion care users who enrolled in the study was 26.15 years. The minimum age was 18, while the maximum was 44 years. Thirty-nine (f= 9.4%) respondents were younger than 20 years, 122 (f= 29.5%) were between 20 and 24 years, 153 (f= 37%) were between 25 and 29 years, 64 (f= 15.5%) were between 30 and 34 years, and 35 (f= 8.5%) were 35 years and older (see Table 4.4). The findings of another study in Deberbirhan, Ethiopia, also revealed that 61% of abortion care users were between the ages of 20 and 29 years (Muche, Bewket, Demeke and Ayalew 2019:30).

In the binary logistic regression tests, the age of respondents (abortion care users) had no statistically significant association with either FP (see Table 4.5), HIV/AIDS (see Table 4.7), or HIV-FP service integration (see Table 4.8) ($P>0.05$). Irrespective of women's ages, it is important to integrate health services for women to receive abortion care to improve their maternal health status and help minimise the stigma associated with abortion care (IPPF 2015:5; Winestonea et al., 2012:149-162).

Table 4.4: Age categories (N=413)

Age category	n=	f=	Cumulative Frequency	Cumulative Percent
15-19	39	9.4	39	9.4
20-24	122	29.5	161	39
25-29	153	37	314	76
30-34	64	15.5	378	91.5
35-39	30	7.3	408	98.8
40-44	5	1.2	413	100

Table 4.5: Odds ratios from multivariable logistic regression on the integration of abortion care with FP service (AOR 95% CI) (N=413)

Covariant	Use of FP methods				Crude odds ratio (COR)	Adjusted odds ratio (AOR) 95% CI
	Yes		No			
	n=	f=	n=	f=		
Age category						
15-19 years	12	30.8	84	69.2	0.667 (0.098 4.520)	NA*
20-24 years	38	31.1	84	68.9	0.679. (109 4.229)	NA*
25-29 years	56	36.6	97	63.4	0.866 (0.140 5.340)	NA*
30-34 years	19	29.7	45	70.3	0.633 (0.098 4.100)	NA*
35-39 years	12	40.0	18	60.0	1.000 0(.145 6.907)	NA*
40-44 years	2	40.0	3	60.0	1	NA*
Religion						
Orthodox	41	35.0	76	65.0	1.281 (0.516 3.180)	NA*
Muslim	14	25.9	40	74.1	.831 (0.298 2.319)	NA*
Protestant	76	35.3	139	64.7	1.299 (0.543 3.106)	NA*
Catholic	8	29.6	19	70.4	1	NA*
Residence						
Urban	66	37.5	110	62.5	1.348 (0.893 2.034)	0.892 (0.505 1.576)
Rural	73	30.8	164	69.2	1	1
Education						
Cannot read and write	28	43.1	37	56.9	1	NA*
Able to read and write	19	33.3	38	66.7	1.582 (0.663 3.778)	NA*
Elementary school	37	36.6	64	63.4	1.045 (0.423 2.585)	NA*
High school (12 or 10 completed)	32	30.2	74	69.8	1.209 (0.530 2.757)	NA*
TVET/Diploma level	12	24.0	38	76.0	0.904 (0.394 2.073)	NA*
Basic degree	11	32.4	23	67.6	0.660 (.251 1.739)	NA*
Ethnicity						
Sidama	87	63.0	51	37.0	1.094 (0.535 2.239)	1.237 (0.501 3.05)
Wolaita	52	48.1	56	51.9	1.733 (0.834 3.604)	2.189 (0.874 5.483)
Gamo	57	83.8	11	16.2	.360 (0.146 0.886)	0.291 (0.096 0.882)
Hadiya	10	17.9	46	82.1	.406 (0.160 1.026)	0.328 (0.106 1.014)
Others	15	34.9	28	65.1	1	1
Occupation						
Housewives	70	39.3	108	60.7	3.313 (1.526 7.191)	2.561 (0.973 6.74)
Farmers	6	27.3	16	72.7	1.917 (0.589 6.233)	1.475 (0.348 6.24)
Self-employed	21	35.6	38	64.4	2.825 (1.158 6.887)	1.948 (0.677 5.61)
Civil servants	42	75.0	14	25.0	1.704 (0.668 4.344)	0.924 (0.275 3.103)

Covariant	Use of FP methods				Crude odds ratio (COR)	Adjusted odds ratio (AOD) 95% CI
	Yes		No			
Private employees	12	36.4	21	63.6	2.921 (1.067 7.992)	2.698 (0.807 9.021)
Entrepreneur	7	70.0	3	30.0	11.926 (2.583 55.05)	40.78(5.62 295.77)
Students	9	16.4	46	83.6	1	1
Marital status						
Single	85	74.6	29	25.4	1.365 (0.274 6.799)	NA*
Married	100	38.0	163	62.0	2.454 (0.511 11.788)	NA*
Divorced	5	31.3	11	68.8	1.818 (0.279 11.865)	NA*
Widowed	2	50.0	2	50.0	4.000 (.329 48.656)	NA*
Separated	1	16.7	5	83.3	0.800 (0.057 11.298)	NA*
Unmarried but in relation	2	20.0	8	80.0	1	NA*
Average monthly income						
0-40	35	38.0	57	62.0	1	1
41-80	36	30.5	82	69.5	3.070 (1.161 8.118)	2.378 (0.720 7.855)
81-120	32	38.6	51	61.4	2.195 (1.840 5.734)	1.491 (0.458 4.856)
121-160	24	41.4	34	58.6	3.137 (1.175 8.373)	2.913 (0.906 9.363)
161- 200	20	76.9	6	23.1	3.529 (1.272 9.792)	2.766 (0.802 9.538)
201 and above	6	16.7	30	83.3	1.500 (0.423 5.315)	0.771 (0.170 3.492)
Distance to facility						
0-15 minutes	29	50.9	28	49.1	1.628 (0.697 3.799)	3.107 (1.021 9.456)
16-30 minutes	40	37.0	68	63.0	0.924 (0.426 2.008)	1.258 (.455 3.478)
31-45 minutes	31	36.5	54	63.5	0.902 (0.404 2.013)	1.374 (.481 3.925)
46-60 minutes	16	20.5	62	79.5	0.406 (0.170 0.965)	.470 (0.157 1.401)
61-90 minutes	9	18.4	40	81.6	0.354 (0.132 0.948)	.316 (0.091 1.092)
More than 90 minutes	14	38.9	22	61.1	1	1
Means of transportation						
walking	67	29.6	67	29.6	0.474 (0.175 1.281)	0.328 (.092 1.172)
public bus	7	22.6	24	77.4	0.328 (0.092 1.170)	0.198 (.040 0.983)
taxi	37	38.1	60	61.9	0.694 (0.246 1.956)	0.523 (0.140 1.962)
private vehicle	20	47.6	22	52.4	1.023 (0.331 3.162)	0.925 (0. 216 3.96)
others	8	47.1	9	52.9	1	1
Waiting time						
0-15 minutes	27	55.1	22	44.9	1.630 (0.651 4.077)	NA*
16-30 minutes	63	57.3	47	42.7	1.492 (0.660 3.376)	NA*
31-45 minutes	26	26.0	74	74.0	0 .703 (0.300 1.645)	NA*
46-60 minutes	26	26.8	71	73.2	0.732 (0.312 1.717)	NA*
61-90 minutes	17	70.8	7	29.2	0.824 (0.263 2.574)	NA*

Covariant	Use of FP methods				Crude odds ratio (COR)	Adjusted odds ratio
	Yes		No			(AOD) 95% CI
More than 90 minutes	11	33.3	22	66.7	1	NA*
Service charge settlement						
Receive the service free of charge	110	35.7	198	64.3	4.111 (1.570 10.76)	3.532 (1.155 10.803)
Paid in cash	24	38.7	38	61.3	4.674 (1.612 13.55)	2.128 (0.601 7.530)
Covered by health insurance	5	11.9	37	88.1	1	1
Previous abortion						
Yes	41	75.9	13	24.1	0.586 (0.303 1.135)	0.753 (.334 1.70)
No	126	35.1	233	64.9	1	1
Abortion law						
Yes	62	46.3	72	53.7	2.259 (1.471 3.470)	2.052 (1.181 3.56)
No	77	27.6	202	72.4		1
Previous use of FP service						
Yes	103	44.4	129	55.6	3.216 (2.056 5.031)	4.299 (2.39 7.704)
No	36	19.9	145	80.1	1	1

P<0.05, NA* not applicable as binary logistic regression P>0.2 not computed in multivariable logistic regression (Yesunesh and Aemayehu 2015:9)

4.3.1.2 Religion (N=413)

A very diverse group of respondents in terms of religion were included in the study. Two hundred and fifteen (f= 52.1%) were Protestants, 117 (f= 28.3%) were Orthodox, 54 (f= 13.1%) were Muslim, and 27 (f= 6.5%) were Catholic (see Table 4.6). It is known that the stigma of abortion is common across the world and is mainly manifested by the religious status of an individual or society (Makleff, Wilkins, Wachsmann, Gupta, Wachira, Bunde, Radhakrishnan, Cislighi and Baum 2019:51). In another study in Wondo Genet district, SNNPR, Ethiopia, 80.8% of respondents were Protestant (Tadesse, Dangisso and Abebo 2020:4), which is the dominant religion in the study area. However, Orthodox Christian (43%) and Muslim (31%) religions are dominant elsewhere in Ethiopia (Central Statistics Authority and ICF 2016:33), thus abortion care would vary with religions prevailing in the different settings. For example, in northern Ethiopia, Orthodox Christians are the majority and also the largest number of abortion care users (Alemayehu et al., 2017:3).

However, the research findings did not reveal a statistically significant association between religion and willingness to use integrated services, such as FP (see Table 4.5), HIV/AIDS (see Table 4.7), and FP-HIV/AIDS services (see Table 4.8) ($p>0.05$). Some religions believe contraception and abortion care is an immoral act, particularly by unmarried women (Silumbwe, Nkole, Munakampe, Milford, Cordero, Kriel, Zulu and Steyn 2018:8). Thus, there is a need for health education and communication interventions tailored to the community to improve integrated abortion care with other health services.

Table 4.6: Religions of abortion care users (N=413)

Religion	n=	f=	Cumulative Frequency	Cumulative Percent
Orthodox	117	28.3	117	28.3
Muslim	54	13.1	171	41.4
Protestant	215	52.1	386	93.5
Catholic	27	6.5	413	100

Table 4.7: Odds ratios from multivariable logistic regression on the integration of abortion care with HIV/AIDS service (AOR 95% CI) (N=413)

Covariant	Use of HIV/AIDS services				Crude odds ratio	Adjusted OR 95% CI
	Yes		No			
	n=	f=	n=	f=		
Age category						
15-19 years	14	35.9	25	64.1	1.190 (0.177 8.000)	NA*
20-24 years	47	38.5	75	61.5	1.064 (0.171 6.605)	NA*
25-29 years	67	43.8	86	56.2	0.856 (0.139 5.268)	NA*
30-34 years	20	31.3	44	68.8	1.467 (0.227 9.475)	NA*
35-39 years	12	40.0	18	60.0	1.000 (0.145 6.907)	NA*
40-44 years	2	40.0	3	60.0	1	NA*
Religion						
Orthodox	53	45.3	64	54.7	0.708 (0.299 1.678)	NA*
Muslim	16	29.6	38	70.4	1.405 (0.529 3.733)	NA*
Protestant	83	38.6	132	61.4	0.937 (0.409 2.144)	NA*
Catholic	10	37.0	17	63.0	1	NA*
Residence						
Urban	80	45.5	96	54.5	0.635 (0.426 0.947)	.857(0.506 1.451)

Covariant	Use of HIV/AIDS services				Crude odds ratio	Adjusted OR 95% CI
	Yes		No			
Rural	82	34.6	155	65.4	1	1
Education						
Cannot read and write	30	46.2	35	53.8	1	1
Able to read and write	21	36.8	36	63.2	0.722 (0.310 1.684)	0.544 (0.144 2.05)
Elementary school	42	41.6	59	58.4	1.061 (0.442 2.549)	0.763 (0.209 2.78)
High school (12 or 10 completed)	44	41.5	62	58.5	0.870 (0.392 1.929)	0.670 (0.199 2.25)
TVET/Diploma level	12	24.0	38	76.0	0.872 (0.395 1.926)	0.824 (0.258 2.63)
Basic degree	13	38.2	21	61.8	1.960 (0.759 5.061)	0.1511 (.446 5.12)
Ethnicity						
Sidama	51	37.0	87	63.0	1.962 (0.982 3.918)	2.004 (.860 4.67)
Wolaita	61	56.5	47	43.5	0.886 (0.436 1.802)	0.761 (0.325 1.78)
Gamo	13	19.1	55	80.9	4.865 (2.077 11.39)	5.034 (1.784 14.20)
Hadiya	14	25.0	42	75.0	3.450 (1.472 8.08)	4.426 (1.587 12.34)
Others	23	53.5	20	46.5	1	1
Occupation						
Housewives	68	38.2	110	61.8	0.854 (0.453 1.607)	1.358 (0.576 3.198)
Farmers	9	40.9	13	59.1	0.762 (0.276 2.105)	0.888 (0.246 3.204)
Self-employed	26	44.1	33	55.9	0.670 (0.314 1.428)	0.996 (0.408 2.43)
Civil servants	14	25.0	42	75.0	1.583 (0.696 3.600)	1.898 (0.584 6.16)
Private employees	17	51.5	164	48.5	0.497 (0.206 1.198)	0.582 (0.205 1.64)
Entrepreneur	9	90.0	1	10.0	0.059 (0.007 0.498)	0.023 (0.002 0.24)
Students	19	34.5	36	65.5	1	1
Marital status						
Single	43	37.7	71	62.3	1.651 (0.452 6.035)	NA*
Married	103	39.2	160	60.8	1.553 (0.439 5.499)	NA*
Divorced	8	50.0	8	50.0	1.000 (0.206 4.856)	NA*
Widowed	2	50.0	2	50.0	1.000 (0.098 10.166)	NA*
Separated	1	16.7	5	83.3	5.000 (0.419 59.65)	NA*
Unmarried but in relation	5	50.0	5	50.0	1	NA*
Average monthly income						
0-40	40	43.5	52	56.5	1	1
41-80	43	36.4	75	63.6	0.500 (0.216 1.156)	0.944 (0.326 2.73)
81-120	32	38.6	51	61.4	0.671 (0.295 1.523)	1.014 (0.365 2.81)
121-160	26	44.8	32	55.2	0.613 (0.261 1.438)	0.914 (0.324 2.57)
161- 200	11	42.3	15	57.7	0.473 (0.194 1.158)	0.667 (0.224 1.98)

Covariant	Use of HIV/AIDS services				Crude odds ratio	Adjusted OR 95% CI	
	Yes		No				
201 and above	10	27.8	26	9	72.2	0.524 (0.181 1.524)	0.755 (0.210 2.71)
Distance to health facility							
0-15 minutes	31	54.4	26	45.6		.937 (.406 2.164)	0.971 (0.335 2.81)
16-30 minutes	45	41.7	63	58.3		1.565 (.733 3.339)	1.979 (0.745 5.25)
31-45 minutes	32	37.6	53	62.4		1.851 (.842 4.070)	2.150 (0.780 5.92)
46-60 minutes	23	29.5	55	70.5		2.673 (1.182 6.041)	2.757 (0.959 7.93)
61-90 minutes	12	24.5	37	75.5		3.446 (1.369 8.674)	5.271 (1.59 17.41)
More than 90 minutes	19	52.8	17	47.2		1	1
Means of transportation							
Walking	79 (35.0	147	65.0		1.654 (0.614 4.455)	NA*
Public bus	12	8.7	19	61.3		1.407 (0.426 4.652)	NA*
Taxi	40	41.2	57	58.8		1.267 (0.450 3.564)	NA*
Private vehicle	23	54.8	19	45.2		0.734 (0.237 2.272)	NA*
Others	8	47.1	9	52.9		1	NA*
Waiting time							
0-15 minutes	28	57.1	21	42.9		0.625 (0.257 1.520)	0.488 (0.171 1.39)
16-30 minutes	48	43.6	62	56.4		1.076 (0.492 2.353)	0.688 (0.259 1.83)
31-45 minutes	32	32.0	68	68.0		1.771 (0.793 3.956)	1.140 (0.424 3.06)
46-60 minutes	29	29.9	68	70.1		1.954 (0.868 4.399)	1.279 (0.479 3.41)
61-90 minutes	10	41.7	14	58.3		1.167 (0.403 3.374)	0.581 (0.158 2.14)
More than 90 minutes	15	45.5	18	54.5		1	1
Service charge settlement							
Free of charge	127	41.2	181	58.8		0.285 (0.123 0.662)	0.243 (0.087 0.67)
Paid in cash	28	45.2	34	54.8		.243 (0.094 0.630)	0.399 (0.127 1.24)
Covered by health insurance	7	16.7	35	83.3		1	1
Previous use of FP service							
Yes	113	81.3	26	18.7		0.488 (0.324 0.735)	0.363 (0.213 0.61)
No	49	17.9	225	82.1		1	1

P<0.05 NA* not applicable as binary logistic regression P>0.2 not computed in multivariable logistic regression (Yesunesh and Aemayehu 2015:9)

4.3.1.3 Place of residence (N=413)

Two hundred and thirty-seven (f= 57.4%) respondents were living in rural areas, while 176 (f= 42.6%) were living in urban areas in the southern part of Ethiopia. This finding

is similar to another study indicating that 65.8% of abortion care users were from the rural community (Lentiro, Gebru, Worku, Asfaw, Gebremariam and Tesfaye 2019:3). A growing number of government public health facilities in rural areas are boosting the provision of abortion care services to the rural communities (Izugbara, Wekesah, Sebany, Echoka, Amo-Adjei and Muga 2020:6). Research findings in 14 developing countries indicated that the recent abortion incidence is far more common among rural poor women than among urban non-poor women (Singh, Remez, Sedgh, Kwok and Onda 2018:29). This may be due to poor rural women often experiencing an unintended pregnancy and seeking abortion care in public healthcare facilities (Finer and Hussain 2013:1). Yet, an estimated 49% of poor rural women who need abortion care are not receiving the services due to poor access to healthcare facilities (Singh, Remez, Sedgh, Kwok and Onda 2018:29).

Abortion care users' residence showed no statistically significant association with utilisation of either FP (see Table 4.5), HIV (see Table 4.7), or HIV-FP services (see Table 4.8) ($P>0.05$).

Table 4.8: Odds ratios from multivariable logistic regression on the integration of abortion care with HIV-FP service (AOR 95% CI) (N=413)

Covariant	Integration with FP and HIV/AIDS services				Crude odds ratio	Adjusted OR 95% CI
	yes		No			
Age category	n=	f=	n=	f=		
15-19 years	10	25.6	29	74.4	0.517 (0.075 3.557)	NA*
20-24 years	32	26.2	90	73.8	0.533 (0.085 3.338)	NA*
25-29 years	47	30.7	106	69.3	0.665 (0.108 4.113)	NA*
30-34 years	15	23.4	49	76.6	0.459 (0.070 3.010)	NA*
35-39 years	7	23.3	23	76.7	0.457 (0.063 3.304)	NA*
40-44 years	2	40.0	3	60.0	1	
Religion						
Orthodox	35	29.9	82	70.1	1.220 (.473 3.145)	NA*
Muslim	10	18.5	44	81.5	0.649 (0.216 1.953)	NA*
Protestant	61	28.4	154	71.6	1.132 (0.455 2.813)	NA*
Catholic	7	25.9	20	74.1	1	
Residence						
Urban	56	31.8	120	68.2	1.474 (.954 2.277)	1.018 (0.561 1.849)

Covariant	Integration with FP and HIV/AIDS services				Crude odds ratio	Adjusted OR
	yes		No			95% CI
Rural	57	24.1	180	75.9	1	1
Education						
Cannot read and write	22	33.8	43	66.2	1	NA*
Able to read and write	15	26.3	42	73.7	1.228 (0.500 3.017)	NA*
Elementary school	29	28.7	72	71.3	0.857 (0.333 2.204)	NA*
High school (12 or 10 completed)	28	26.4	78	73.6	0.967 (0.411 2.272)	NA*
TVET/Diploma level	9	18.0	41	82.0	0.862 (0.366 2.025)	NA*
Basic degree	10	29.4	24	70.6	0.527 (0.188 1.478)	NA*
Ethnicity						
Sidama	38	27.5	100	72.5	0.982 (0.457 2.107)	.993 (0.391 2.517)
Wolaita	47	43.5	61	56.5	1.990 (0.924 4.287)	2.485 (.971 6.355)
Gamo	8	11.8	60	88.2	0.344 (0.127 .931)	.273 (0.082 0.910)
Hadiya	8	14.3	48	85.7	0.431 (0.158 1.173)	.365 (0.108 1.235)
Others	12	27.9	31	72.1	1	1
Occupation						
Housewives	126	70.8	52	29.2	2.109 (0.963 4.620)	1.312 (.488 3.530)
Farmers	5	22.7	17	77.3	1.503 0.441 5.126)	1.104 (0.241 5.06)
Self-employed	19	32.2	40	67.8	2.428 (0.988 5.967)	1.688 (0.579 4.919)
Civil servants	11	19.6	45	80.4	1.249 (0.473 3.303)	.666 (0.189 2.345)
Private employees	10	30.3	23	69.7	2.222 (0.793 6.226)	1.823 (0.541 6.148)
Entrepreneur	7	70.0	3	30.0	11.926 (2.58 55.05)	47.409 (6.18 363.5)
Students	9	16.4	46	83.6	1	1
Marital status						
Single	27	23.7	87	76.3	1.241 (0.249 6.201)	NA*
Married	77	29.3	186	70.7	1.656 (0.344 7.976)	NA*
Divorced	5	31.3	11	68.8	1.818 (0.279 11.865)	NA*
Widowed	1	(25.0%	3	75.0	1.333 (0.086 20.70)	NA*
Separated	1	16.7	5	83.3	0.800 (0.057 11.298)	NA*
Unmarried but in relation	2	20.0	8	80.0	1	NA*
Average monthly income						
0-40	28	30.4	64	69.6	1	1
41-80	30	25.4	88	74.6	2.712 (0.955 7.703)	2.004 (0.564 7.12)
81-120	24	28.9	59	71.1	2.114 (0.753 5.929)	1.527 (0.434 5.37)
121-160	21	36.2	37	63.8	2.522 (0.876 7.258)	2.007 (0.58 6.943)

Covariant	Integration with FP and HIV/AIDS services				Crude odds ratio	Adjusted OR
	yes		No			95% CI
161- 200	5	19.2	21	80.8	3.519 (1.188 10.42)	2.475 (0.669 9.15)
201 and above	5	13.9	31	86.1	1.476 (0.380 5.73)	0.846 (0.167 4.27)
Distance to health facility						
0-15 minutes	25	43.9	32	56.1	1.562 (0.656 3.723)	2.304 (.718 7.39)
16-30 minutes	31	28.7	77	71.3	0.805 (0.359 1.808)	0.924 (0.321 2.66)
31-45 minutes	25	29.4	60	70.6	0.833 (0.361 1.921)	1.031 (0.342 3.10)
46-60 minutes	13	16.7	65	83.3	0.400 (0.160 .997)	0.514 (0.162 1.62)
61-90 minutes	7	14.3	42	85.7	0.333 (0.116 .961)	.306 (0.079 1.177)
More than 90 minutes	12	33.3	24	66.7	1	1
Means of transportation						
Walking	52	23.0	174	77.0	0.427 (0.155 1.177)	0.322 (0.088 1.18)
Public bus	5	16.1%	26	83.9	0.275 (0.071 1.070)	0.161 (0.029 0.89)
Taxi	30	30.9	67	69.1	0.640 (0.222 1.842)	0.528 (0.137 2.02)
Private vehicle	19	45.2	23	54.	1.180 (0.377 3.694)	1.374 (0.320 5.89)
Others	7	41.2	10	58.8	1	1
Waiting time						
0-15 minutes	21	42.9	28	57.1	2.000 (0.772 5.184)	1.540 (0.482 4.92)
16-30 minutes	37	33.6	73	66.4	1.352 (0.571 3.201)	1.219 (0.405 3.67)
31-45 minutes	19	19.0	81	81.0	0.626 (0.251 1.561)	.694 (0.224 2.152)
46-60 minutes	20	20.6	77	(79.4	0.693 (0.279 1.721)	.636 (0.203 1.997)
61-90 minutes	7	29.2	17	70.8	1.098 (0.342 3.527)	1.408 (0.341 5.81)
More than 90 minutes	9	27.3	24	72.7	1	1
Service charge settlement						
Receive the service free of charge	87	28.2	221	71.8	2.913 (1.108 7.656)	2.444 (0.754 7.91)
Paid in cash	21	33.9	41	66.1	3.790 (1.298 11.070)	1.470 (0.386 5.60)
Covered by health insurance	5	11.9	37	88.1	1	1
Existing abortion						
yes	45	83.3	9	16.7	.490 (.231 1.039)	.505 (0.202 1.263)
No	104	29.0	255	71.0	1	1
Previous use of FP service						
Yes	83	35.8	149	64.2	2.804 (1.744 4.508)	4.067 (2.185 7.568)
No	30	16.6	151	83.4	1	1

P<0.05 NA* not applicable as binary logistic regression P>0.2 not computed in multivariable logistic regression (Yesunesh and Aemayehu 2015:9)

4.3.1.4 Education (N=413)

National surveys in Ethiopia indicated that education is one of the most important factors for economic and social development. Education is associated with various socioeconomic variables, such as lifestyle, income, and fertility for both individuals and societal levels (Central Statistics Authority and ICF 2016:14). The educational status of abortion care users, as illustrated in Figure 4.1, was 84 (f= 20.3%) had degrees or diplomas, 106 (f= 25.7%) attended high school, 101 (f= 24.5%) attended elementary school, 57 (f= 13.8%) were able to read and write, while the remaining 65 (f= 15.7%) were unable to read and write. The findings concur with another study in northern Ethiopia where 20.7% of women were unable to read and write, 10% were able to read and write, and 15.2% had a diploma or degree (Alemayehu, Yebyo, Medhanyie, Bayray, Fantahun and Goba 2017:3).

Abortion care users' educational status proved to have no statistically significant association with the use of FP (see Table 4.5), HIV/AIDS (see Table 4.7), or HIV-FP services (see Table 4.8) ($p>0.05$). Even though women's educational status did not show a statistically significant association with integrated health service use in this study, it does not mean that efforts have not been exerted to improve the educational status of women to enhance integrated healthcare service utilisation (Irani, McGinn, Mellish, Mtema and Dindi 2015:22).

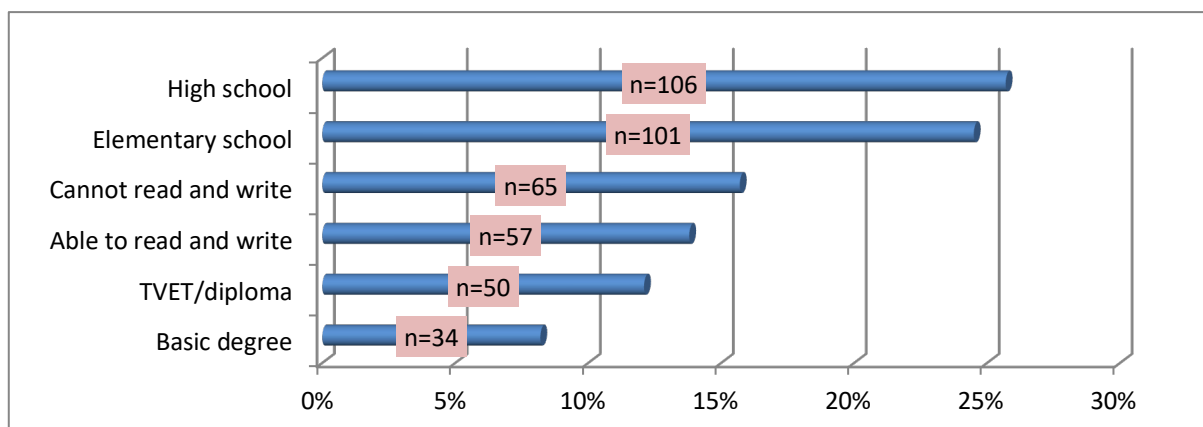


Figure 4.1: Educational status of women (N=413)

4.3.1.5 Ethnicity (N=413)

Southern Ethiopia is a diverse region in terms of ethnicity, language, and culture, and is one of the largest administrative regions in the country (Central Statistics Authority and ICF 2016:34). There are about 56 known ethnic groups in the region, and the dominant ones are Sidama, Wolaita, and Gurage (Adugna 2021:3). Not surprisingly, nearly 60% (f=59.6%; n=246) of respondents belonged to Sidama and Wolaita ethnic groups. Others were Gamo respondents (n=68; f= 16.5%), Hadiya (n=56; f=13.6%), and 44 (f=10.7%) were Amhara, Silte, Halaba Kembata, Goffa and Oromo ethnic groups, combined (see Table 4.9).

Women who belonged to the Gamo ethnic group were 71% less likely to opt to receive FP services than Amhara, Silte, Halaba, Kembata, Goffa, and Oromo ethnic groups combined: AOR= 0.291 with 95% CI (0.096, 0.8820) P= 0.026 (see Table 4.5). Gamo women were also 73% less likely to opt to receive integrated HIV-FP services when compared with Amhara, Silte, Halaba, Kembata, Goffa, and Oromo ethnic groups: AOR=0.273 with 95% CI (0.082, 0.910) P=0.035 (see Tables 4.7). This may be because women from the Gamo ethnic group live in the highland areas (600 to 3300m above sea level) with inaccessible transportation, information, and integrated FP and HIV-FP services (Wegayehu, Tsalla, Seifu and Teklu 2013:151).

The women who belonged to the Hadiya ethnic group were four times more likely to receive HIV/AIDS services than Amhara, Silte, Halaba, Kembata, Goffa, and Oromo ethnic groups: AOR=4.426 with 95% CI (1.587, 12.343) P=0.04 (see Table 4.7). This finding may be explained as Hadiya groups are located 200 km from Addis Ababa, where the prevalence of HIV and uptake of HIV testing is high (MOH Ethiopia 2018:3). Also, studies indicated that 80% of pregnant women who received prevention of mother-to-child transmission of HIV (PMTCT) care were satisfied with client privacy and counselling services, which might motivate the uptake of HIV service (Bachore, Tafese, Gebissa and Mekango 2018:9).

The unmet need for FP is one of the determinant factors of unintended pregnancy that could lead to the need for an abortion (Getaneh, Negesse, Dessie, Desta and Moltot 2020:102). Access to FP services should not vary by geography or ethnic

characteristics (MOH Ethiopia 2020:25). However, ethnic affiliations are often associated with FP services if it remains a standalone programme (Cleland, Holley, Thompson, Millington and Kangu 2014:46). Integrating FP with other health services such as HIV and abortion services can improve service use and subsequently improve maternal health status (MOH Ethiopia 2020:25).

Table 4.9: Ethnicity of women who received abortion care (N=413)

Ethnic Group	n=	f=	Cumulative Frequency	Cumulative Percent
Sidama	138	33.4	138	33.4
Wolaita	108	26.2	246	59.6
Gamo	68	16.5	314	76.0
Hadiya	56	13.6	380	92.0
Others*	44	10.4	413	100.0

Others* Amhara, Silte, Halaba, Kembata, goffa, and Oromo*

4.3.1.6 Occupational status (N=413)

Women from various occupational statuses were enrolled in the study. One hundred and eighty-two (f= 44.1%) respondents were housewives, 59 (f= 14.3%) were self-employed, 56 (f= 13.6%) were public servants, 33 (f= 8%) were private employees, 22 (f= 5.3%) were farmers, and 8 (f= 1.9%) were entrepreneurs (see Figure 4.2). In low and middle-income countries, women who undergo unsafe abortions often do not have income-generating jobs; thus, they tend to opt for unsafe abortions (Arambepola, Rajapaksa, Attygalle and Moonasinghe 2016:2). Therefore, providing maternal health services free of charge can improve perinatal, postnatal healthcare outcomes (Azaare, Akweongo, Aryeetey and Dwomoh 2020:169), improve maternal health status, and contribute towards the better health status of the community (Bridgman-Packer and Kidanemariam 2018:19-24).

The binary logistic regression analysis indicated that women who were housewives had a statistically significant association with FP service use (p-value=0.002) (see Table 4.5). Similarly, women who were self-employed showed a statistically significant association for using FP services (p-value=0.022) (see Table 4.5). Despite high

awareness and knowledge of modern and emergency contraceptives, the incidence of unplanned pregnancies is increasing among women attending educational institutes in Africa. Every year factors such as age, culture, ethnicity, religion, poor access to contraceptive services, peer pressure and a lack of partner support were identified as contributing to the non-utilisation of contraceptives in educational institutions (Gbagbo and Nkrumah 2019:12).

Women who were entrepreneurs were 40 and 47 times more likely to use FP and integrated HIV-FP services than students: AOR=40.785 with 95% CI (5.62 295.77) P= 0.001 (see Table 4.5), and AOR=47.409 with 95%CI (6.18 363.56) P= 0.001, respectively (see Table 4.8). Businesswomen were less likely to seek abortion care (Frederico, Michielsen, Arnaldo and Decat 2018:4), probably because they use contraceptives (Yaya, Uthman, Ekholuenetale and Bishwajit 2018:10). Economic empowerment, however, has a paramount effect on the use of FP and integrated health services. Governmental and NGOs engaging women in business activities could enhance the use of integrated healthcare services (Yaya et al., 2018:214).

Entrepreneurs in this study were less likely to use HIV/AIDS services: AOR=0.023 with 95% CI (0.002, 0.243) P=0.02 (see Table 4.7). Persons who are involved in business sectors such as transport, construction, health, tourism, and other economic activities are at high risk of contracting HIV infections (USAID 2016:2) but may decline HIV testing for psychosocial (stigma and discrimination) reasons (Astill, Miall, Shillito, Winfield, Evans, Schoeman and Wilson 2019:605). However, an increased risk of HIV infection should not be a barrier to HIV testing, and clients' perceptions of HIV testing can be improved through client-healthcare provider communication or counselling services (Wise, Ott, Azuero, Lanzi, Davies, Gardner, Vance and Kempf 2019:10).

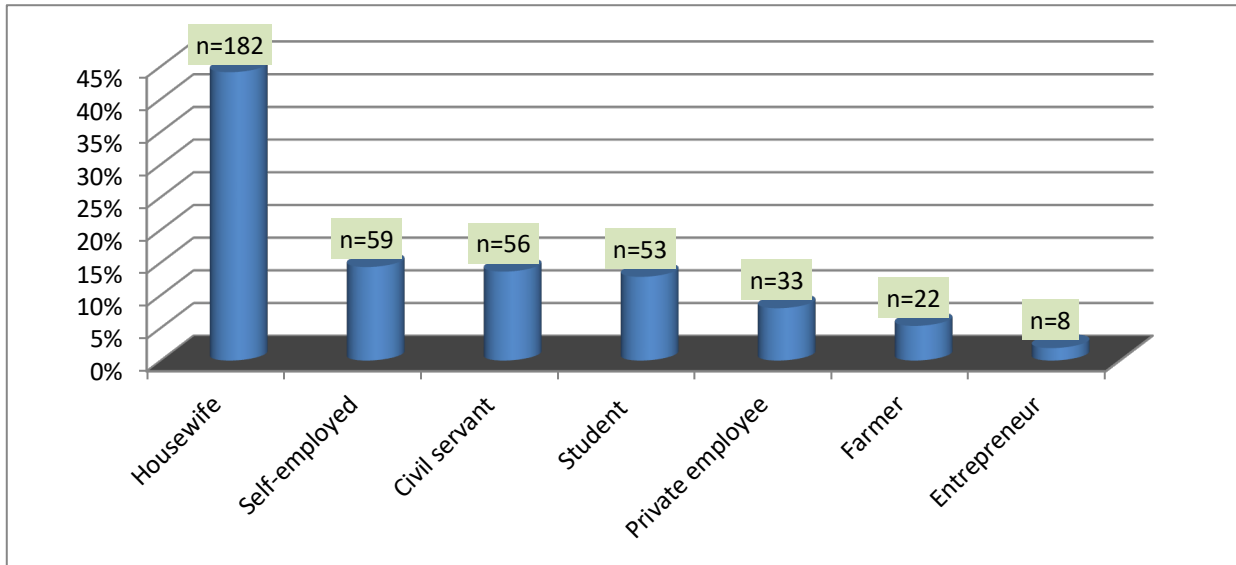


Figure 4.2: Occupational status (N=413)

4.3.1.7 Marital status (N=413)

Women with different marital statuses enrolled in the study. The occurrence of abortion is common among married women, particularly those who do not use contraceptives, aged 40 years and older, and multiparous (Ojo, Ojo and Orji 2021:327). As reflected in Figure 4.3, 263 (f= 63.7%) abortion care users were married, while 150 (f= 36.3%) were single (divorced, widowed, separate, and unmarried but in relation). Similarly, in the study conducted in Arsi, 69.8% of women who underwent unsafe abortions were married (Wodajo, Mengesha and Beyen 2017:123). Even though 263 (f= 63.7%) abortion care users in this study were married, marital status showed no statistically significant association with either FP service (see Table 4.5), HIV service (see Table 4.7), or HIV-FP services (see Table 4.8) ($p>0.05$). Integrating abortion care with FP and HIV services could reduce the occurrence of unsafe abortions, unintended pregnancies, and HIV infections (Paul, Gemzell-Danielsson, Kiggundu, Namugenyi and Klingberg-Allvin 2014:28).

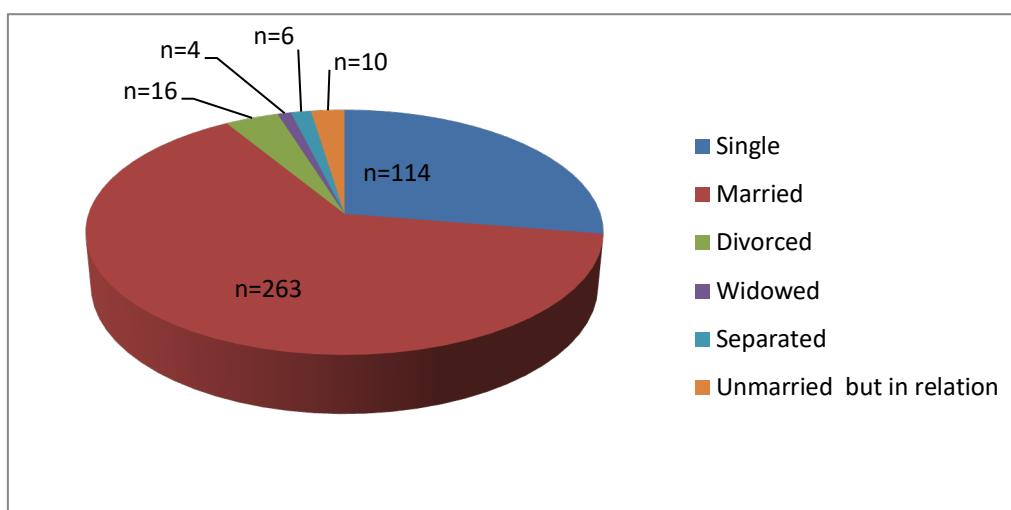


Figure 4.3: Marital statuses of women who received abortion care (N=413)

4.3.1.8 Partners' age (N=413)

The mean age of partners was found to be 33.6 years. The minimum age was 19, while the maximum age of partners was 64 years. Two (f= 0.5%) partners' ages were between 16 and 20 years, 34 (f= 8.2%) were between 21 and 25 years, 133 (f= 32.2%) were between 26 and 30 years, 105 (f= 25.4%) were between 31 and 35, and 81 (f= 19.6%) were between 36 and 40 years of age (see Table 4.10). The findings indicated that the mean, minimum, and maximum ages of partners were higher than that of the abortion care users (see Table 4.4). Reflecting on statistics from the Ethiopian demographic health survey (2016:65), women get married 6.6 years earlier than men on average. The median age at first marriage is 17.1 years for women, and 23.7 years for men.

Table 4.10: Partners' age (N=413)

Partner Age Category	n=	f=	Cumulative Frequency	Cumulative Percent
16-20	2	0.5	2	0.5
21-25	34	8.2	36	8.8
26-30	133	32.2	169	41.5
31-35	105	25.4	274	67.3
36-40	81	19.6	355	87.2
41-45	39	9.4	394	96.8
46 and above	19	4.6	413	100

4.3.1.9 Partners' occupation (n=413)

As indicated in Figure 4.4, 129 (f= 31.2%) respondents' partners were farmers by trade, 111 (f= 26.9%) were self-employed, 100 (f= 24.2%) were civil servants, 36 (f= 8.7%) were private employees, 21 (f= 5.1%) were students, and 16 (f= 3.9%) were entrepreneurs. Partners' influence is one of the factors for undertaking abortion care (Assefa 2019:5). As indicated in Section 4.3.1.3, 237 (f= 57.4%) respondents were living in rural areas, where it was likely they were farmers.

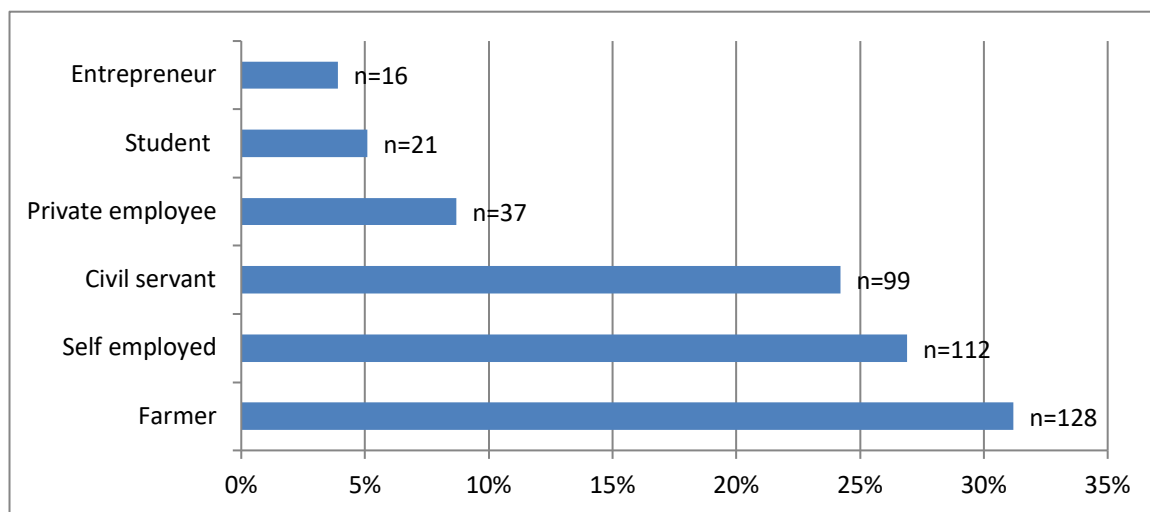


Figure 4.4: Partner's occupational status (N=413)

4.3.1.10 Average monthly income (N=413)

Ethiopia is one of the poorest countries, with an estimated per capita income of US \$863 (World Bank Ethiopia 2020:14). The monthly income of 92 (f= 22.3%) respondents was US \$0-40, 118 (f= 28.6%) respondents earned US \$40-80, and 83 (f= 20.1%) respondents earned US \$81-120 (see Table 4.11). The mean monthly income of the respondents in this study was US \$96.5, with an SD of \pm US \$65.7 and a median income of US \$77.5. Two hundred and ten (f= 50.9%) respondents' average monthly income was less than US \$81. The average income was less than those reported in another study conducted in Ethiopia (Ayalew 2018:76), where the average income of women using public health facilities was US \$123.5. The lower average monthly income reported in this study may be explained by an ever-increasing currency conversion rate between Ethiopian Birr (ETB) and USD.

The binary logistic regression analysis indicated that abortion care users' monthly income was statistically significantly associated with FP service utilisation ($p=0.024$) (see Table 4.5) and also with HIV-FP service integration ($p=0.023$) (see Table 4.8). Thus, as the women's average monthly income increased, their awareness and use of FP and HIV-FP integrated services also increased.

Table 4.11: Average monthly income of women who received abortion care (N=413)

Income In USD	n=	f=	Cumulative Frequency	Cumulative Percent
0-40	92	22.3	92	22.3
40-80	118	28.6	210	50.9
81-120	83	20.1	293	71
121-160	58	14	351	85
161-200	26	6.3	377	91.3
201 and above	36	8.7	413	100

4.3.1.11 Health facility visit (N=413)

This study was undertaken among women who primarily visited public healthcare facilities for abortion care. Among them, 75 ($f= 18.2\%$) and 17 ($f= 4.1\%$) respondents requested FP and HIV/AIDS services, respectively, in addition to abortion care (see Table 4.12). The majority ($n= 329$; $f= 79.7\%$) of respondents requested only abortion care, 76 ($f= 18.4\%$) requested at least two services (abortion care with FP or HIV/AIDS services), and only 8 ($f= 1.9\%$) requested all three services. Frequent visits for different health needs are expensive in terms of money and time (Shadea et al., 2013:S91), which can be reduced if an integrated service is offered. Integrating different health services to be provided by the same or different healthcare providers can improve the uptake of healthcare utilisation (Lambdin et al., 2015:1).

Table 4.12: Reasons for visiting healthcare facilities (N=413)

S.N	Reason for facility visits	n=	f=
1	To receive abortion care	413	100
2	To receive FP in addition to abortion care	75	18.2
3	To receive HIV/AIDS service in addition to abortion care	17	4.1

4.3.1.12 Distance of healthcare facilities (N=413)

Distance is one of the main factors affecting health service utilisation (Dos Anjos Luis and Cabral 2016:172). Facilities located within two hours' walking distance or a five-kilometre radius from the community are more likely to be used by community members (Teka et al., 2018:581). In this study's context, only 57 (f= 13.8%) respondents travelled less than 15 minutes to access public health facilities, 108 (f= 26.2%) travelled 16-30 minutes, 85 (f= 20.6%) travelled f 31-45 minutes, 78 (f= 18.9%) travelled 46-60 minutes, 49 (f= 11.9%) travelled 61-90 minutes, and 36 (f= 8.7%) travelled more than 90 minutes to access public health facilities to received abortion care (see Table 4.13).

Unsurprisingly, the binary logistic regression analysis indicated that abortion care users travelling a distance taking 46 minutes or longer has a statistically significant association with the non-utilisation of FP ($p<0.05$) (see Tables 4.5) and HIV-FP services ($p<0.05$) (see Table 4.8). It is clear that the longer it takes to reach healthcare facilities, the more the likelihood of health service utilisation reduces. This is also indicated in the study conducted in China, where it was revealed that clients who travelled 45 minutes had higher health service utilisation (Wu, Cai and Li 2020:1). As indicated in Table 4.13, 215 (f= 60.5%) abortion care users in this study's context accessed public healthcare facilities within 45 minutes. Improved access to healthcare facilities increases the utilisation of integrated healthcare services (Dos Anjos Luis and Cabral 2016:172).

The distance to a healthcare facility is an important indicator that may affect an individual's decision to seek healthcare, such as obtaining HIV counselling and testing services and FP (Chen, Zhou, Hall, Tucker, Latkin, Renzaho and Ling 2017:2).

Contradictory to what was expected, the multiple logistic regression analysis in this study indicated a travelling distance of 61-90 minutes increased women’s likelihood to use HIV/AIDS services by five times: AOR= 5.271 with 95% CI (1.595 17.417) P=0.006 (see Table 4.7). A possible explanation might be that abortion care users might prefer to get HIV testing away from their community to get safe, confidential and non-judgmental services and avoid stigma and discrimination for unwanted test results (Ijang and Sundjo 2019:4). However, there is evidence that the greater the geographic distance, the lower utilisation of a variety of health services (Chen et al., 2017:10), including abortion care (Thompson, Sturrock, Foster and Upadhyay 2021:6) and FP services (Lwin, Soe, San, Aung and Soe 2019:3).

Table 4.13: Traveling time to the healthcare facility (N=413)

Time required to reach a health facility	n=	f=	Cumulative Frequency	Cumulative Percent
0-15 minutes	57	13.8	57	13.8
16-30 minutes	108	26.2	165	40
31-45 minutes	85	20.6	250	60.5
46-60 minutes	78	18.9	328	79.4
61-90 minutes	49	11.9	377	91.3
Longer than 90 minutes	36	8.7	413	100

4.3.1.13 Transport methods (N=413)

Not only the distance but also the means of transportation affect health service uptake (Carolyn, Bernice, Joseph and Sharyl 2018:23). In rural Ethiopia, the roads are underdeveloped, and transportation problems are critical, particularly during the rainy season (WHO 2017:6). Distance, poor roads, and lack of transportation can delay the management of life-threatening complications, especially from obstetric emergencies like abortions and complicated labours (Broni, Aikins, Asbeyi and Agyemang-Duah 2014:32). It is believed that an effective and variety means of transport must be available, particularly in rural areas. Improving the transportation system can potentially increase healthcare delivery and subsequently improve maternal health status (MOH Ethiopia 2015:64).

Respondents in this study used different means of transportation to reach public health facilities. Two hundred and twenty-six (f= 54.4%) respondents reached public health facilities by walking, whereas 31 (f= 7.5%) used public buses, 97 (f= 23.5%) used taxis, 42 (f= 10.2%) used private vehicles, and 42 (f= 4.1%) used other means of transportation (see Table 4.14).

The multiple logistic regression analysis indicated abortion care users who were using public busses were 81% less likely to use FP services compared to those who used ambulances, animal transportation, and motor bicycle, combined: AOR=0.198 with 95% CI (0.040, 0.983) P=0.045 (see Table 4.5). Similarly, public bus users were also 84% less likely to use HIV-FP services than ambulance, animal transportation, and motor bicycle users, combined: AOR= 0.161 with 95% CI (0.029 0.899) P= 0.037 (see Table 4.8). In this study's context, 237 (f= 57.4%) respondents were living in rural areas (see section 4.3.1.3), and only 31 (f= 7.5%) respondents used public buses (see Table 4.14). People living in rural areas often do not have a means of public transport to healthcare facilities (Broni, Aikins, Asbeyi and Agyemang-Duah 2014:31).

Table 4.14: Means of transport (N=413)

Means Of Transportation	n=	f=	Cumulative Frequency	Cumulative Percent
Walking	226	54.7	226	54.7
Public Bus	31	7.5	257	62.2
Taxi	97	23.5	354	85.7
Private Vehicle	42	10.2	396	95.9
Others	17	4.1	413	100

Others Ambulance, Animal as means of transportation, motor bicycle

4.3.1.14 Waiting time (N=413)

A concerning 49 (f= 12%) respondents in this study received abortion care within 15 minutes after arrival at the public health facilities, 110 (f= 26.6%) between 16-30 minutes, 100 (f= 24.2%) between 31-45 minutes, 97 (f= 23.5%) between 46-60 minutes, 24 (f= 5.8%) between 61-90 minutes, and 33 (f= 8%) received care more

than 90 minutes after their arrival at a healthcare facility (see Table 4.15). It is of great concern that 254 (f= 61.5%) respondents waited more than 30 minutes before healthcare was offered. The long waiting time in healthcare facilities is often negatively associated with the utilise of healthcare services (Naaz and Mohammed 2019:71-76).

Table 4.15: Waiting time (N=413)

Time Taken	n=	f=	Cumulative Frequency	Cumulative Percent
0-15 Minutes	49	11.9	49	11.9
16-30 Minutes	110	26.6	159	38.5
31-45 Minutes	100	24.2	259	62.7
46-60 Minutes	97	23.5	356	86.2
61-90 Minutes	24	5.8	380	92
More than 90 Minutes	33	8	413	100

Nearly half of the respondents (n= 195; f= 47.2%) perceived the waiting time was appropriate, and the other 188 (f= 44.1%) believed it was moderate. Yet, there were 36 (f= 8.7%) respondents who claimed the waiting time was too long (see Figure 4.5).

The time spent in the healthcare facilities depends on the services clients require (Xie and Calvin 2017:10). The majority (n= 327; f= 79.1%) of abortion care users preferred receiving a variety of health services before they return home, whereas the remaining few (f= 20.9; n= 86) wanted to go home as soon as they received abortion care.

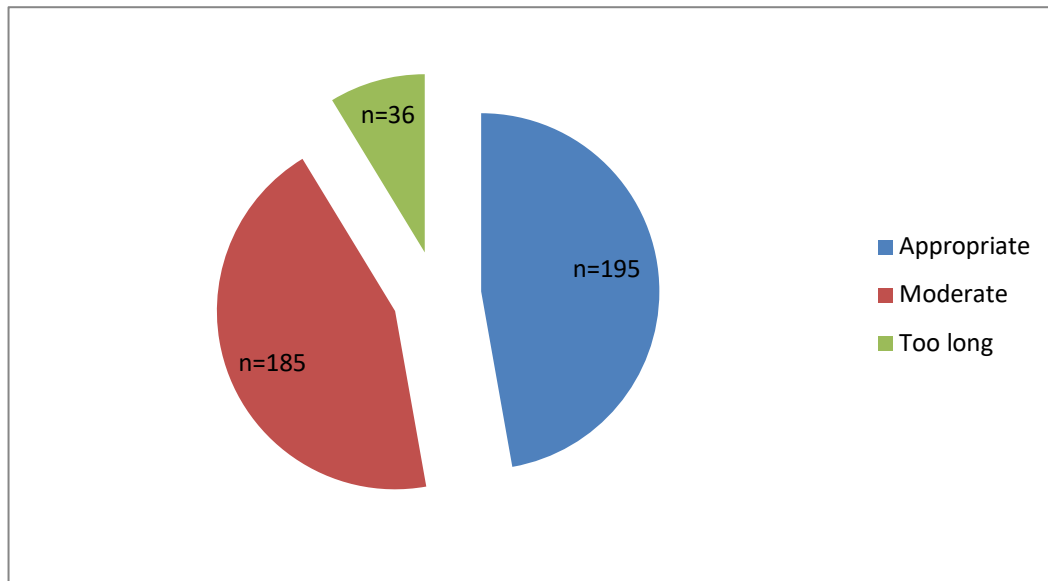


Figure 4.5: Perceived waiting times (N=413)

The waiting time to receive healthcare had no statistically significant association with FP ($p>0.05$) (see Table 4.5), HIV ($p>0.05$) (see Table 4.7), or integrated HIV-FP services use ($p>0.05$) (see Table 4.8). Even though waiting time had no statistically significant association in this study, the study by Asres et al. (2020:59) indicated healthcare service uptake could be influenced by clients' waiting time, and it is also considered one of the indicators of health service satisfaction. Clients who wait longer to receive healthcare often perceive the healthcare services are less acceptable and not appropriate (Xie and Calvin 2017:2).

4.3.1.15 Service charges (N=413)

Ever-increasing healthcare costs are becoming a global concern (Dhawan, Heetderks, Pavel, Acharya, Akay, Mairal, Wheeler, Dacso, Sunder, Lovell and Gerber 2015:1) that negatively affects health service utilisation (Mosadeghrad 2013:210). In this study, nearly three-fourths ($n= 309$; $f= 74.8\%$) of respondents received abortion care free of charge, 42 ($f= 10.2\%$) respondents' cost was covered by community healthcare insurance, and the remaining 62 ($f= 15\%$) abortion care users' cost was covered out of pocket (see Figure 4.6).

FP service was three times more likely to be used by women who received it free of charge, compared to when it was covered by community insurance: $AOD=3.532$ with

95% CI (1.155 10.803) P=0.0027 (see Table 4.5). Free healthcare services encourage women to attend public health facilities (Alebachew et al., 2018:4).

Conversely, the odds of using HIV/AIDS services are 76% less likely when it is provided free of charge, compared to when covered by community insurance AOR=0.243 with 95% CI (0.087 0.676) P=0.007 (see Table 4.7). Even though HIV counselling and testing services could be obtained for free from public healthcare facilities regardless of the economic status of the community, women might prefer privately owned healthcare facilities to secure their privacy. Studies also indicated that some people prefer HIV counselling and testing in privately owned high-quality settings to ensure the test outcomes are accurate (Obiezu-Umeh, Ezechi, Nwaozuru, Jason, Ong, Idigbe, Musa, Uzoaru, Airhihenbuwa, Tucker and Iwelunmor 2021:6).

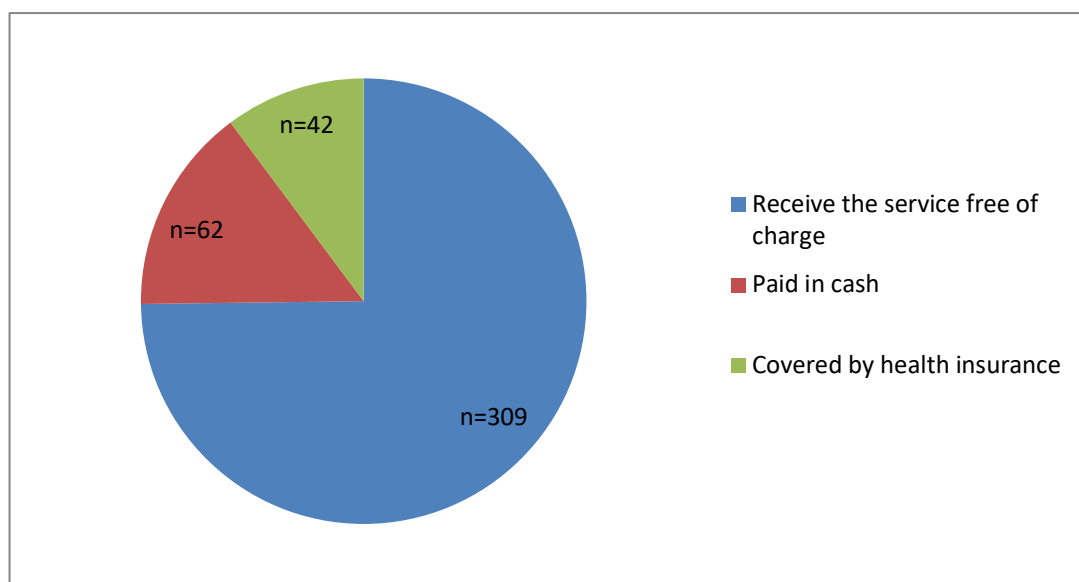


Figure 4.6: Abortion care service payment (n=62)

4.3.1.16 Fertility (N=413)

The Ethiopian population increased by 2.6% per annum, and the doubling time is estimated to be 27 years (MOH Ethiopia 2020:16). Marriage and sexual activity are the main determinants of fertility (Central Statistics Authority and ICF 2016:65). The number of children a woman could have depends on when a woman begins to give birth, the time interval between births, and the capacity of women's fecundity (Central Statistics Authority and ICF 2016:77).

In this study, the mean number of pregnancies was 2.72. Among abortion care users, the minimum numbers of pregnancies were one (primigravida), while the maximum was eight (multigravida). The majority (n= 296; f= 71.7%) of abortion care users were multigravida, while the remaining 117 (f= 28.3%) were primigravida (see Figure 4.7). Of the 296 multigravidas, 92 (f= 31.1%) were gravida 2, 87 (f= 29.4%) were gravida 3, 63 (f= 21.3%) were gravida 4, 27 (f= 9.1%) were gravida 5, and 27 (f= 9.1%) were gravida 6 or more.

In Ethiopia, the total fertility rate for the three years preceding the 2016 Ethiopian Demographic and Health Survey was 4.6 children per woman (2.3 in urban areas and 5.2 in rural areas) (Central Statistics Authority and ICF 2016:77). FP can play an important role in the reduction of women’s fertility (MOH Ethiopia 2020:22).

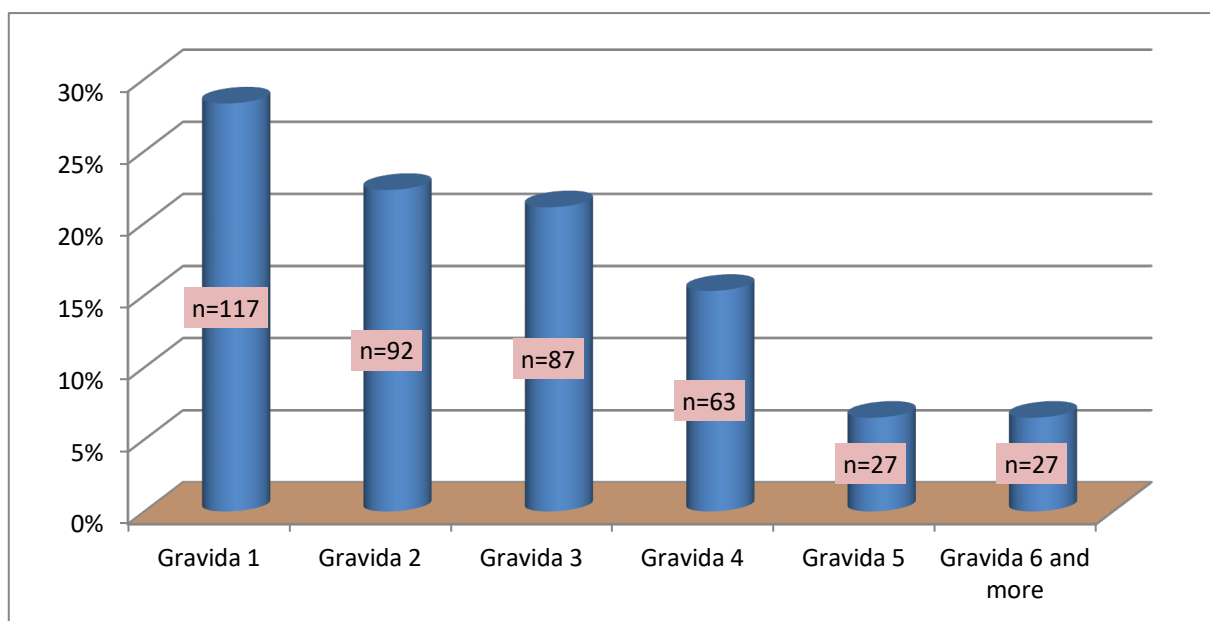


Figure 4.7: Fertility of abortion care users (N=413)

4.3.1.17 Repeated abortions (N=413)

If women had one previous abortion, the likelihood of recurrence of subsequent abortions increases (Behulu, Fenta and Aynalem 2019:499). The recurrence of repeated abortions in low and middle-income countries is high. However, research on repeated abortions is scarce (Behulu et al., 2019:499), particularly in Ethiopia, where

the magnitude of repeated abortions is unknown (Alemayehu et al., 2017:188; Behulu, Fenta and Aynalem 2019:499).

For the majority (n= 362; f= 87.7%) of respondents, this was their first abortion, while 48 (f= 11.6%) had two, and 3 (f= 0.7%) had three abortions; thus, 51 (f= 12.3%) had two or more abortions (see Table 4.16). Women’s experience of previous abortions had no statistically significant association with FP (see Table 4.5) ($p>0.05$), HIV/AIDS (see Table 4.7) ($p>0.05$), or HIV-FP service utilisation (see Table 4.8) ($p>0.05$). However, global evidence indicated that women’s willingness to receive integrated health services increases over time before they are discharged from healthcare facilities where they are treated for abortions (MOH Ethiopia 2020:30).

Table 4.16: Repeated abortions (N=413)

Number of abortions	n=	f=	Cumulative Frequency	Cumulative Percent
One time	362	87.7	362	87.7
Two times	48	11.6	410	99.3
Three times	3	0.7	413	100

4.3.1.18 Influential to the decision to request an abortion (N=413)

The decision to receive abortion care could be made by abortion care users, male partners, parents, friends or close relatives (Kumi-Kyereme, Gbagbo and Amo-Adjei 2014:8). Women’s age, occupation, number of previous abortions, and the number of living children are also important factors in the decision to seek abortion care (Kumi-Kyereme, Gbagbo and Amo-Adjei 2014:5).

The majority (f= 83.3%; n=344) of decisions to receive abortion care were made by abortion care users themselves, whereas 69 (f=16.7%) were influenced by their partners, parents, neighbours, and friends to use abortion care services.

The reasons respondents provided for why they requested an abortion were unplanned pregnancies, the continuation of pregnancy was risky for their maternal health, the pregnancy occurred as a result of rape, was due to contraceptive failure,

problems in the growing foetus, or the pregnancy was the result of intercourse with a close relative (see Table 4.17).

Table 4.17: Reasons for choosing abortion care (n=344)

Individual reasons for an abortion request	Frequency (F)	Percentage (f)
Pregnancy was unplanned	131	37.9
Pregnancy was risky for maternal health	110	31.8
Pregnancy results from rape	47	13.6
Pregnancy due to contraceptive failure	41	11.8
The problem with the growing foetus	34	9.8
Pregnant from close relatives	21	6.1

Women are typically accompanied to abortion care by a person who can take care of them, specifically when they need care due to illness (MOH Ethiopia 2014:24). In this study's context, 239 (f= 57.9%) abortion care users were accompanied by their partners/spouses, 118 (f= 28.6%) by friends, 50 (f= 12.1%) by relatives, 36 (f= 8.7%) by parents, and 23 (f= 5.6%) were accompanied by their neighbours. Among the respondents, the majority (n= 365; f= 88.4%) of abortion care users were accompanied by only one individual, 43 (f= 10.4%) by two, and five (f= 1.2%) abortion care users were accompanied by three individuals.

4.3.1.19 Reasons for opting for an abortion (N=413)

Studies indicated no single reason why women would seek abortion care. Socioeconomic factors are frequently indicated reasons, followed by child spacing, parents/partners pressures, and women's health-related issues (Singh, Remez, Sedgh, Kwok and Onda 2018:13). In this study's context, personal problems, premarital pregnancy, financial problems, and contraceptive failures were the frequently indicated reasons for seeking abortion care (see Table 4.18).

Table 4.18: Reasons for opting for an abortion (N=413)

Reasons for abortion request	n=	Percentage (f)
Personal problems	165	40
Premarital pregnancy	152	36.8
Financial problems	135	32.7
Contraceptive problems	109	26.4
Spacing pregnancy	73	17.7
Don't want more children	68	16.5

4.3.1.20 Knowledge of abortion legislation (N=413)

Knowledge of legislation that addresses abortion care is an important factor in abortion care. In earlier times, abortions were allowed only to save the life of a woman or protect her against physical injury. Since 2005, Ethiopia expanded its abortion law, and abortions became legal in cases of rape, incest, foetal impairment, close relative impregnation, or mental and physical disability (Blystad, Haukanes, Tadele, Haaland, Sambaiga, Zulu and Moland 2019:7). However, community members' limited knowledge and negative attitude towards abortion care remain major challenges that prevent women from seeking abortion care (Kahsay et al., 2019:46).

In this study, 134 (f= 32.4%) respondents knew about the existence of the changed abortion law, while 279 (f= 67.6%) did not know about it. The finding is consistent with a study conducted in northern Ethiopia by Kahsay, Ambaw, Gebremedhin, Tetemke, and Gebremedhin (2019:50), claiming 35% of respondents did not know about the existence of the abortion law. Among the respondents who knew about the legislation, 134 reported the indications for safe abortion care as pregnancy due to rape (F= 105, f=78,4%), when the pregnancy resulted from close relatives (F=71, f= 53%), if the pregnancy endangered the health and life of mothers or fetuses (F= 54, f= 40.3%), when the woman has a physical and mental disability (F= 43, f=32.1%), and when the foetus has an incurable disease or physical deformity (F= 31, f= 23.1%). The findings resembled another study by Kahsay et al. (2019:50) in northern Ethiopia, where 55% of respondents indicated safe abortions are permitted in cases of rape, 57.8% said in

cases of incest, and 46% mentioned if the pregnancy endangers the life of mothers. The multiple response analysis indicated 61 (f= 45.5%), 24 (f= 17.9%), 19 (f= 14.2%), 11 (f= 8.2%), and 19 (f= 14.2%) abortion care users identified 1, 2, 3, 4, and 5 different indications of safe abortion services, respectively.

Women who were knowledgeable about abortion legislation were twice as likely to use FP services compared to those who were ignorant about the abortion law: AOR=2.052 with 95% CI (1.181, 3.566) P=0.011 (see Table 4.5). Knowledge of abortion legislation is important in the utilisation of integrated services and are governed by abortion laws/legislation (WHO 2015:2). The 2014 revised Technical and Procedural Guidelines for Safe Abortion Services in Ethiopia (2014:24) also recommend women who received abortion care should get FP services before being discharged from the health facilities. Improving knowledge of abortion law in the community could improve integrated health services (MOH Ethiopia 2014:11).

4.3.1.21 Adverse effects of abortions (N=413)

The adverse effects of abortions could vary from mild to life-threatening, specifically in an unsafe environment (Francome 2015:9). Complications from abortions, especially unsafe abortions, include bleeding, trauma, infection, and sometimes even death (Frederico et al., 2018:10). Lack of public interest and relatives' denial are also common psychological consequences of abortion complications (Al-Assady 2019:1).

The majority (f= 83.5%; F= 345) of respondents indicated vaginal bleeding is one of the complications of abortion, 238 (f= 57.6%) indicated that complications might end in death, 136 (f= 32.9%) indicated infection as a possible adverse event, 93 (f= 22.5%) indicated that mothers could be weak afterwards, and 61 (f= 14.8%) indicated women might not conceive in future again (see Table 4.19). Respondents in another study in Ethiopia were also familiar with the mentioned adverse effects (Kahsay et al. 2019:50). Of concern is that the respondents' knowledge about the risks was poor, as 119 (f= 28.8%) indicated only one adverse effect of abortions, 168 (f= 40.7%) knew two, 86 (f= 20.8%) knew three, and only 40 (f= 9.7%) were aware of 4 or more adverse effects of abortions.

Table 4.19: Adverse effects of abortion (N=413)

Harmful effects of abortion	n=	Percentage (f)
Infection	136	32.9
Bleeding	345	83.5
weakness	93	22.5
Not conceiving	61	14.8
Death	238	57.6
Don't know	27	6.5

4.3.1.22 Competency of healthcare providers (N=413)

Healthcare providers' competency could be described based on their knowledge and skill, enabling them to provide healthcare services safely and effectively (Oldland, Botti, Hutchinson and Redley 2020:159). As indicated in Table 4.20, 265 (f= 64.2%) respondents described healthcare providers as very skilful, 142 (f= 34.4%) as moderately skilful, while 6 (f= 1.5%) respondents thought healthcare providers were not skilful at all.

Periodic comprehensive in-service training is important for healthcare providers to deliver quality healthcare (WHO 2016:5). Improving healthcare providers' competency could improve the uptake of healthcare services (Dibaba et al., 2017:76).

Table 4.20: Competency of healthcare providers (N=413)

Competency	n=	f=	Cumulative frequency	Cumulative Percent
Very skilful	265	64.2	265	64.2
Moderate skilful	142	34.4	407	98.5
Not skilful	6	1.5	413	100

4.3.1.23 Family planning service (N=413)

Knowledge about contraceptive methods can prevent the occurrence of unintended pregnancy (MOH Ethiopia 2020:22), improve FP service uptake (Teka et al., 2018:50), and decrease the need for abortion care due to unplanned pregnancies. Contraceptive methods can be broadly classified into modern and traditional methods (Central

Statistics Authority and ICF 2019:33). The modern methods include female sterilisation, male sterilisation, IUDs, implants, injectables, pills, male condoms, female condoms, emergency contraception, standard day's method (SDM), and lactation amenorrhea method (LAM). Rhythm, withdrawal, and other folk methods are considered traditional methods of contraception (Central Statistics Authority and ICF 2019:33).

Respondents in this study mentioned different types of FP methods. As indicated in Figure 4.8, injectables were mentioned by 342 (f= 82.8%) respondents, oral contraceptive pills by 340 (f= 82.3%) respondents, implants by 193 (f= 46.7%) respondents, and IUDs by 176 (f= 42.6%) respondents. Knowledge and positive attitude toward contraceptives and open discussions with sexual partners enhance the use of contraceptives (Alemu, Ambelie and Azage 2020:2). The Ethiopian preliminary Demographic and Health Survey (2019:9) findings indicated the most popular contraceptive methods were injectable (27%), implants (9%), pills (2%), and IUDs (2%). These modern methods of contraceptives were also the most frequently mentioned by the respondents in this study (see Figure 4.8). Knowledge about and the use of contraceptives can, therefore, prevent an unwanted pregnancy, abortions, disability, and death resulting from pregnancy-related complications (Endriyas, Eshete, Mekonnen, Misganaw, Shiferaw and Ayele 2017:10).

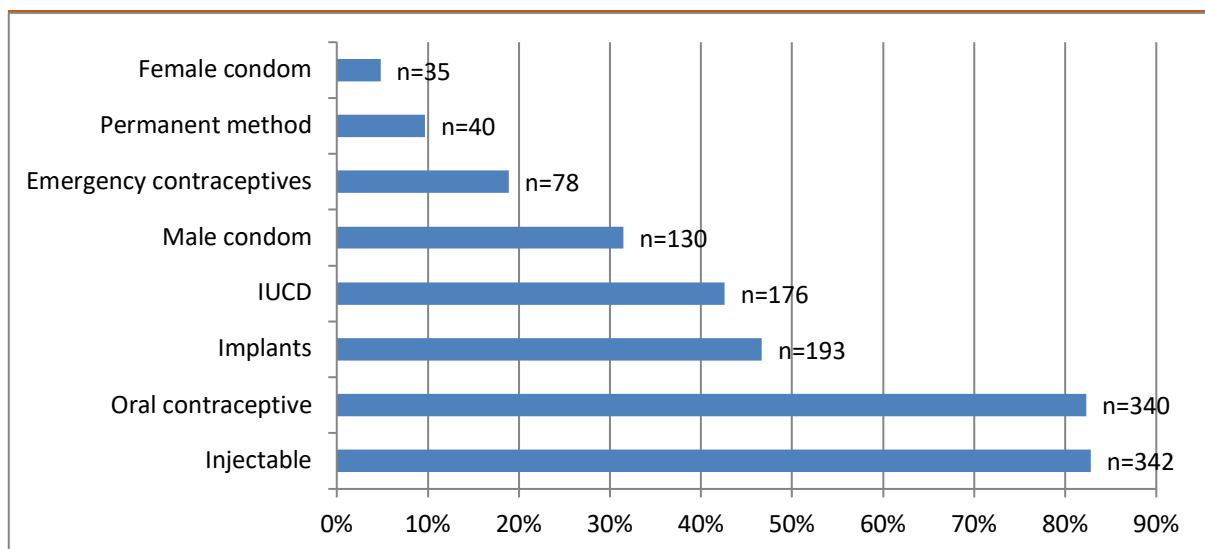


Figure 4.8: Awareness of contraceptives methods (N=413)

Three hundred and seventeen (f= 76.8%) abortion care users obtained information on contraceptives from nurses, 121 (f= 29.3%) from friends, 103 (f= 24.9%) from their partners, and a few (F= 55; f= 13.3%) obtained information from their family members, health extension workers, and midwives combined (see Figure 4.9). In Uganda, research findings revealed a similar tendency where healthcare providers, friends, and partners were primary sources of information regarding contraceptives (Alege, Matovu, Ssensalire and Nabiwemba 2016:5). Among respondents, 268 (f= 64.9%) received information from one source, 116 (f= 28.1%) from two, and 29 (f= 7%) received information on contraceptive methods from three or more sources. Improving the trusted sources of information on FP services would help to improve knowledge and utilisation of FP services (Akamike, Okedo-Alex, Eze, Ezeanosike and Uneke 2020:9). If abortion care users are counselled and informed about the options or methods of FP services, abortion services can become a good entry point for the integration of abortion care and FP services (Demeke, Alemayehu and Gelaso 2013:32).

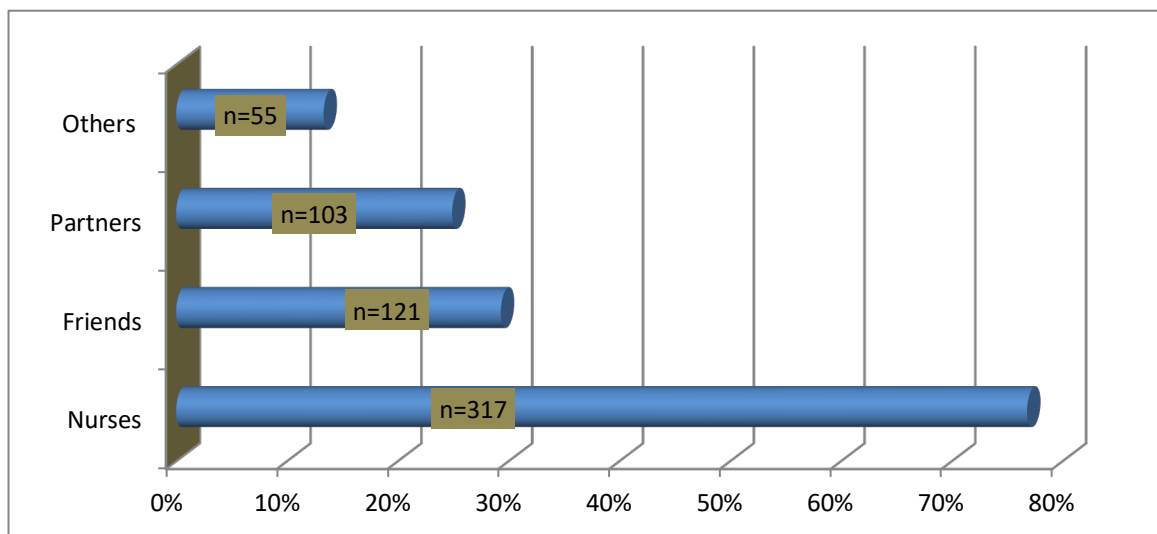


Figure 4.9: Sources of information on FP services (N= 413)

Two hundred and thirty-two (f= 56.2%) respondents in this study used contraceptives before. The positive motivators for using contraceptive methods (n=232) were preventing unwanted pregnancy and having knowledge of the importance of contraceptive methods, as indicated by 220 (f= 94.8%) and 21 (f= 9.1%) respondents, respectively. Reasons for not using FP methods (n=181) before this specific abortion were that the pregnancy was intentional, but abortions happened spontaneously (F=

58, f= 32%), the respondents who were students did not have the intention to use contraceptives and preferred to use other means of contraception (F= 51, f= 28%), not being married (F= 30, f= 16.1%), refusal to use contraceptives and preferring other means of contraception (F= 17, f= 9.1%), as well as the fear of infertility (F= 15, f= 9.1%) after using contraceptives. Other reasons included that they wanted other children, religious problems, personal problems, and a lack of information on FP services (F= 15, f= 8.3%).

Two hundred and seventy-four (f= 66.3%) respondents did not receive contraceptives after their recent abortion. The reasons for not using contraceptives (n=274) after the recent abortion included a desire to get pregnant again (F= 122, f= 44.5%). Despite having had an abortion due to being a student and not wanting to have children while studying, 40 respondents (f= 14.6%) still refused to take contraceptives after their last abortion. Similarly, 30 (f= 11%) abortion care users who were unmarried and had unwanted pregnancies still refused to use FP services after their recent abortion. Fear of infertility (F= 25, f= 9.1%), religious problems, personal problems, and wanting time to discuss FP with their partners were indicated as other reasons for refusing contraceptives (F= 21, f= 7.7%).

Abortion care users who have been using FP services previously were four times more likely to use FP services compared to those who never used: AOR=4.299 with 95% CI (2.399, 7.704) P=0.0001 (see Table 4.5). Women who previously used FP services often have knowledge and information on contraceptives, thus increasing their likelihood of using FP services after having had an abortion (Dasa, Kassie, Roba, Wakwoya and Kelel 2019:12).

The likelihood of abortion care users accessing HIV-FP services was four times higher among women who previously used FP services, compared to those who did not use the service: AOR=4.067 with 95% CI (2.185, 7.568) P=0.0001 (see Table 4.8). The national guideline on FP services in Ethiopia (2020:30) indicated women who received abortion care should receive integrated health services before they are discharged from healthcare facilities.

4.3.1.24 Challenges of family planning methods (N=413)

Worldwide, 57% of women of reproductive age are in a relationship and use a modern method of FP (United Nations 2015:1). Still, about 150 million have unmet needs of FP (Debas, Donkor, Gawande, Jamison, Kruk and Mock 2015:112). Low education status, low socioeconomic status, and inaccessibility of healthcare facilities are challenges related the utilisation of contraceptive methods (Namasivayam, Lovell, Namutamba and Schluter 2020:9).

In this study's context, respondents (abortion care users) indicated a lack of knowledge of contraceptive methods, misconceptions, religious problems, cultural problems, beliefs, minimal access to FP, cost of FP services, and side effects as challenges that affect their use of FP services (see Table 4.21).

Information, education, and communication (IEC) materials that are developed and used to inform the community on FP services must be appropriate to the community norms, attitudes, and ideas (Murithi, Santillán, Dhillon, Sebany, Farley, Ndhlema, Chintu and Jackson 2016:19). Individuals and communities can be reached through the local media, outreach visits, and house-to-house visits to address the challenges of using FP services (EngenderHealth 2011:5; Mendes 2014:52).

Table 4.21: Utilisation of FP services: Challenges (N=413)

Challenges to FP use	n=	Percentage (f)
Lack of knowledge	231	55.9
Misconceptions	201	48.7
Religion barrier	178	43.1
Cultural barriers	140	33.9
Community beliefs	133	32.2
Low access to FP services	29	7.0
Cost of FP services	12	2.9
Unwanted side effects	2	0.5

4.3.1.25 HIV/AIDS (N=413)

The third service to be part of the integration is HIV/AIDS services. In Ethiopia, the first case of HIV was reported in 1984, a few years later than in most sub-Saharan countries (Girum, Wasie and Worku 2018:2). Since then, the infection spread across the country very fast, impacted the lives of millions, and left hundreds of thousands of children without parents (MOH Ethiopia 2017:1).

Unsurprisingly, all respondents (N= 413, f=100%) had heard about HIV/AIDS. Hearing about HIV/AIDS does not necessarily mean that a person has comprehensive knowledge of HIV/AIDS. According to the Ethiopian Demographic Health Survey (2016:220), comprehensive knowledge of HIV/ADS is measured by (1) knowledge of the consistent use of condoms, (2) having one uninfected faithful partner, (3) knowing a healthy-looking person can have HIV, and (4) rejecting misconceptions about the transmission or prevention of HIV. Studies indicated that knowledge has been identified as a powerful tool in all human endeavours, including the integration of HIV/AIDS with other healthcare services (Tomori 2017:2).

Radio, television, and health education in the healthcare facilities were sources of information on HIV/AIDS, according to 307 (f= 74.3%), 296 (f= 71.7%), and 221 (f= 53.5%) respondents, respectively (see Table 4.22). Among abortion care users, 58 (f= 14%) respondents indicated one source of HIV/AIDS information, 118 (f= 28.6%) two sources, 142 (f= 34.4%) three sources, and 95 (f= 15.3%) respondents indicated four or more sources of information on HIV/AIDS. Obtaining information on HIV/AIDS from different sources can increase the uptake of these services (Sanoa, Sedziafab, Amoyawa, Boatenga, Kuuirec, Boamahd and Kwona 2016:684-688) and improve understanding among individuals about multiple health needs. This may enhance the integration of abortion care and FP services (Boone and Cloutier 2015:7).

Table 4.22: Sources of information about HIV/AIDS (N=413)

Source of information	n=	Percentage (f)
Radio messages	307	74.3
Television messages	296	71.7

Source of information	n=	Percentage (f)
Health education in the healthcare facility	221	53.5
Health extension workers in the community	181	43.8
*Others	127	30.8

Others source of information leaflet, school and friends*

One hundred and sixty-two (f= 39.2%) respondents in this study received HIV/AIDS services, while 251 (f= 60.8%) did not receive any. Among abortion care users who received HIV/AIDS services (n= 162), 83 (f= 51.2%) received HIV counselling and testing, 77 (f= 47.5%) received voluntary HIV counselling services, 76 (f= 46.9%) received voluntary HIV testing, 48 (f= 29.6%) received provider-initiated HIV counselling services, 42 (f= 25.9%) received provider-initiated HIV testing services, and only two (f= 1.2%) received ART (see Figure 4.10). The availability of different HIV/AIDS services in a healthcare facility enhances the use of integrated health services (MOH Ethiopia 2018:9), such as FP and abortion care, as a one-stop service.

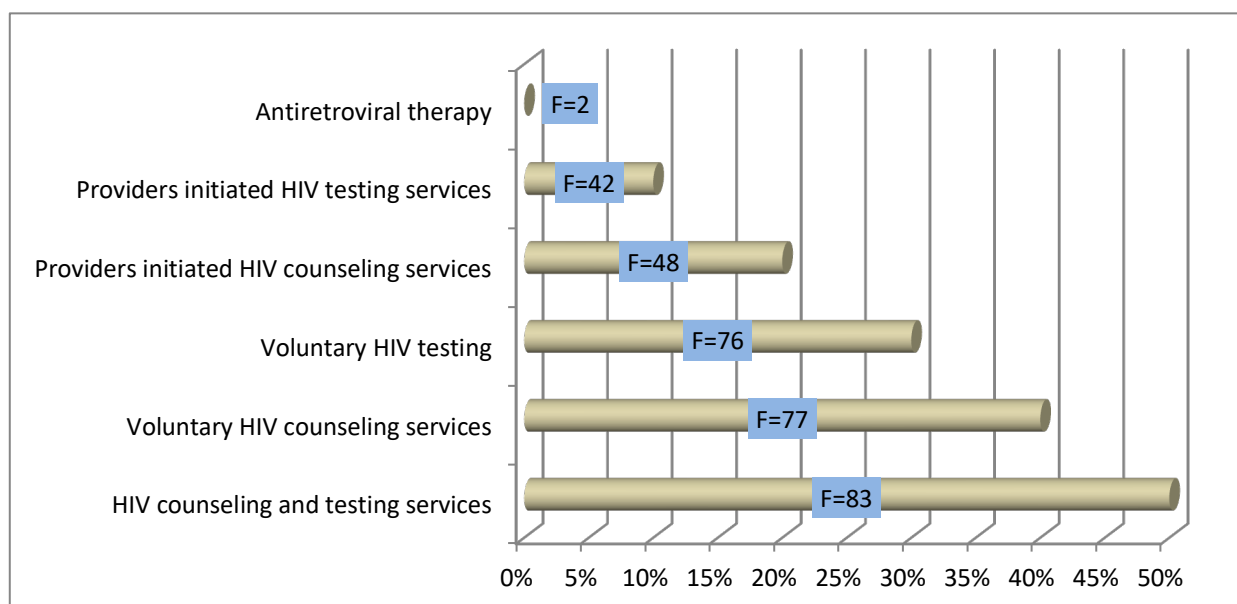


Figure 4.10: Utilisation of HIV/AIDS-related services (n=162)

4.3.1.26 FP-HIV/AIDS services (N=413)

Health service integration reduces the risk of unintended pregnancy, unsafe abortions, and sexually transmitted diseases such as HIV/AIDS (Warren et al., 2017:91; USAID

2012:1). One hundred and eighty-eight (f= 45.5%) abortion care users received integrated health services. Of those, 113 (f= 60.1%) respondents received the service in the abortion care unit, 52 (f= 27.7%) in HIV-FP rooms, 12 (f= 6.4%) in the delivery room, 6 (f= 3.2%) in ANC/PMTCT rooms, and five (f= 2.7%) respondents received the integrated services in the outpatient department (see Table 4.23). The availability of abortion care rooms in health facilities enhances the provision of integrated health services (Samuel, Alemayehu and Powell 2013:18) and improves maternal health status (Warren, Hopkins, Narasimhan, Collins, Askew and Mayhew 2017:91).

Table 4.23: Rooms used for the consultation of integrated health service (n=188)

Abortion Providing Room	Frequency (F)	Percentage (f)	Cumulative frequency	Cumulative Percent
Abortion care unit	113	60.1	113	60.1
Integrated HIV-FP unit	52	27.7	165	87.8
Outpatient department	5	2.7	170	90.4
PMTCT/ANC unit	6	3.2	176	93.6
Delivery unit	12	6.4	188	100.0

Among women who received integrated health services (n=188), 111 (f= 59%) received the services in the same room by the same healthcare provider, 46 (f= 24.5%) in the same room but by different healthcare providers (thus, one provides the one service and another offers the next service), and 31 (f= 16.5%) respondents had to move to another room to be taken care of by another healthcare provider for their other healthcare needs (see Figure 4.11).

In a study in Malawi, few clients (38.5%) received health services in the same room by the same healthcare provider; 30.8% in the same room but by different healthcare providers; and 30.7% received the health services in different rooms from different healthcare providers (USAID, PEPFAR, and project HP 2015:50). Providing integrated health services in the same room by the same healthcare providers is believed to reduce clients' waiting time and healthcare providers' workload (USAID et al., 2015:20).

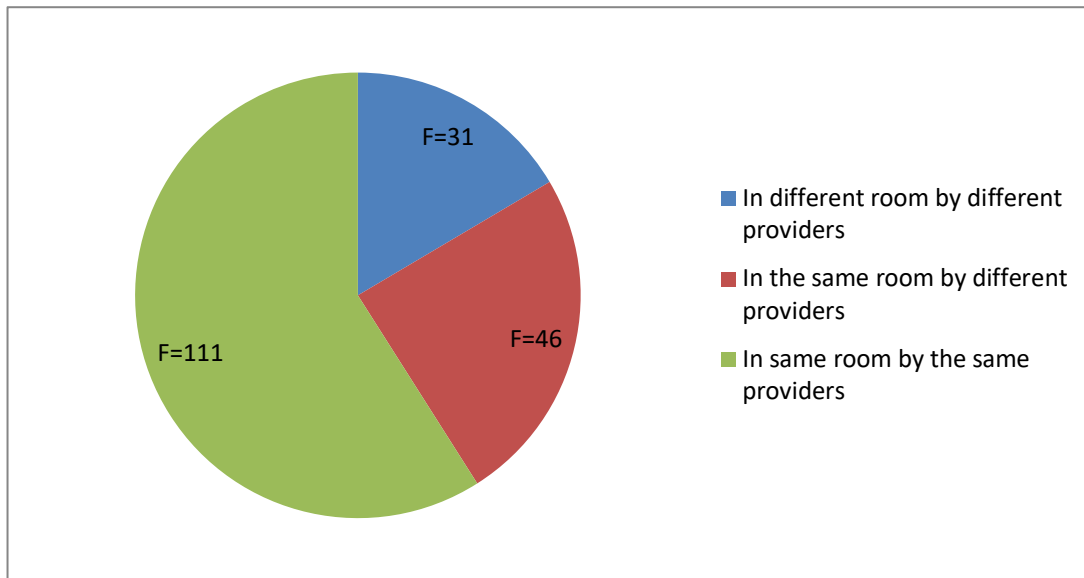


Figure 4.11: Integrated health service deliveries (n=188)

Clients could receive two or more different health services according to their needs over time and across different levels of the health system (Colombini, Mayhew, Mutemwa, Kivunaga and Ndwiga 2016:2133). It increases efficiency, improves horizontalization of vertical programmes, and appropriate utilisation of human resources (Lenka and George 2013:297; Rutaremwa and Kabagenyi 2016:2). It can also enhance access to healthcare in one place and improve the privacy and confidentiality of clients who receive a variety of health services in the healthcare facilities (Kurpas, Stefanicka-Wojtas, Shpakou, Halata, Mohos, Skarbaliene, Dumitra, Klimatckaia, Bendova and Tkachenko 2021:8; Winestonea, Bukusib, Cohenc, Kwarob, Schmidtd and Turanc 2012:149-163). It promotes the health of mothers by reducing their risk of unintended pregnancies, unsafe abortions, and sexually transmitted infections like HIV/AIDS (USAID 2012:1).

Even though only 188 (f= 45.5%) respondents received an integrated healthcare service in this study's context, the majority (n= 332; f= 80.5%) of respondents preferred to use integrated healthcare in the future. Yet, 81 (f= 19.6%) respondents did not want integrated health services even in the future. Their reasons were the need to receive only abortion care, the expected long waiting time, fear of stigma and discrimination due to an illness related to abortion care, confidentiality problems, and the reduced quality of health services (see Table 4.24).

Table 4.24: Negative motivators for integrated health services (n=81)

Negative Motivators	Frequency (F)	Percentage (f)	Cumulative Frequency	Cumulative Percent
Only want to receive abortion care	52	64.2	52	64.2
Long waiting time	15	18.5	67	82.7
Fear of stigma and discrimination	9	11.1	76	93.8
Others	5	6.2	81	100.0

Others* due to illness of abortion care, confidentiality problems, reduce the quality of services*

The majority (f= 71.4%; n= 295) of respondents preferred to receive abortion care with HIV-FP health services in the same room by the same healthcare provider. Fifty-three (f= 12.8%) preferred in the same room but different healthcare providers (thus, one provides the one service and then another offers the next service), and 65 (f= 15.7%) preferred integrated health services in different rooms by different healthcare providers (see Table 4.25). Receiving healthcare services from different providers in different rooms may increase the waiting time as clients need to visit different rooms and wait for different healthcare providers (USAID et al., 2015:4). Having the same healthcare provider offering an integrated service in the same room can minimise the waiting time (USAID et al., 2015:20).

Table 4.25: Perception of integrated health service in the future (N=413)

Preference for integrated services	n=	f=	Cumulative frequency	Cumulative percent
In the same room with the same providers	295	71.4	295	71.4
In the same room with different providers	53	12.8	348	84.3
In different rooms with different providers	65	15.7	413	100

4.3.1.27 Disadvantages of integrated health service (N=413)

Even though the advantages of integrated health services are paramount, there are also some disadvantages, such as a possible perceived increased waiting time (n=166; f= 40.2%), confidentiality problems (n= 114; f= 27.6%), fear of stigma and discrimination (n= 109; f= 26.4%) and increased workload (n= 101; f= 24.5%) (see Table 4.26). Of the respondents, 245 (f= 59.3%) indicated only one disadvantage of integrated health services, 88 (f= 21.3%) mentioned two, 40 (f= 9.7%) listed three, and 40 (f= 9.7%) offered four or more disadvantages of integrated health services. Improving counselling services and reducing the waiting time could meaningfully reduce the perceived disadvantages of integrated health services (Kozłowska, Lumb, Tan and Rea 2018:66).

Table 4.26: Disadvantages of integrated health services (N=413)

Disadvantages of integrated health services	n=	Percentage
Increased waiting time	166	40.2
Fear of loss of confidentiality	114	27.6
Fear of stigma and discrimination	109	26.4
Increased workload	101	24.5
Decreased quality of services	81	19.6
Embarrassed to discuss HIV and/or FP issues with providers	67	16.2

4.3.1.28 Challenges to integrated health services (N=413)

Integrating maternal health services promotes the health status of women in the reproductive age groups (Mutemwa et al., 2017:101). Public health facilities are often faced with challenges in providing integrated health services (Mutemwa et al. 2013:18). Work overload, lack of service infrastructure, a shortage of logistical supplies, a shortage of trained healthcare providers (Mutemwa et al., 2017:101; Mutemwa et al. 2013:18), and time constraints to provide counselling services are common challenges often seen while integrating different health services in the public health facilities (Newmann, Zakaras, Tao, Onono, Bukusi, Cohen, Steinfeld and Grossman 2016:211).

Respondents in this study indicated that increased waiting times, decreased quality of health services, unavailability of services, and the increasing cost of integrated health services are perceived challenges in receiving integrated health services (see Table 4.27). The majority (n=317; f=76.8%) of respondents indicated one challenge of integrated health services, whereas the remaining few (n= 96; f= 23.2%) mentioned two or more challenges in integrating maternal health services. Improving the skills and knowledge among providers, improving the quality of services, teamwork, and reducing the cost of services are important strategies for overcoming the challenges of integrated maternal health services (Mayhew, Hopkins and Warren 2017:iv1-iv5).

Table 4.27: Perceived challenges in the utilisation of integrated health services (N=413)

Challenges of integrations	n=	Percentage
Increased waiting time	258	62.5
Reduce the quality of care	137	33.2
Inaccessibility of services	43	10.4
Increased service cost	28	6.8

4.3.1.29 Improvement of integrated services: Abortion care users' opinions (N= 413)

Different opinions were shared by abortion care users to improve integrated health services. Availing all necessary materials and equipment for these services (n= 288; f= 69.7%), strengthening the referral system (from the community to the health centre/hospital) (n= 284; f= 68.7%), providing integrated health services free of charge (n= 221; f=53.5%), and availing integrated health services at all health facilities (n= 181; f= 43.8%), were all mentioned.

Table 4.28: Abortion care users' opinions on the improvement of integrated health services (N=413)

Opinions on integrated health services	n=	Percentage
The necessary materials and equipment for integrated health services must be available	288	69.7
Strengthen the referral system (from the community to the health centre/hospital) to improve integrated health services.	284	68.7
Integrated health services should be free of charge	221	53.5
Integrated health services available at all health facilities	181	43.8

4.3.1.30 Benefits of integration of services (N=413)

Integrating abortion care, FP, and HIV/AIDS services have a paramount benefit for abortion care users and healthcare providers (Mutemwa et al., 2013:18). Abortion care users can promote their health status by obtaining integrated health services. Conversely, healthcare providers can improve their clinical and communication skills by interacting with other healthcare providers and working as a team (Mutemwa et al., 2013:18). Furthermore, integration can reduce workload because fewer clients will visits at the health system level (Milford et al., 2018:187).

Low transportation costs and reduced waiting times were the benefits of integrated health services mentioned by 249 (f= 60.3%) and 218 (f= 50.8%) respondents, respectively (see Table 4.29), despite some indicating that it will extend the waiting time (see Section 4.3.1.14). Among respondents, 114 (f= 27.6%) mentioned one benefit of integrated health services, 98 (f= 23.7%) mentioned two, 106 (f= 25.7%) three, and the remaining 95 (f= 23%) respondents indicated four or more benefits of integrated health services.

Table 4.29: Benefits of health service integration (N=413)

Benefits of service integration	n=	Percentage
Reduced transportation cost	249	60.3
Reduce waiting time	218	52.8
Make fewer trips to the facility	209	50.6

Benefits of service integration	n=	Percentage
Reduces stigma toward accessing HIV services	167	40.4
Efficient way to access several services	159	38.5
Reduce stigma towards accessing FP services	81	19.6

4.3.1.31 Possible suggestions on the integration of health services (N=413)

A list of suggestions to enhance the integration of maternal health services was obtained from abortion care users. Accordingly, availing all necessary services in the public healthcare facility, providing training to healthcare providers, equipping the rooms with necessary materials, educating the community on integrated services, and rearranging service-providing areas in the healthcare facilities were some of the suggestions (see Table 4.30).

Among respondents, 110 (f= 26.6%) provided one suggestion on how to enhance integrated health services, 182 (f= 44.1%) provided two, 104 (f= 25.2%) provided three, and 17 (f= 4.1%) provided four or more suggestions. The suggestions from abortion care users were used in the proposed action plan (see Section 5.8).

Table 4.30: Abortion care users' suggestions to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (N=413)

Suggestions provided on the integration of abortion care with other health services	n=	Percentage
Avail all necessary services in the health facility	206	49.9
Provide training to healthcare providers	127	30.8
Equip the room with the necessary materials and supplies	121	29.3
Educate the community on integrated services	73	17.7
Rearrange service-providing areas in the facility	70	16.9
Create compassionate, respectful and caring healthcare providers	60	14.5
Improve counselling system	50	12.1
Improve the intra-facility referral system	33	8.0

Suggestions provided on the integration of abortion care with other health services	n=	Percentage
Continuous following up of the service	27	6.5
Provide all services in one room	26	6.3
Improve quality care	16	3.9
Reduce waiting time	15	3.6
Reduce cost service	7	1.7
Transport cost	6	1.5
Budget allocation	6	1.5
I don't know	5	1.2
Improve confidentiality	3	0.7
Staff commitment	2	0.5
Reduce stigma discrimination	2	0.5
Women empowerment	2	0.5

4.3.2 Healthcare providers (N=306)

A total of 306 healthcare providers from 58 public healthcare facilities volunteered to participate in the study. Two hundred and eleven (f= 69%) respondents were from public health centres, whereas 95 (f= 31%) were from public hospitals. Among the respondents, 153 (f= 50%) were abortion care providers, and the other 153 (f= 50%) were integrated HIV-FP service providers. The data obtained from healthcare providers are presented under the following sub-headings.

4.3.2.1 Professions (N=306)

The health workforce is an important component of the healthcare system (Akinyemiju, McDonald and Lantz 2015:382). In this study's context, data were obtained from healthcare professionals who were responsible for providing abortion care and HIV-FP services in public health facilities. Among 306 respondents, 157 (f= 51%) were nurses, 72 (f= 23.5%) were public health officers, 60 (f= 19.6%) were midwives, and 17 (f= 5.6%) were medical doctors (see Table 4.31). The professional mix of healthcare providers was consistent with another study in Addis Ababa, Ethiopia, by

Ayalew (2018:59), which sampled nurses (56%), midwives (27%), health officers (14.4%), and physicians (1.6%). The presence of adequate numbers and a professional mix (doctors, health officers, midwives and nurses) are essential for providing comprehensive healthcare services (MOH Ethiopia 2015:45).

Table 4.31: Healthcare providers' professional categories (N=306)

Professions	n=	f=	Cumulative Frequency	Cumulative Percent
Nursing	157	51.3	157	51.3
Health officer	72	23.5	229	74.8
Midwifery	60	19.6	289	94.4
Medical doctor	17	5.6	306	100

4.3.2.2 Gender (N=306)

Ethiopia's essential health service package (MOH Ethiopia 2019:14) reflects that 56.9% of nurses, 42.4% of midwives, 33.5% of physicians, and 27.8% of health officers are female. In this study, 164 (f= 53.6%) healthcare providers were female. Women's representation in the health system is showing an increasing pattern over time (WHO 2019:3). In a study conducted in 104 countries around the world, the 67% of the health workforce was female (Habib, Halwani, Mikati and Hneiny 2020:3), which indicates the number of female professionals is becoming a priority in healthcare facilities. Women seeking maternal health-related services often find it easier to discuss and obtain appropriate care from female healthcare providers (Panday, Bissell, Van Teijlingen and Simkhada 2017:623).

4.3.2.3 Age (N= 306)

The mean and median ages of the respondents were 29.1 years and 28 years, respectively. The minimum age of the respondents was 21 years, while the maximum was 45 years. Seventy (f= 22.3%) respondents were younger than 26 years, 156 (f= 50.3%) were between 26 and 30 years, 44 (f= 14.4%) were between 31 and 35 years, 23 (f= 7.5%) were between 36 and 40 years, and 15 (f= 4.9%) were older than 40 years (see Table 4.32). These findings are consistent with another study conducted in

the Sidama zone, where the majority of midwives and nurses were in the age group of 20-30 years (Asegid, Belachew and Yimam 2014:10).

Table 4.32: Age category of healthcare providers (N= 306)

Age in years	n=	f=	Cumulative frequency	Cumulative Percent
21-25	70	22.9	70	22.9
26-30	154	50.3	224	73.2
31-35	44	14.4	268	87.6
36-40	23	7.5	291	95.1
41-45	15	4.9	306	100

4.3.2.4 Residences (N=306)

Respondents were enrolled from five zones, namely Sidama, Wolaita, Gamo, Hadiya, and Hawasa zones. Eighty-five (f= 27.8%) respondents were enrolled from the Sidama zone, 75 (f= 24.5%) from the Gamo zone, 70 (f= 22.9%) from the Wolaita zone, 52 (f= 17.0%) from the Hadiya zone, and 24 (f= 7.8%) respondents were enrolled from the Hawasa zone (see Table 4.33).

Table 4.33: Place of residence (N=306)

Place of residence	n=	f=	Cumulative percent	Cumulative percent
Sidama	85	27.8	85	27.8
Gamo	75	24.5	160	52.3
Wolaita	70	22.9	230	75.2
Hadiya	52	17.0	282	92.2
Hawasa	24	7.8	306	100.0

4.3.2.5 Ethnicity (N=306)

Ethiopia is a country with diverse ethnicity; more than 80 ethnic groups are believed to exist in Ethiopia. The largest ethnic groups are Oromo (34%) and Amhara (30%), and the rest are relatively few in proportion (Central Statistics Authority and ICF

2016:34). Among nine regions in Ethiopia, 56 ethnic groups existed in SNNPR, with distinct geographical locations, languages, cultures, social identities and names according to zones (World Bank 2020:15). The findings of this study indicated 76 (f= 24.8%) respondents were Sidama by ethnicity, 71 (f= 23.2%) were Wolaita, 67 (f= 21.9%) were Gamo, and 38 (f= 12.4%) were from the Hadiya ethnic group (see Table 4.34).

Table 4.34: Ethnicity of healthcare providers (N= 306)

Ethnicity	n=	f=	Cumulative frequency	Cumulative Percent
Sidama	76	24.8	76	24.8
Wolaita	71	23.2	147	48
Gamo	67	21.9	214	69.9
Hadiya	38	12.4	252	82.3
Amhara	29	9.5	281	91.8
Goffa	14	4.6	295	96.4
Others*	11	3.6	306	100

*Others * other ethnic groups are Tigria, Oromo, Gurage, Gedio, and Silte

4.3.2.6 Marital status (N= 306)

One hundred and sixty-eight (f= 54.9%) respondents were married, while 121 (f= 39.5%) were single. Divorced, widowed, unmarried but in a relationship, and separated respondents represented 5 (f= 1.6%), 5 (f= 1.6%), 4 (1.3%), and 3 (f= 1%) respondents in the sample, respectively (see Table 4.35). This finding is consistent with another study in eastern Ethiopia, where 64% of health professionals (physicians, health officers, midwives, and nurses) were married, while 32.3% were single (Merga and Fufa 2019:494).

Table 4.35: Marital status of healthcare providers (N=306)

Marital status	n=	f=	Cumulative Percent	Cumulative Percent
Married	168	54.9	168	54.9
Single	121	39.5	289	94.4

Marital status	n=	f=	Cumulative Percent	Cumulative Percent
Divorced	5	1.6	294	96.1
Widowed	5	1.6	299	97.7
Unmarried but in a relationship	4	1.3	303	99.0
Separated	3	1.0	306	100.0

4.3.2.7 Religion (N=306)

There are diverse religions in Ethiopia. The most dominant ones are Orthodox Christianity, which accounts for about 43% of the population, Muslims (31%), and Protestants (22%). However, the dominance of religion varies from one religion to another (Central Statistics Authority and ICF 2016:33). One hundred and eighty (f= 58.8%) respondents in this study were Protestant, followed by Orthodox (n=91; f= 29.7%) (see Table 4.36). This finding concurred with another study by Merga and Fufa (2019:494), which reported 62.2% and 24.8% of healthcare professionals were Protestant and Orthodox, respectively. Nevertheless, most studies indicated that healthcare providers' religion did not influence the provision of integrated healthcare services (Olivier, Tsimpo, Gemignani, Shojo, Coulombe, Dimmock, Nguyen, Hines, Mills, Dieleman and Haakenstad 2015:1771).

Table 4.36: Religions of the respondents (N=306)

Religion	n=	f=	Cumulative Percent	Cumulative percent
Protestant	180	58.8	295	96.4
Orthodox	91	29.7	91	29.7
Muslim	24	7.8	115	37.6
Catholic	11	3.6	306	100

4.3.2.8 Work experience (N=306)

Work experience plays an important role in the delivery of quality healthcare (Samuelsson and Thach 2018:2). In this study, 109 (f= 35.6%) healthcare providers

had 36 months and longer work experience, whereas 30 (f= 12.1%) respondents had served between 0-11 months (see Figure 4.12). The finding is in line with another study by Aklilu, Warku, Tadele, Mulugeta, Usman, Alemu, Abdela, Hailemariam and Birhanu in Addis Ababa (2020:3), where 11.8% of healthcare providers had served between 0-12 months.

The healthcare providers who had served for 36 months and longer were twice as likely to provide integrated health services compared to those who served for 0-5 months: AOR= 2.775 with 95% CI (1.158, 6.650) P=0.022 (see Table 4.37). The less-experienced healthcare providers often showed lower teamwork, lower quality of healthcare service, and they tended to make more medical errors (Samuelsson and Thach 2018:2). The finding indicated that retaining and assigning experienced healthcare providers in maternal healthcare service areas enhances the provision of integrated health services.

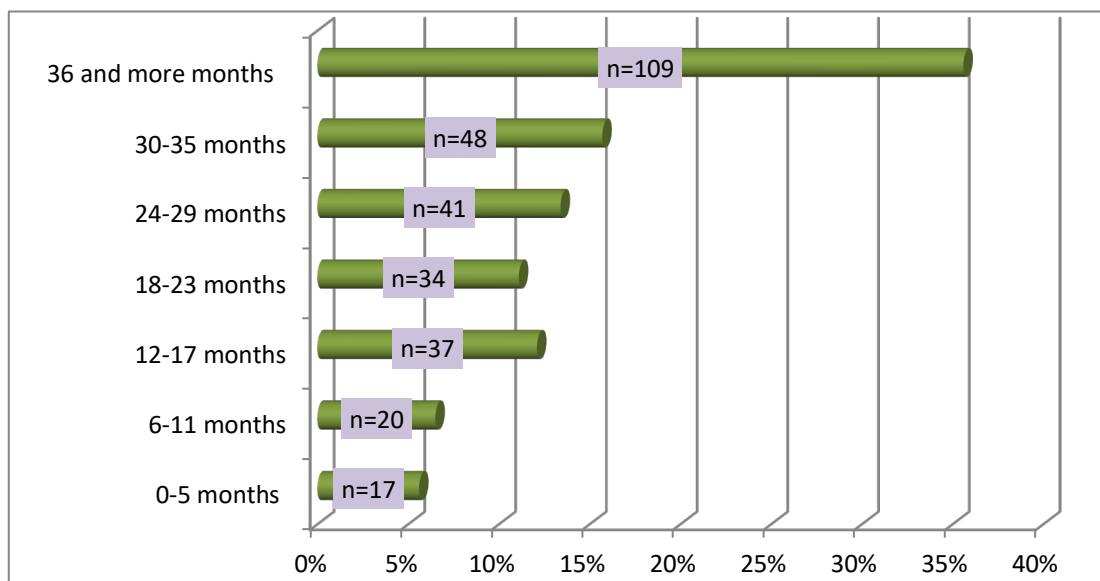


Figure 4.12: Work experience of healthcare providers (N=306)

Table 4.37: Odds ratios from multivariable logistic regression on the integration of abortion care with HIV-FP service (AOR 95% CI) (N=306)

Covariant	Integration of abortion care with FP-HIV/AIDS services				Crude odds ratio	Adjusted OR 95% CI
	Yes		No			
	n=	f=	n=	f=		
Duration in the health facilities						
0-5 months	13	76.5	4	23.5	1	1
6-11 months	17	85.0	3	15.0	1.151 (.343 3.864)	1.449 (0.377 5.569)
12-17 months	32	86.5	5	13.5	0.660 (0.178 2.447)	0.690 (0.168 2.832)
18-23 months	27	79.4	7	20.6	0.584(0.205 1.668)	0.727 (0.232 2.277)
24-2 months	34	82.9	7	17.1	0.969 (0.375 2.507)	0.992 (0.352 2.795)
30-35 months	31	64.6	17	35.4	0.770 (.302 1.960)	0.757 (0.273 2.096)
36 months and more	86	78.9	23	21.1	2.050 (0.969 4.338)	2.775 (1.158 6.650)
Basic in-service training received						
Yes	199	79.3	52	20.7	0.765 (0.388 1.509)	NA*
No	41	74.5	14	25.5	1	NA*
Integrated training received						
Yes	111	84.1	21	15.9	0.537 (0.289 0.999)	NA*
No	88	73.9	31	26.1	1	NA*
Awareness of abortion regulatory documents						
Yes	109	87.2	16	12.8	0.385 (0.207 0.713)	NA*
No	131	72.4	50	27.6	1	NA*
Awareness of FP regulatory documents						
Yes	123	87.2	18	12.8	2.803 (1.542 5.098)	0.491 (0.203 1.187)
No	117	70.9	48	29.1	1	1
Awareness of HIV/AIDS regulatory documents						
Yes	85	85.9	14	14.1	0.491 (0.257 0.937)	1.025 (0.404 2.600)
No	155	74.9	52	25.1	1	1
Awareness of integrated health service regulatory documents						
Yes	33	94.3	2	5.7	.196 (0.046 0.839)	0.360 (0.069 1.869)
No	207	76.4	64	23.6	1	1
Availability of regulatory documents in the health facilities						
Yes	122	84.1	23	15.9	0.517 (0.294 0.911)	0.929 (0.407 2.121)
No	118	73.3	43	26.7	1	1
Responsibility of healthcare providers						

Covariant	Integration of abortion care with FP-HIV/AIDS services				Crude odds ratio	Adjusted OR 95% CI
	Yes		No			
	n=	f=	n=	f=		
Abortion service provides	123	80.4	30	19.6	1	NA*
HIV-FP service provides	117	76.5	36	23.5	0.793 (0.459 1.369)	NA*
Availability of teaching aids						
Yes	152	92.1	13	7.9	0.142 (0.073 0.275)	0.142 (0.070 .286)
No	88	62.4	88	62.4	1	1
Perception of the importance of service integration						
Very important	217	79.8	55	20.2	0.530 (0.244 1.153)	0.583 (0.239 1.424)
Important	23	67.6	11	32.4	1	1

P<0.05 NA* not applicable as binary logistic regression P>0.2 not computed in multivariable logistic regression (Yesunesh and Aemayehu 2015:9)

4.3.2.9 In-service training (professional development) (N=306)

Professional development through in-service training improves the provision of quality healthcare (WHO 2016:5). Healthcare providers need knowledge, skills, and ongoing training and professional development opportunities to maintain and update their capacity to continuously improve the quality of services they deliver. The government of Ethiopia is also working on healthcare providers' professional development through in-service training (MOH Ethiopia 2020:49).

The majority (n= 251; f =82%) of respondents received one or more types of in-service training that enabled them to provide healthcare services. Among respondents who received in-service training (n=251), 124 (f= 49.4%) received comprehensive abortion care training, 114 (f= 45.4%) long-acting FP service training, 81 (f= 32.3%) short-acting FP training, and 71 (f= 28.3%) received HIV counselling in-service training (see Table 4.38). One hundred and eighty-four (73.3.1%) received only one type of in-service training, 58 (f= 23.1%) received two, 6 (f= 2.6%) received three, and only 3 (f= 1.2%) of the respondents received four different types of in-service training.

Periodical provision of in-service training could make healthcare providers skilful and knowledgeable about integrated health services (Osamwonyi 2016:83). Sixty-five (f= 25.9%) healthcare providers received in-service training within the last 12 months, 74 (f= 29.5%) between 12 and 23 months, 47 (f= 18.7%) between 24 and 35 months, and 35 (f= 13.9%) respondents received training more than 36 months ago. Healthcare providers – whether new or existing – need to have period in-service training to upgrade their skills and knowledge (Dibaba et al., 2017:76; Ng, Pacque-Margolis, Kotellos and Brantley 2012:2). It improves their confidence and competence to deliver appropriate integrated health services (Osamwonyi 2016:84).

Training for healthcare providers could be provided by governmental or/and partner organisations. One hundred and eighty-one (f= 72.1%) respondents received in-service training organised by NGOs, 73 (f= 29.1%) by the SNNRP region health bureau, 44 (f= 17.5%) by the Federal Ministry of Health Ethiopia, and the remaining 30 (f= 12%) respondents received the in-service training from the zonal health departments. Ongoing competency-based training for healthcare professionals by governmental and non-governmental organisations enhances the delivery of integrated health services (MOH Ethiopia 2020:44).

Of the 251 healthcare providers who received in-service training, 132 (52.6%) received training on integrated health services. As indicated in Figure 4.3, HIV-FP integrated training, abortion-FP integrated training, abortion-HIV integrated training, and abortion and HIV-FP integrated training were received by 60 (f= 45.5%), 49 (f= 37.1%), 20 (f= 15.2%) and 3 (f= 1.9%) healthcare providers, respectively. Thirty-nine (f= 29.6%) healthcare providers received the integrated training within the last 12 months, 39 (f= 29.6%) between 12 and 23 months, 38 (f= 28.8%) between 24 and 35 months, and 16 (f= 12.1%) received the integrated training longer than 36 months ago.

Similarly, 92 (f= 68.9%) healthcare providers received integrated in-service training, which was provided by NGOs. The regional health bureau, zonal health departments, and the Federal Ministry of Health Ethiopia organised and provided integrated in-service training to 32 (f= 23.5%), 24 (f= 18.2%), and 16 (f= 12.2 %) respondents, respectively. In-service training, in this study, proved a statistically insignificant association with the provision of integrated health services ($P>0.05$) (see Table 4.37).

Nevertheless, in-service training is essential, and it has to be given periodically to update the skills and knowledge of healthcare providers to deliver integrated health services (Dibaba et al., 2017:76) with improved confidence and competence (WHO 2015:68).

Table 4.38: In-service training provided to healthcare providers (n=251)

Training types	Frequency (F)	Percentage (f)
Comprehensive abortion	124	49.4
Long-acting FP	114	45.4
Short-acting FP	81	26.5
HIV counselling	71	32.3
Prevention of mother-to-child transmission of HIV	54	21.5
BEmONC training	46	18.3
Antiretroviral treatment	30	12
Opportunistic infection	19	7.6
Tubal ligation	4	1.6
Vasectomy	3	1.2

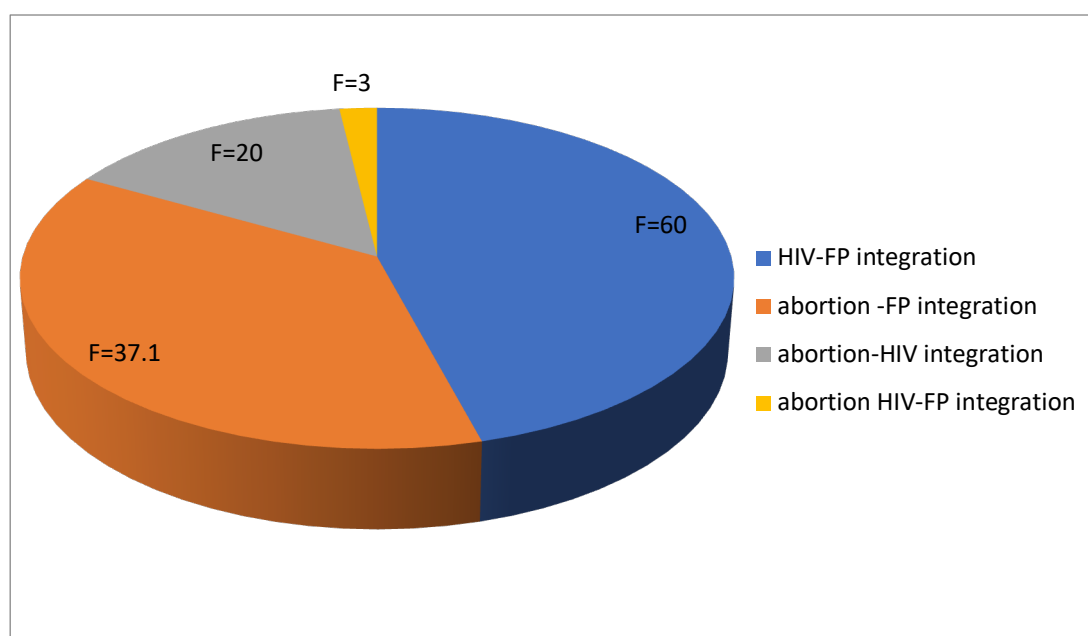


Figure 4.13: Integrated in-service training provided to healthcare providers (n=132)

4.3.2.10 Abortion regulatory documents (N=306)

Healthcare providers need to render health services as per national standards and guidelines (MOH Ethiopia 2014:24). Abortion regulatory documents ensure the provision of safe abortion services (WHO 2015:6). One hundred and twenty-five (f= 40.8%) respondents in this study indicated they knew of at least one abortion regulatory document. A total of seven different types of abortion-related policies, guidelines, and strategies were mentioned by respondents. Technical guidelines on comprehensive abortion care (F= 65; f= 52%) and abortion management protocol (F= 33; f= 26.4%) were among the frequently mentioned regulatory documents (see Table 4.39).

In this study's context, knowledge of abortion-related regulatory documents had no statistically significant association with the delivery of integrated health services ($p>0.05$) (see Table 4.37). However, it is important to update healthcare providers on available regulatory documents to provide quality healthcare as per national standards (Johnson, Lavelanet and Schlitt 2018:2).

Table 4.39: Abortion regulatory documents (n=125)

Abortion regulatory documents	Frequency (F)	Percentage (f)
Technical guidelines on abortion care	65	52
Abortion management protocol	33	26.4
First and second-trimester guideline	14	11.2
Women-centred guide on abortion care	12	9.6
BEMoNC guidelines	9	7.2
Abortion contraception strategies	8	6.4
Infection prevention strategies	6	4.8

4.3.2.11 Family planning regulatory documents (N=306)

Several policies, guidelines, and strategies on FP services were developed by the Federal Ministry of Health Ethiopia, namely a population policy, national youth policy, youth reproductive health strategy, national FP service guideline, and standards on youth-friendly reproductive health services (see Section 2.6.2.6).

One hundred and forty-one (f= 46.1%) respondents in this study indicated they knew about FP-related regulatory documents. A total of nine different types of FP-related policies, guidelines and strategic documents were mentioned by respondents. Long and short-acting FP guidelines (F= 52; f= 36.9%), national guidelines on FP service (F= 43; f= 30.5%), and medical eligibility criteria for FP service (F= 34; f= 24.1%) were among the frequently mentioned regulatory documents (see Table 4.40).

The binary logistic regression analysis indicated awareness of FP-related regulatory documents proved to have a statistically significant association with the provision of integrated health services (P=0.001) (see Table 4.37). The availability and awareness of regulatory documents guide healthcare providers in rendering integrated health services (MOH Ethiopia 2020:2). However, studies indicated guidelines are not often available in public health facilities, and the healthcare providers are also not consistently using available guidelines during their FP service consultations (Tafese, Woldie and Megerssa 2013:253).

Table 4.40: Awareness of regulatory documents on FP services (n= 141)

FP regulatory documents	Frequency (F)	Percentage (f)
Long-acting and short-acting FP services	52	36.9
National guidelines on FP service	43	30.5
Medical eligibility criteria for FP services	34	24.1
National reproductive health service	17	12.1
Women's right to access FP services	11	7.8
Client centre FP counselling	8	7.7
Quick reference guide on FP	4	2.8
Guidelines on obstetrics and gynaecology	2	1.4
National youth policy	1	0.7

4.3.2.12 HIV/AIDS regulatory documents (N=306)

The first case of HIV in Ethiopia was reported in 1984 (Girum, Wasie and Worku 2018:2) and a response to the situation was initiated in 1985. Since then, the Ministry of Health has developed various HIV/AIDS-related policies, guidelines, and strategies to prevent and control the transmission of HIV/AIDS (see Section 2.6.3.6).

Knowledge of available regulatory documents is important for HIV/AIDS preventive and control activities. One hundred and five (f= 34.3%) respondents in this study indicated that they knew HIV/AIDS regulatory documents exist. A total of six different HIV/AIDS-related regulatory documents were mentioned by 105 (f= 34.3%) respondents. Guidelines on PMTCT services (F= 50; f= 47.6%) and HIV/AIDS treatment guidelines (F= 44; f= 41.9%) were among the most frequently indicated regulatory documents (see Table 4.41).

The binary logistic regression analysis indicated healthcare providers' awareness of HIV/AIDS regulatory documents proved to have a statistically significant association with the provision of integrated health services (P=0.031) (see Table 4.37). The finding supported the need for HIV/AIDS regulatory documents in public health facilities (MOH Ethiopia 2014:111) to enhance the sustainable provision of integrated health services (Maiuro 2015:4).

Table 4.41: Awareness of regulatory documents on HIV/AIDS services (n=105)

HIV/AIDS regulatory documents	Frequency (F)	Percentage (f)
Guideline on PMTCT services	50	47.6
HIV/AIDS treatment guidelines	44	41.9
Comprehensive HIV counselling and testing guidelines	16	15.2
Counselling service on HIV/AIDS	11	10.5
Multi-sectoral HIV/AIDS response guideline	7	6.7
PLWHIV/AIDS comprehensive health service	2	1.9

4.3.2.13 Integrated health service regulatory documents (N=306)

Governmental and non-governmental organisations strongly recommend the provision of integrated health services. Among 306 respondents, only 35 (f= 11.4%) respondents indicated they knew about integrated regulatory documents. Five types of integrated regulatory documents were mentioned by 35 (f= 11.4%) respondents. Integrated maternal and child health services (F= 26; f= 74.3%) and prevention of

mother-to-child transmission of HIV (F= 6; f= 17.1%) were among the frequently listed integrated regulatory documents (see Table 4.42).

Table 4.42: Awareness of the availability of integrated regulatory documents (n=35)

Integrated regulatory documents	Frequency (F)	Percentage (f)
Integrated maternal and child health services	26	74.3
Prevention of mother-to-child transmission of HIV (PMTCT)	6	17.1
Pregnancy, childbirth, postpartum and newborn care	3	8.6
Basic emergency and newborn care	2	5.7
Guideline on TB-HIV services	2	5.7

4.3.2.14 Availability of regulatory documents in the healthcare facilities (N=306)

One hundred and forty-five (f= 47.4%) respondents had at least one regulatory document in their healthcare facilities, whereas 161 (f= 52.6%) did not have any. As described in Table 4.43, a total of 21 different regulatory documents existed in the public healthcare facilities. National guidelines on FP services (n= 48; f= 15.7%), technical guidelines on comprehensive abortion care (n= 40; f=13.1%), and abortion management protocols (n= 29; f=9.5%) were among the frequently listed regulatory documents available in the healthcare facilities (see Table 4.43).

The binary logistic regression analysis indicated the availability of regulatory documents proved to have a statistically significant association with the provision of integrated health services (P=0.022) (see Table 4.37). The availability and use of regulatory documents in public health facilities are crucial (Borges et al., 2015:94). Evidence can be obtained from this study that distributing an adequate number of integrated regulatory documents to public health facilities could improve integrated maternal health services.

**Table 4.43: The availability of regulatory documents in the healthcare facilities
(N=306)**

Availability of regulatory documents	n=	f=
National guidelines on FP service	48	15.7
Technical guidelines on comprehensive abortion	40	13.1
Abortion management protocol	29	9.5
HIV/AIDS treatment guideline	24	7.8
HIV/AIDS treatment guidelines	19	6.2
National reproductive health service	16	5.2
Quick reference guide on FP	16	5.2
First-trimester abortion care manual	15	4.9
Women's right to access FP services	9	2.9
Comprehensive HIV counselling and testing guidelines	8	2.6
Guideline on BEmOENC	7	2.3
Prevention of mother-to-child transmission of HIV	5	1.6
Abortion contraception	4	1.3
women-centred abortion care	3	1
Second-trimester guideline manual	2	0.6
National youth policy	1	0.3
Pregnancy, childbirth, postpartum and newborn care	1	0.3
Maternal, neonatal and child health services	1	0.3
Reproductive health services	1	0.3
Post-partum intrauterine devices	1	0.3
HIV counselling and testing services	1	0.3

The professional categories and responsibilities of healthcare providers enrolled from Sidama, Wolaita, Gamo, Hadiya and Hawas are reflected in Table 4.44.

Table 4.44: Professions and responsibilities of sampled respondents (N=306)

Zone	Professions	Abortion care providers	HIV-FP service providers	Total
Sidama	Medical Doctor	2	2	4
	Health Officer	10	9	19
	Midwifery	7	9	16
	Nursing	23	23	46
Wolaita	Medical Doctor	2	2	4
	Health Officer	9	8	17
	Midwifery	6	7	13
	Nursing	18	18	36
Gamo	Medical Doctor	2	2	4
	Health Officer	9	9	18
	Midwifery	8	7	15
	Nursing	19	19	38
Hadiya	Medical Doctor	2	1	3
	Health Officer	6	6	12
	Midwifery	5	6	11
	Nursing	13	13	26
Hawasa	Medical Doctor	1	1	2
	Health Officer	3	3	6
	Midwifery	2	3	5
	Nursing	6	5	11
Total		153	153	306

The responsibilities and services provided by abortion care and HIV-FP service providers are discussed as follows:

4.3.2.15 Abortion care providers (N=153)

Abortion care providers are healthcare professionals responsible for providing abortion care (WHO 2015:3). Midwives, nurses, health officers, and doctors could provide abortion care. However, basic knowledge and skill are necessary to provide the services safely and promote women's health status (Benson, Healy, Dijkerman and Andersen 2017:1-15; WHO 2018:9).

One hundred and fifty-three (f= 50%) abortion care providers enrolled in the study (see Table 4.44). Among them, the majority (n= 122; f= 79.7%) were providing comprehensive abortion care, 26 (f= 17%) post-abortion care, and only 5 (f= 3.3%) were providing safe abortion services. Women often seek safe or post-abortion care because of an unintended pregnancy. Abortion care providers should use the opportunity to counsel and provide integrated health services to women who received safe, post or comprehensive abortion care (MOH Ethiopia 2020:30).

4.3.2.16 Indications of safe abortion care (N= 153)

The indications of safe abortion care are well-versed in 2014 technical and procedural guidelines for safe abortion services in Ethiopia (2014:11). Any one of the following indications allows women to receive safe abortion services in public healthcare facilities: (1) if women get pregnant as a result of rape or incest, (2) the continuation of pregnancy risks the life of mothers and/or foetuses, (3) if the foetus has an incurable and/or serious physical deformity, (4) if the women have a physical or mental deficiency that prevents them from raising their children (Ministry of Health Ethiopia 2014:11).

In this study's context, 100 (f= 65.4%) respondents mentioned five indications for safe abortion services, 37 (f= 24.2%) mentioned four, 10 (f= 6.5%) mentioned three, and 6 (f= 3.9%) respondents mentioned two indications of safe abortion services (see Figure 4.14). The finding corresponds with another study by Madziyire, Moore, Riley, Sully and Chipato – conducted in Zimbabwe – that found 83% of healthcare providers knew rape is an indication of safe abortion care, and 71% mentioned safe abortion is indicated in the case of women's physical deformity (2019:5). It is important to know the indications of safe abortion care so healthcare providers can deliver the service (MOH Ethiopia 2014:8).

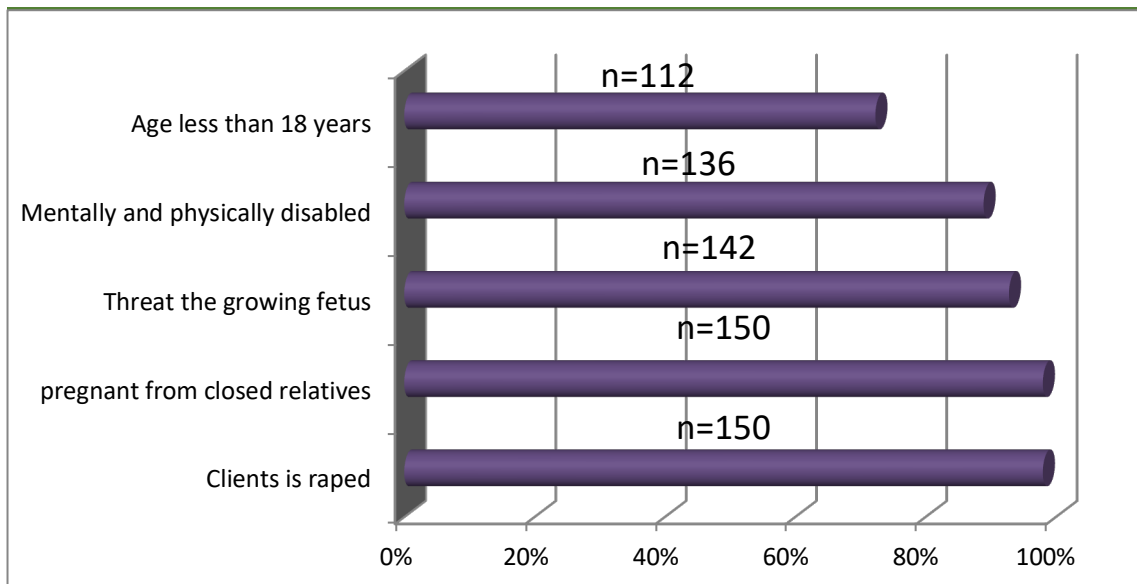


Figure 4.14: Indications of safe abortion care (N=153)

4.3.2.17 Source of abortion care information (N= 153)

Safe abortion services can prevent the unnecessary loss of maternal lives (Ushie et al., 2019:7). Messages on abortion care should be communicated to the community, taking context-specifics, such as religious, socio-economic, and cultural factors into account (Sheikh, Humayun, Qureshi and Zaman 2020:4). Healthcare providers should engage with community leaders to correct existing misconceptions and improve the provision of abortion care in healthcare facilities (Banerjee et al., 2013:149).

As indicated in Figure 4.15, the majority (n=125, f= 81.7%) of respondents indicated the community could obtain abortion care-related information from healthcare providers, 110 (f= 71%) indicated from health extension workers, and 79 (f= 51%) respondents indicated the community could get abortion-related information from mass media.

Almost all (n= 149, f= 97.4%) abortion care providers said messages are provided through radio and television, education by health extension workers, and healthcare providers in the healthcare facilities to enhance the uptake of abortion care. Yet, 4 (f= 2.6%) respondents indicated community influence is a challenge for abortion-related messages. Nevertheless, conveying abortion-related messages through different

channels could correct community misconceptions and increase the use of abortion services (MOH Ethiopia 2014:20).

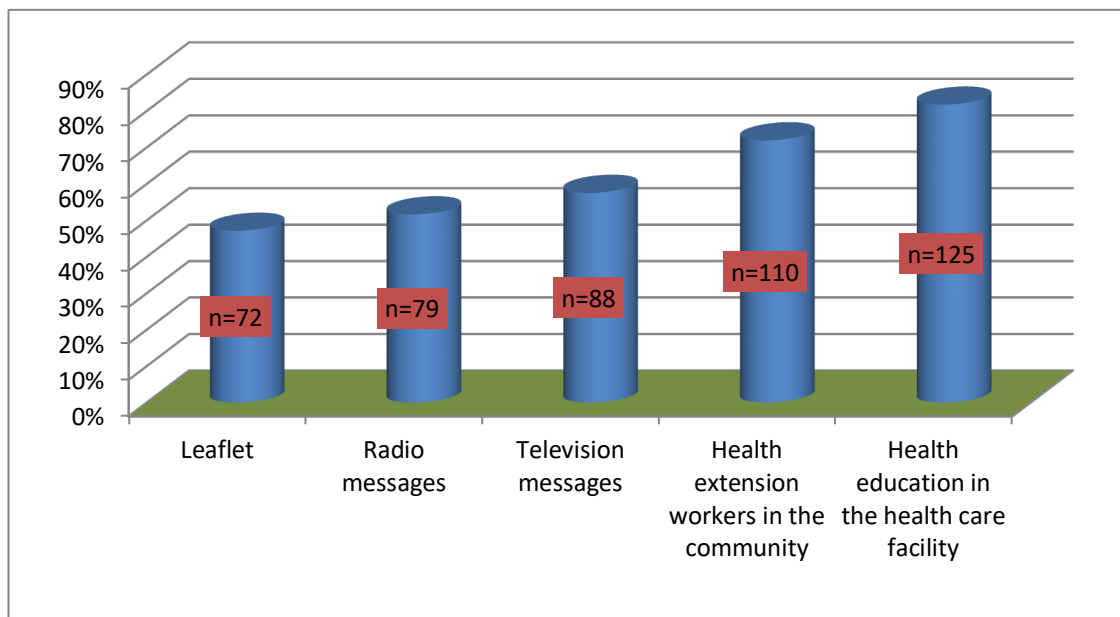


Figure 4.15: Sources of information on abortion care (N=153)

4.3.2.18 Challenges of providing abortion care (N= 153)

Access is a challenge for rural communities (Erko, Abera and Admassu 2016:2), and available healthcare facilities often face a shortage of abortion care providers (Erko, Abera and Admassu 2016:2). Moreover, a lack of equipment and medical supplies are the challenges in providing abortion services (Taddele et al., 2019:7). As indicated in Figure 4.16, a lack of trained healthcare providers, socio-cultural problems in the community, lack of medical supplies, and a lack of equipment were challenges mentioned in this study's context.

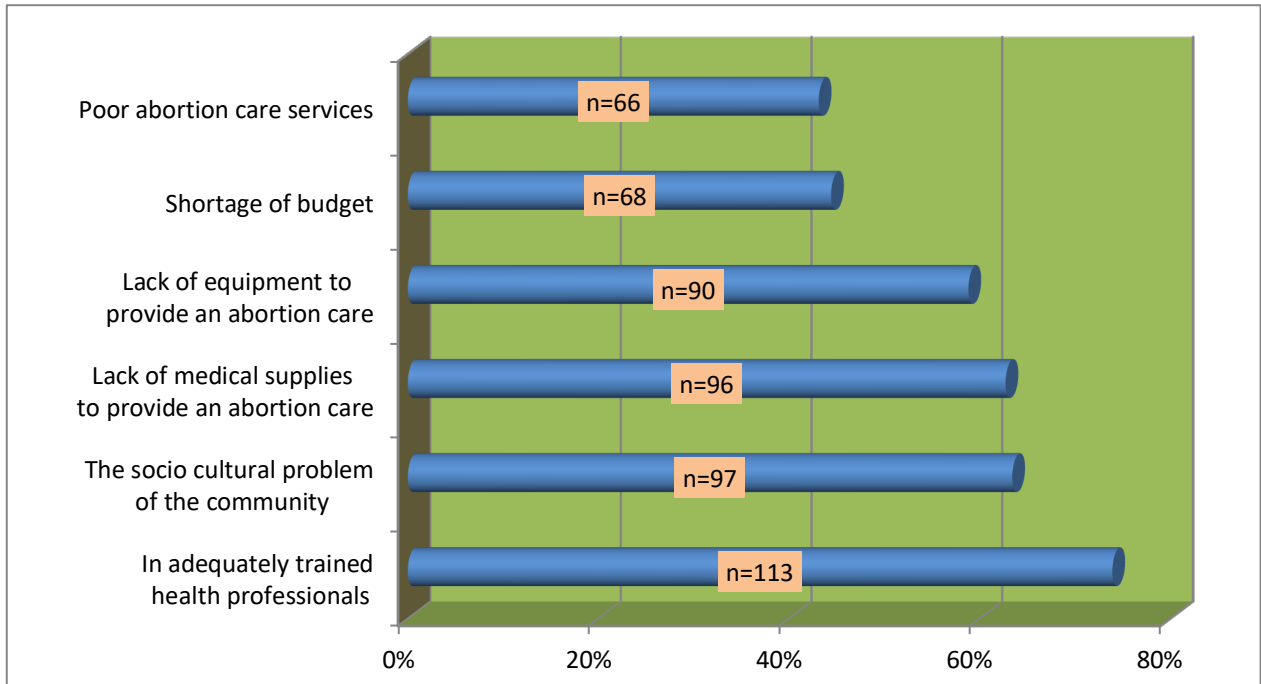


Figure 4.16: Challenges of abortion services (N=153)

4.3.2.19 Medical abortion (N= 153)

Medical abortions are safe and effective methods for ending pregnancy (Jelinska and Yanow 2018:89). Medical abortion is a non-invasive and highly acceptable option for pregnant women (WHO 2018:7), particularly for early pregnancy (Siraneh and Workneh 2019:6). It increases access to safe abortion services, thereby reducing the burden of unsafe abortions (Prata, Bell and Gessesew 2013:1; Jelinska and Yanow 2018:89).

The availability of drugs for abortion care is often insufficient in public healthcare facilities. The majority (n= 114; f= 74.5%) of respondents in this study indicated Misoprostol had been available in their healthcare facilities for the last six months. Mifepristone and Medabone were also available in 85 (f= 55.6%) and 49 (f= 32%) respondents' health facilities in the last six months, respectively. Yet, 17 (f= 11.1%) respondents did not have any in their healthcare facilities in the last six months (see Table 4.45). Among respondents, 52 (f= 34%) had only one type of abortion drug in the healthcare facilities in the last six months, 56 (f= 36.6%) had two types, and 28 (f= 18.3%) had three types of abortion drugs in the public healthcare facilities in the last six months.

Supplies such as gloves, antiseptic solutions (Tesfaye and Oljira 2013:35), cotton balls or gauze sponges, analgesics, anaesthetics (MOH Ethiopia 2014:30), needles, syringes, pregnancy test kits, blood pressure apparatus, and stethoscopes are necessary supplies to provide quality abortion services (Tafese, Woldie and Megerssa 2013:248). A lack of or shortage of medical supplies is one of the factors that hinder the provision of health services (Mutemwa et al., 2013:18).

As indicated in Table 4.48, nearly all (n= 152; f= 99.3%) respondents had syringes with needles in the healthcare facilities in the last six months. Similarly, 150 (f=98%) respondents had gloves in their health facilities in the last six months. Among respondents, 143 (f= 93.5%) indicated three different types of supplies were available in the healthcare facilities in the last six months, and only 10 (f= 6.5%) respondents mentioned the availability of one or two supplies in the healthcare facilities in the last six months (see Table 4.46). Supplies are important components of medical resources that are used to provide quality and uninterrupted integrated health services (Combes and Arespacochaga 2013:13).

Of the respondents, 140 (f= 91.5%) had manual vacuum aspirators, 34 (f= 22.2%) had dilatation and curettage kits, and 27 (f= 17.6%) had electric vacuum aspirations in their healthcare facilities in the last six months (see Table 4.46). Six (f= 3.9%) respondents did not mention having any of the equipment in their healthcare facilities in the last six months. The multiple response analysis indicated that 110 (f= 71.9%) respondents had one piece of equipment, 20 (f= 13.1%) had two, and 17 (f= 11.1%) respondents had three types of medical equipment in their facilities in the last six months.

Table 4.1 shows the drugs, equipment and supplies necessary for abortion care.

Table 4.45: Drugs, equipment, and medical supplies availability (N= 153)

Drugs, equipment, and supplies	Types of items	n=	f=
Drugs used for medical abortion	Misoprostol	114	74.5
	Mifepristone	85	55.6
	Medabone	49	32.0
	Manual vacuum aspirator	140	91.5

Drugs, equipment, and supplies	Types of items	n=	f=
Equipment used for surgical abortion	Dilatation and curettage kits	34	22.2
	Electric vacuum aspirator	27	17.6
Supplies used for abortion care	Syringes and needles	152	99.3
	Gloves	150	98
	Gauze sponges or cotton balls	148	96.7
	Antiseptic solutions	146	95.4

4.3.2.20 Management of abortion (N=153)

Healthcare providers such as midwives, health officers, and nurses are responsible for managing abortion care in the public health centres of Ethiopia. Gynaecologists, doctors, and integrated surgical officers, in addition to midwives, health officers, and nurses, are responsible for providing abortion care in public hospitals (Abdi and Gebremariam 2011:33; WHO 2015:13; MOH Ethiopia 2014:27).

The majority (n= 139; f= 90.8%) of respondents in this study's context indicated abortion care was managed in public healthcare facilities by midwives. Nurses, health officers, medical doctors, and integrated surgical officers were also mentioned by 114 (f= 74.5%), 93 (f= 60.8%), 47 (f= 30.7%), and 5 (f= 3.3%) respondents, respectively (see Table 4.46). The multiple response analysis showed 23 (f= 15%), 47 (f= 30.7%), 55 (f= 35.9%), 24 (f= 15.7%), and 4 (f= 2.6%) respondents indicated 1, 2, 3, 4, 5 different types of healthcare professionals were responsible for managing abortion care, respectively. Abortion care providers, whatever their profession, need the basic knowledge and skills to manage abortion care and integrate health services (WHO 2015:33).

Table 4.46: Health professionals providing abortion care (N=153)

Service providers	n=	f=
Midwives	139	90.8
Nurses	114	74.5
Health officers	93	60.8

Service providers	n=	f=
Medical doctors	47	30.7
Emergency surgical officers (ESO)	5	3.3

4.3.2.21 Abortion care space (N= 153)

As per national standards, an abortion-providing facility should have adequate spaces that include an examination room, couches, waste management facilities, and sanitary napkins (2018:48). The rooms should be neat, wide enough for air circulation, and curtains must be drawn at dawn with the door closed (WHO 2018:41). However, abortion-providing setups in Ethiopia are often substandard, and large numbers of healthcare facilities use delivery rooms for abortion services (Samuel, Alemayehu and Powell 2013:18).

As indicated in Figure 4.17, 83 (f= 54.2%) respondents indicated abortion rooms had adequate space with couches, 72 (f= 47.1%) indicated the rooms had inadequate space, and 50 (f= 32.7%) indicated the rooms had a comfortable temperature.

One hundred and four (f= 65.4%) respondents indicated abortion care was offered in abortion care units, whereas 49 (f= 34.6%) indicated delivery rooms. Four (2.6%) respondents mentioned both abortion and delivery rooms were used for abortion services, and 2 (f= 1.3%) healthcare providers indicated outpatient departments have also been used for abortion care services.

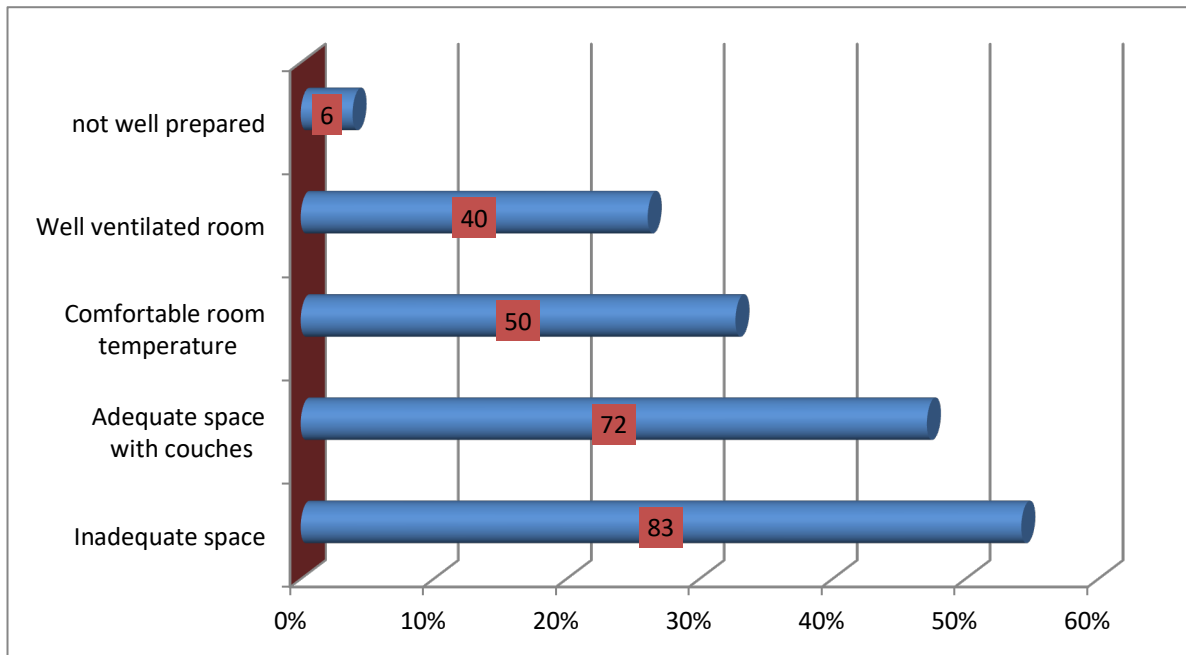


Figure 4.17: Preparedness of abortion-providing setup in the healthcare facilities (N=153)

4.3.2.22 Abortion service charge (N= 153)

The 2014 revised Ethiopian abortion law recommends women who need immediate abortion care and those suffering from abortion-related complications must be treated free of charge, as appropriate (MOH Ethiopia 2014:24). Similarly, the majority (n= 136, f= 89.9%) of respondents indicated abortion services are free, while 17 (f= 11.1%) respondents indicated payment was made out of pocket. The mean payment among payers was US \$2.1, while the maximum and the minimum payment were US \$5 and US \$2.1, respectively. Free abortion care could improve the uptake of integrated health services (MOH Ethiopia 2014:9).

4.3.2.23 HIV/AIDS services (N=153)

As indicated in Figure 4.18, the majority (n= 140, f= 91.5%) of respondents mentioned the availability of voluntary counselling and testing services in their healthcare facilities. Provider-initiated HIV counselling and testing services (n=139, f= 90.8%) and prevention of mother-to-child transmission of HIV services (n= 131, f= 85.6%) were also the most frequently offered HIV/AIDS services among healthcare providers.

Voluntary HIV counselling and testing, providers initiating HIV counselling and testing, and prevention of mother-to-child transmission of HIV are vital HIV/AIDS services that should be integrated with abortion services, as appropriate (Merga et al., 2016:2).

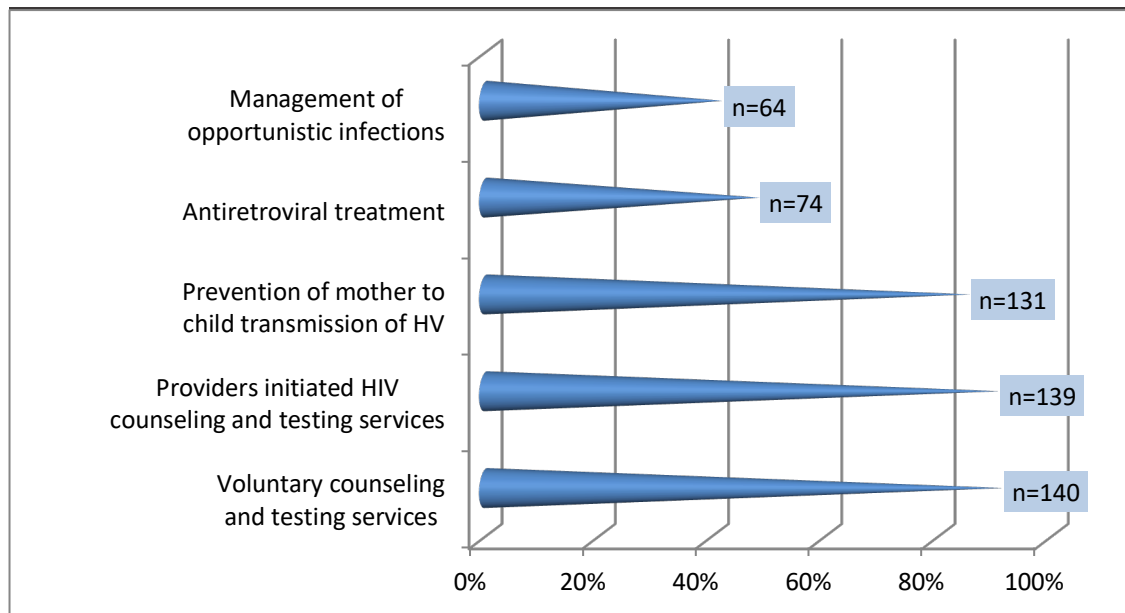


Figure 4.18: HIV/AIDS services provided in the healthcare facilities (N= 153)

4.3.2.24 HIV/AIDS commodities (N= 153)

Medical resources such as ART drugs, HIV test kits, and drugs for the treatment of an opportunistic infection are necessary to prevent and control HIV infections, identify individuals' serostatus, and conduct clinical and laboratory monitoring (MOH Ethiopia 2017:43). In this study's context, almost all (n=151, f=98%) respondents indicated that HIV test kits were available in the healthcare facilities in the last six months. ART (n= 87, f= 56.9%) and drugs for the treatment of opportunistic infections (n=70, f=45.8%) were also available under HIV/AIDS services in the healthcare facilities in the last six months. The integration of HIV/AIDS into the existing health services improves its uptake (USAID, PEPFAR and health policy plus 2020:11).

4.3.2.25 Challenges on HIV/AIDS services (N= 153)

Factors such as poor HIV counselling and testing, lack of ART drugs and prophylaxis, and poor patient-provider communication affect HIV/AIDS service utilisation (Kiplagat,

Mwangi, Chasela and Huschke 2019:10). A shortage of trained healthcare providers, fear of stigma and discrimination, and a shortage of commodities and supplies were mentioned as challenges in HIV/AIDS services in this study (see Figure 4.19). In the Vhembe district of Limpopo province, South Africa, HIV testing refusal, non-ART compliance, refusal of their HIV status and non-disclosure of HIV status to partners, high workload, insufficient consulting rooms, and an inadequate number of health workforce were challenges noticed by the healthcare providers (Tshililo, Mangena-Netshikweta, Nemathaga and Maluleke 2019:3).

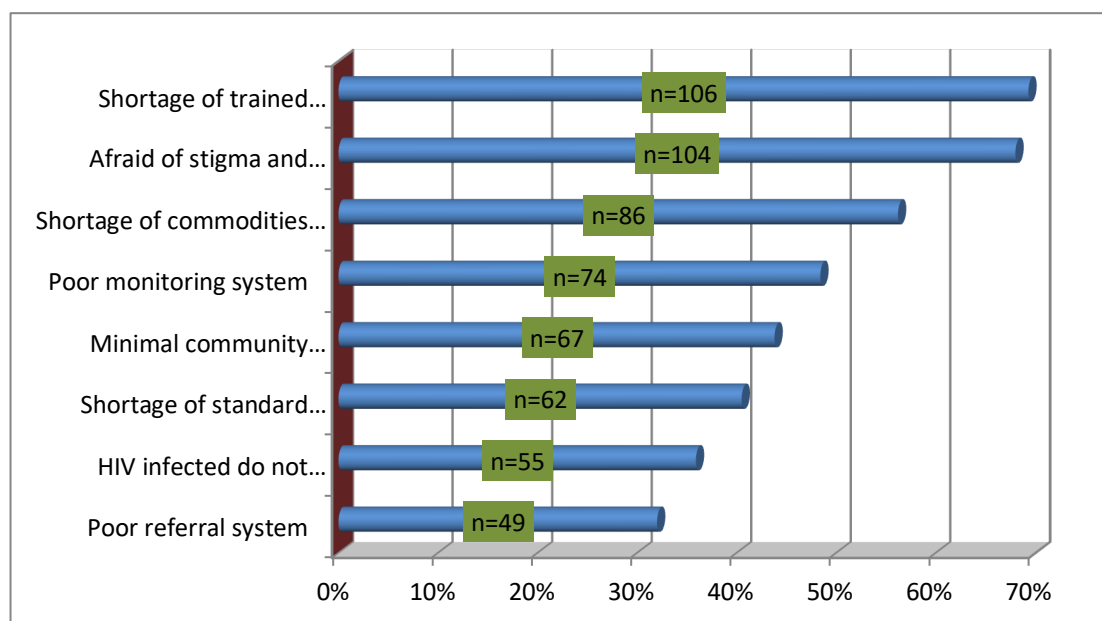


Figure 4.19: Challenges to the utilisation of HIV/AIDS services (N= 153)

4.3.2.26 Contraceptive commodities (N= 153)

The availability of contraceptive commodities influences FP service utilisation (Teka et al., 2018:50). As portrayed in Figure 4.20, almost all (n= 149; f=97.4%) respondents indicated contraceptive pills were available in the healthcare facilities in the last six months, male condoms were mentioned by 135 (f= 88.2%) respondents, injectables by 134 (f= 87.6%), implants by 129 (f= 84.3%), and IUDs by 116 (f= 75.8%) respondents. Evidence from the global communities indicated that women who received abortion care have a higher rate of accepting FP methods before being discharged from the health facility (MOH Ethiopia 2022:30).

A study in Ghana revealed that contraceptive pills and male condoms were available in 75% of public health facilities, 100% of public health facilities had both three-month injectable and monthly injectable contraceptives, and 43% of public facilities had implants (Adjei, Laar, Narh, Abdulai, Newton, Owusu-Agyei and Adjei 2015:3). Implant contraceptive use in this study was much higher than what has been indicated in Peruvian communities. The difference might arise from an ever-increasing demand for long-acting FP services in Ethiopia (Central Statistics Authority and ICF 2016:103).

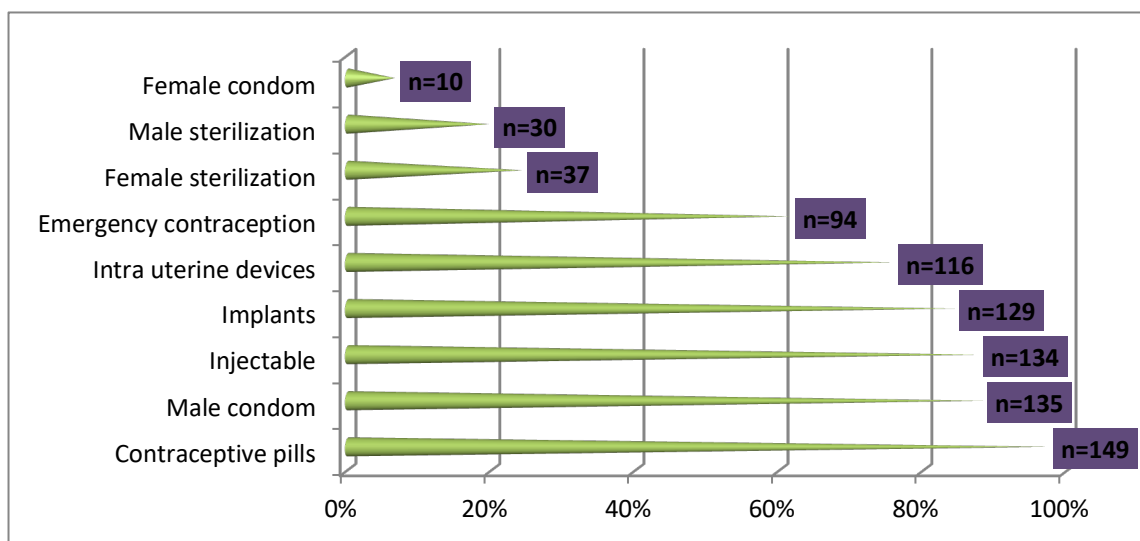


Figure 4.20: The available contraceptive methods in the health care facilities (N= 153)

4.3.2.27 Challenges in family planning services (N= 153)

Even though the supply of FP commodities in healthcare facilities has been increasing over time, a stock-out at some delivery points and regions is still challenging (MOH Ethiopia 2016:11). Cultural barriers, lack of consent from the husband, the desire to have more children, and fear of side effects are additional challenges to the uptake of FP services (Abdel-Salam, Albahlol, Almusayyab, Alruwaili, Aljared, Alruwaili and Alnasser 2020:7).

A shortage of trained healthcare providers, fear of side effects, inadequate contraceptive supplies, partners' or husbands' influence, shortage of budgets, lack of contraceptive options, and poor FP service provision were challenges outlined by the respondents in this study (see Table 4.47). Stakeholders, such as traditional leaders,

religious leaders, education sectors, and health professionals are important to address the challenges encountered in the uptake of FP services (Akamike, Okedo-Alex, Eze, Ezeanosike and Uneke 2020:30).

Table 4.47: Challenges to FP services provision (N=153)

Challenges of FP services	n=	f=
Shortage of trained healthcare providers	101	66.0
Fear of side effects	88	57.5
Shortage of contraceptive supplies	78	51.0
Partners or husbands influence	74	48.4
Shortage of budget	70	45.8
Lack of contraceptive options	46	30.1
Poor FP service provision	28	18.3

4.3.2.28 Family planning and HIV/AIDS service providers (N= 153)

The national guidelines of Ethiopia stipulate health extension workers are responsible for providing HIV and FP counselling services at the health post levels (MOH Ethiopia 2020:34). Health officers, midwives, clinical nurses, and public health nurses are responsible at health centre levels. Doctors, health officers, midwives, clinical nurses, and public health nurses are responsible at the general hospital level. Gynaecologists, doctors, health offices, midwives, clinical nurses, and public health nurses are responsible for providing integrated HIV-FP services in specialised referral hospitals (MOH Ethiopia 2020:34).

As indicated in Table 4.48, almost all (n= 147; f= 96.1%) respondents indicated midwives were responsible for providing integrated HIV-FP services, 135 (f= 88.2%) indicated nurses, 101 (f= 66.0%) indicated health officers, 45 (f= 29.4%) indicated medical doctors, and only 2 (f= 1.3%) indicated integrated surgical officers were responsible for providing integrated HIV-FP services in the healthcare facilities (see Table 4.48).

Table 4.48: Health professionals delivering integrated HIV-FP services (N=153)

FP-HIV/AIDS services providers	n=	f=
Midwives	147	96.1
Nurse	135	88.2
Health officers	101	66.0
Medical doctors	45	29.4
Integrated surgical officers (ISO)	2	1.3

4.3.2.29 Integrated health services (N= 306)

The integrated healthcare strategy has received considerable support from international organisations to promote the life of mothers and children (Adamchak, Okello and Kaboré 2016:24-29). In the provision of integrated services, healthcare providers must maintain respectful, compassionate and careful services (Luis and Cabral 2016:173) to motivate the community to receive a variety of health services simultaneously (Lambdin, Mbwambo, Josiah and Bruce 2015:1).

The majority (n= 240, f= 78.4%) of healthcare providers delivered integrated health services in their facilities, whereas 66 (f= 21.6%) did not. The reasons for not providing integrated health services (n= 66) included not being trained, a shortage of rooms, a lack of human resources, insufficient equipment and supplies, and an inadequate budget (see Table 4.49). Receiving integrated health services from the same healthcare provider enhances the uptake of various health services at a time (Samuel, Fetters and Desta 2016:S70).

Table 4.49: Reasons for not providing integrated services (n=66)

Reasons for not providing integrated services	Frequency (F)	Percentage (f)
Shortage of trained health providers	25	37.9
Shortage of rooms	24	36.4
Shortage of healthcare providers	14	21.2
Shortage of equipment and supplies	3	4.5
Shortage of budget	1	1.5

Of the 240 healthcare providers who had experience providing integrated health care, more than half (F= 121, f= 50.4%) had experience integrating HIV services with abortion care, 74 (f= 31.3%) integrated FP with abortion care, and 44 (f= 18.3%) integrated HIV-FP with abortion care (see Table 4.50). Ninety-eight (f= 40.8%) respondents indicated healthcare services are offered in the same room by the same healthcare providers, 95 (f= 39.6%) said in different rooms by different healthcare providers, and 47 (f= 19.6%) respondents integrated the healthcare services in the same room by different healthcare providers (see Table 4.50).

As indicated in Figure 4.21, integrated healthcare services are offered in abortion care units, FP units, delivery units, HIV counselling and testing units, outpatient departments, ANC/PMTCT, and ART units.

Table 4.50: Integration of abortion care with other services (n= 240)

Integration	Integrated Services	Frequency (F)	Percentage (f)
Types of service integrated	HIV/AIDS services	121	50.4
	FP services	75	31.3
	HIV-FP services	44	18.3
Method of integration	Single room, same provider	98	40.8
	Single room, different providers	47	19.6
	Different rooms, different providers	95	39.6

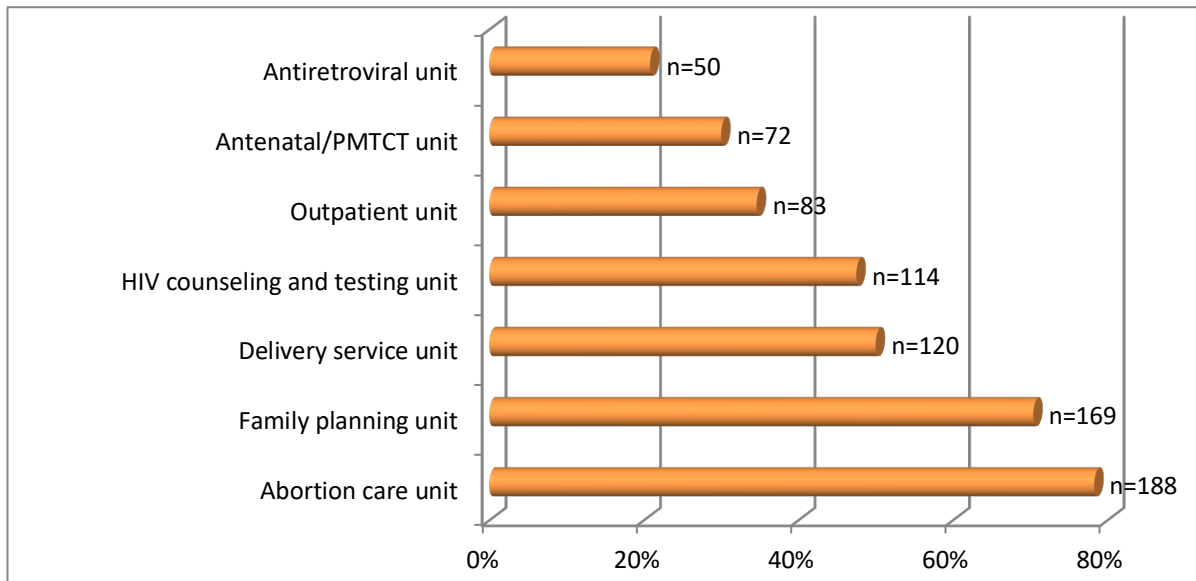


Figure 4.21: Service delivery units for integration (n= 240)

4.3.2.30 Awareness of integrated health services (N= 306)

A standalone source of information may not promote awareness among the target population and their use of the intended integrated health services (UNAID 2016:74). Two hundred and thirty-two (f= 75.8%) healthcare providers indicated the community could obtain information on integrated health services through health education in the healthcare facilities, 233 (f= 76.1%) said during healthcare providers' visits, and 180 (f= 58.8%) respondents indicated the information could reach the community through health extension workers (see Table 4.51).

Influential individuals, such as kebele leaders, religious leaders, and elders, are important community figures who could influence the community's response to integrated health services (Murithi, Santillán, Dhillon, Sebany, Farley, Ndhlema, Chintu and Jackson 2016:19). Providing integrated care to individuals, families, and communities (Woldemichael, Takian, Sari and Olyaeemanesh 2019:4) and their participation in the decision-making process could improve the uptake of integrated health services (World Health Organization 2015:10).

Table 4.51: Strategies to improve awareness of the integrated services (N=306)

Community awareness of the integration	n=	f=
Health education in the health facility	232	75.8
Inform clients during service provision	233	76.1
Information through health extension workers in the community	180	58.8

4.3.2.31 Health education materials (N= 306)

Health education materials such as leaflets, posters, and brochures are important tools that guide healthcare providers in rendering quality health services (Dwyer, Jain, Ishaku, Okunade, Uzomba, Adebayo and Tobey 2019:8). One hundred and sixty-five (f= 53.9%) respondents indicated the presence of health education materials in their healthcare facilities. Health education materials that were used during consultations were leaflets, brochures, and posters, according to 111 (f= 35.4%), 74 (f= 23.6%), and 129 (f= 41.1%) respondents, respectively (see Table 4.52). Of the respondents (n=165), 65 (f= 39.4%) indicated the availability of one health education material, 51 (f= 30.9%) two health education materials, and 49 (f= 29.7%) respondents mentioned the availability of three different types of health education materials in their healthcare facilities. Another study in Nigeria indicated that 29.4% of healthcare providers used one health education material, 29.3% used two health education materials, and 26.3% used three different types of health education materials to offer healthcare services (Dwyer et al., 2019:5). Health education materials are a useful tool for healthcare providers to remind them of key issues, especially for long lists of information and procedures to provide health services (Dwyer, Jain, Ishaku, Okunade, Uzomba, Adebayo and Tobey 2019:8).

Table 4.52: Health education materials in the healthcare facilities (n=165)

Teaching aids availability	Frequency (F)	Percentage
Posters	129	78.2
Leaflet	111	67.3
Broachers	74	44.8

4.3.2.32 Challenges of health services integration (N=306)

Despite various benefits, there are also challenges in integrating abortion care with other health services. Challenges include infrastructure problems, a shortage of logistics, a shortage of trained human resources (Mutemwa et al., 2013:18), a lack of adequate space, and time constraints to provide counselling services (Newmann, Zakaras, Tao, Onono, Bukusi, Cohen, Steinfeld and Grossman 2016:211). Financial and cultural problems are additional challenges in integrating abortion care with other health services (Maruthappu, Hasan and Zeltner 2015:252).

Challenges emphasised in this study's context were a lack of operational policies and guidelines, poor infrastructure in the healthcare facilities, a shortage of trained staff, and poor support and monitoring systems (see Table 4.53).

Table 4.53: Challenges of integration of health services (N=306)

Challenges of integration	n=	f=
Lack of operational policies and guidelines	207	67.6
Poor infrastructure	207	67.6
Shortage of healthcare providers	194	63.4
Poor support and monitoring system	190	62.1
Inadequate medical supplies	157	51.3
Inadequate budget allocation	118	38.6
Takes time to integrate the service	95	31.0

4.3.2.33 Advantages of integration of health services (N= 306)

Improved teamwork, improved healthcare efficiency, increased quality of care, reduced healthcare costs, and enhanced confidence in the healthcare system are the advantages of integrated maternal health services (Al-Saddique 2018:3). Furthermore, reducing fragmentation in healthcare, increasing access to supplies, avoiding duplication of decisions, alleviating organisational bottlenecks, and providing a coordinated response to clients are other known benefits of integrated health services (Maruthappu, Hasan and Zeltner 2015:187; Milford et al., 2018:18).

Respondents in this study mentioned avoiding missed opportunities (n= 256; f= 83.7%), improving teamwork (n= 236; f= 77.1), increasing access to health services (n= 208; 68%), reducing stigma and discrimination (n= 182; f= 59.5%), efficient use of staff time (n= 177; 57.8%), reducing frequent visits to healthcare services (n= 176; 57.5%), and reducing healthcare service costs (n= 165; 53.9%) were advantage of integrated health services (see Table 4.54).

Table 4.54: Advantage of integrating abortion care with other health services (N=306)

Advantages of integration	n=	f=
Avoid missed opportunities	256	83.7
Improve teamwork	236	77.1
Increase access to other health services	208	68.0
Reduce stigma and discrimination	182	59.5
Efficient use of staff time	177	57.8
Reduce visits to healthcare services	176	57.5
Reduces cost	165	53.9

4.3.2.34 Encouraging factors for integrated services (N= 306)

A study conducted by Maruthappu, Hasan and Zeltner (2015:254) reported improving information technologies, improving facility infrastructure, capacitating clinical leadership, and periodic monitoring and evaluation encourage the implementation of integrated health services. As indicated in Figure 4.22, improving policies, strategies, and guidelines, providing training for healthcare providers, improving infrastructure in healthcare facilities, and a consistent supply of medical resources to healthcare facilities enhance the implementation of integrated health services.

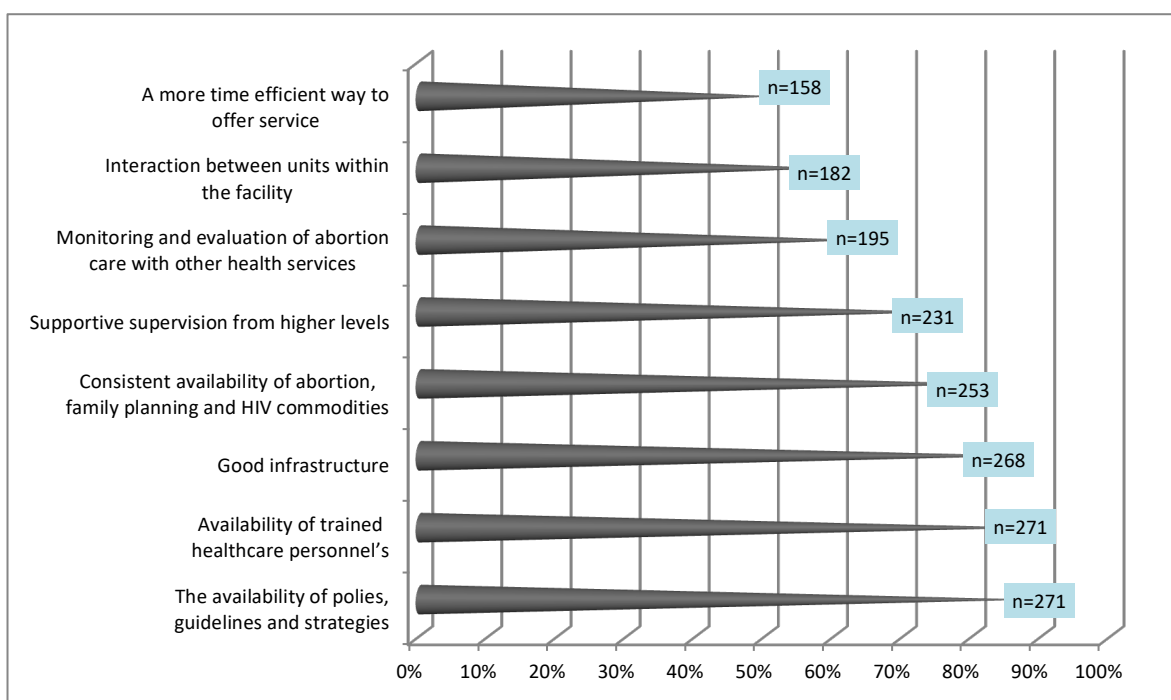


Figure 4.22: Encouraging factors for the integration of health services (N=306)

The majority (n= 272; f= 88.9%) of healthcare providers' perception of the usefulness of integrated health services was that it is very important, while only 34 (f= 11.1%) respondents indicated it is important. The level of healthcare providers' perception of integrated health services had no statistically significant association with the implementation of integrated health services ($P > 0.05$) (see Table 4.37). Even though their perception of integrated health services is not statistically significant, it does not mean efforts have not been made to improve healthcare providers' awareness of the implementation of integrated health services.

Table 4.55: Suggestions provided by healthcare providers on health service integration (N=306)

Theme	Categories	Recommended suggestions
Integration of abortion care with other health services.	Geographic accessibility	<ul style="list-style-type: none"> ➤ The public health facilities must be accessible to communities where it is located ➤ Integrated health service needs to be supported by health extension programmes in the community

Theme	Categories	Recommended suggestions
	Human resources	<ul style="list-style-type: none"> ➤ Improve the quality of healthcare delivery by providing basic and in-service training ➤ Improve staff commitment by offering incentives to healthcare providers ➤ Respectful, compassionate and caring healthcare providers could improve the provision of integrated health services
	Medical resources and supplies	<ul style="list-style-type: none"> ➤ Ensure the consistent availability of drugs, medical equipment and supplies in the public health facilities
	Infrastructure	<ul style="list-style-type: none"> ➤ Construct, maintain and rearrange healthcare facilities
	Fiscal resource	<ul style="list-style-type: none"> ➤ An adequate budget needs to be allocated to support integrated maternal and child health services ➤ Abortion, FP and HIV services must have a reduced cost or free of charge
	Policies, Strategies, and Guidelines	<ul style="list-style-type: none"> ➤ Policies, strategies, and guidelines on the integration of abortion, FP, HIV/AIDS, and integrated health services must be in place at service delivery points
	Behavioural change and communication	<ul style="list-style-type: none"> ➤ Awareness-creation on the provision of abortion care with other health services must be addressed among communities using mass media (radio, TV) and print media (leaflets, brochures, and banners) ➤ Improve 1:5 networking in the community to share health-related messages timely
Monitoring and evaluation	Conducting follow-up services	<ul style="list-style-type: none"> ➤ Reduce the waiting time of service provision ➤ Conduct supportive supervision in the public health facilities by higher-level officials ➤ Periodical monitoring and evaluation of the integrated health services ➤ Strengthen the referral system within and outside healthcare facilities ➤ Work with supportive NGOs to properly deliver integrated health services

4.4 SUMMARY

In this chapter, an analysis of the data collected from 719 respondents (413 abortion care users and 306 healthcare providers) was presented. The data were summarised and presented in tables and figures using frequencies and percentages. The findings were interpreted and supported or contradicted by literature, where applicable.

The presented findings and literature review were used to develop a draft action plan for the implementation of abortion care with HIV-FP services in public health facilities in Ethiopia, as described in Chapter Five.

CHAPTER FIVE

PHASE II: LITERATURE REVIEW ON ACTION PLAN DEVELOPMENT AND THE DRAFT ACTION PLAN

5.1 INTRODUCTION

Chapter Five describes the literature review that was conducted on action plan development. It also outlines the development of the first draft action plan based on the findings from phase one and the literature review, as illustrated in Table 5.1.

Table 5.1: Chapter layout and progress

Chapter 1	Overview of the study
Chapter 2	Literature review on: <ul style="list-style-type: none"> ➤ Change logic model ➤ Ethiopian healthcare services ➤ Abortion in Ethiopia ➤ Abortion services ➤ FP service ➤ HIV/AIDS service ➤ Integrated healthcare services
Chapter 3	1. The overall methodology of the study 2. Phase 1 <ul style="list-style-type: none"> ➤ Methodology followed ➤ Data analysis ➤ Data interpretation and presentation
Chapter 4	Phase 1: data presentation, analysis, and description of the research findings <ul style="list-style-type: none"> ➤ Abortion care users ➤ Healthcare providers
Chapter 5	Phase 2 <ul style="list-style-type: none"> ➤ Literature review on action plan development ➤ Principles and processes for action plan development ➤ Draft action plan with an embedded assessment validation tool

Chapter 6	Phase 3 <ul style="list-style-type: none"> ➤ Methodology ➤ Validation process and final action plan ➤ interpretation of the findings ➤ Action plan for the implementation of one-stop integrated abortion care, HIV and FP service in public health facilities of Ethiopia (The so-called AFH Service)
Chapter 7	Conclusions, limitations and recommendations

5.2 ACTION PLAN

An action plan refers to a step-by-step method to get things done. It is an implementation plan or operational plan (UNESCO 2015:23) that contains adequate details of activities to achieve desired objectives or goals. The action steps indicate the actions to be taken (what), the responsible agents (by whom), and the timeline (when) (Athuraliya 2020:1) for a certain strategy to succeed (Edmonstone 2011:83). Problem-based, participatory, inclusive, adequate evidence and achievable actions should be considered in every step of action plan development (UN-Habitat, 2017:6). An action plan can be simplified as a process of organising ideas and resources to strengthen operations, procedures, activities, and ensure that healthcare providers and stakeholders intend to achieve the set organisational targets and common goals (Edmonstone 2011:83). An action plan also provides an opportunity to look at how healthcare providers can effectively deliver quality care to clients or communities (Crone, Kahlmeier, Onatsu, Cavill and Goudas 2017:11). To develop an effective action plan, different partners or stakeholders should take part in the development and sustainably contribute their efforts to reach the desired outcome (European Union 2016:7).

5.3 PRINCIPLES RELATED TO ACTION PLAN DEVELOPMENT

To develop an action plan, the existing situation within a specific setting or community should be considered (MOH Ethiopia 2016:8). A good understanding of the organisation's current situation is needed before an action plan can be developed. Therefore, to develop an action plan, the following principles should be considered:

(1) the specific areas that need interventions should be identified (UN-Habitat 2017:10); (2) available strategies, guidelines, and policies are to be assessed; (3) all relevant stakeholders important to the setting must be included to contribute to the action plan's development (Crone, Kohlmeier, Onatsu, Cavill and Goudas 2017:18); (4) adequate evidence on the provision of health services is required; and (5) knowledge of the development of an intended action plan is necessary (WHO 2013:4; Ministry of Youth and Sport the Republic of Serbia 2014:6).

Complying with the mentioned principles, the findings from phase one of the study and the comprehensive literature review in phase two strengthened the developed action that was validated, as illustrated in Figure 5.1.

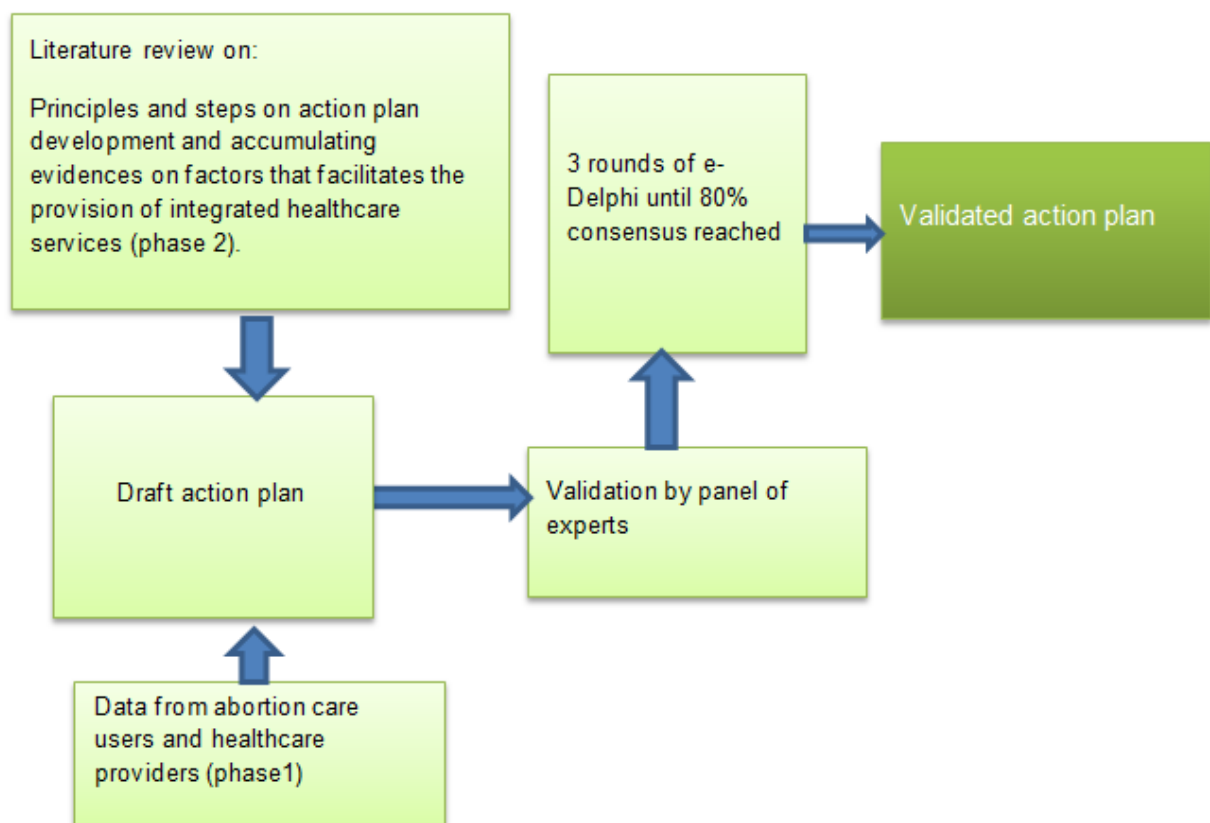


Figure 5.1: Schematic presentation of action plan development

5.3.1 Identifying specific areas for intervention

Assessing an organisation's activities help to identify areas for short-term, mid-term, and long-term organisational interventions that help an organisation achieve prioritised

objectives (Rajan, Kalambay, Mossoko, Kwete, Bulakali, Lokonga, Porignon and Schmets 2014:3). Identifying prevailing problems in an organisation requires resource mobilisation (Wycliffe and Moïra 2019:1); mobilised individuals, families, and communities are also required to develop an action plan (Ministry of Health Lao People Democratic Republic 2016:7). In this study, evidence was accumulated to identify factors associated with the integration of abortion care with HIV-FP services in the first phase (see Section 4.3) and literature review in the second phase (see Section 6.8). The findings were used to develop the intended action plan to integrate abortion care with HIV-FP services in public health facilities in Ethiopia.

5.3.2 Policies, strategies, and guidelines important for action plan development

The availability and use of strategies, guidelines and policy documents are important in the development of an action plan (URBACT 2017:4). These documents ensure that the action plan considers the provision of quality maternal and child health services (United Nations 2017:3). They are also helpful in sustainably improving the developed action plan by refining healthcare managers' leadership skills, good governance, and management's capacity for programme implementation, strengthening the efficiency and quality of health service provision (Ministry of Health Lao People Democratic Republic 2016:7). Relevant policies, strategies, and guidelines in this study were reviewed to develop the intended action plan (see Section 5.11).

5.3.3 Stakeholder involvement in the action plan development

The multi-stakeholder approach and commitment from participating actors or stakeholders are important in the development and implementation of action plans (UN-Habitat 2017:5). It is critical to secure their commitment, recognise organisational culture, collect, comprehend, and use the valid information provided by them (European Union 2016:9). Stakeholders' role in the action plan's validation and implementation was essential in this study. The following stakeholders were involved in the different phases, as is explained in Table 5.2.

Table 5.2: Stakeholders involved in different phases of action plan development

Stakeholders	Roles in the process of action plan development	Working place	Phase involved
Healthcare providers working in public healthcare facilities (doctors, health officers, midwives, and nurses).	Involved in the development of the draft action plan by completing the self-administered questionnaires and providing information on the provision of abortion care and HIV-FP services in public healthcare facilities.	Healthcare facilities (Public health centres and public hospitals)	Phase 1
Programme officers working at regional, zonal, and district levels (Abortion care as well as HIV-FP service programme officers).	Involved as panellists in the Delphi technique to validate the draft action plan using the validation tool.	Health offices (region, zones, and districts)	Phase 3

5.3.4 Accumulating evidence in the development of an action plan

The availability of diverse services in healthcare facilities could increase communities' health-seeking behaviour (MOH Ethiopia 2016:8). Healthcare services that are provided in an organised and integrated manner could reduce missed opportunities and increase the efficiency of healthcare (MOH Ethiopia 2016:8). Striving to achieve the 2030 SDG of maternal and child health services, improving institutional mandates, and strengthening value-added health service deliveries at all levels are essential to increase health-seeking behaviour in the community (WHO 2017:9). The integration of abortion care with HIV-FP services could improve women's health status and reduce the occurrence of unwanted pregnancies and subsequent abortions (Chavkin, Stifani, Bridgman-Packer, Greenberg and Favier 2018:7). Moreover, it can expand the scope of practice of healthcare providers such as doctors, health officers, midwives,

nurses, and integrated surgical officers (Bridgman-Packer and Kidanemariam 2018:19) (see Section 4.3.2.29).

5.3.5 Knowledge of action plan development

A good action plan guides how things must be done and should answer the questions: What will have to happen? When does it have to happen? Who must be responsible for the action to happen (De Scisciolo, Egger and Ayala 2018:18:74). A prepared action plan, based on evidence, helps healthcare providers identify, implement, and monitor the desired actions to enhance the effective functioning of the health system and improve the quality of healthcare provision (De Scisciolo, Egger and Ayala 2018:74). Therefore, an effective action plan needs to be SMART, being Specific, Measurable, Achievable, Realistic with clearly defined activities, and Time-sequenced (Edmonstone 2011:83). The draft action plan in this study was prepared based on input from the theoretical framework of the change logic model. It comprises the action statements and how it has to be implemented, the responsible person/s, and the time frame to implement each action (see Sections 5.8.1–5.8.7). An action plan must have the following characteristics, as described in the literature.

5.4 CHARACTERISTICS OF ACTION PLANS

During an action plan's preparation phase, attention must be given to the quality of the process, the quality of the content, as well as the workability; thus, the plan's implementation ability (UNESCO 2015:11). The following characteristics are indicative of a good action plan and were relevant in this study: (1) time scales are realistic (see Section 5.7.5); (2) informed by the past but focused on the future (see Section 5.3.1); (3) takes into account external factors and constraints (see Section 5.7); (4) addresses specified objectives (see Section 5.7.1); (5) are sufficiently detailed for its purpose (see Section 5.3.5); (6) clear on who should be responsible and what is to be done (see Section 5.7.4); (7) the measures in the plan are aligned to success (see Section 5.5.6); and (8) can be revised and updated as required (see Chapter Six) (Lansdown, Rixon, O'Shea-Poon, O'Dell, Long, Peachey, Scott, Robinson, Vardy, Mugisha and Anna Mbwambo 2021:1). Thus, the indicated characteristics were considered in the development of the action plan to integrate abortion care with HIV-FP services in

public health facilities in Ethiopia. Having the above-mentioned characteristics, a good action plan's development should track the following steps:

5.5 STEPS IN ACTION PLAN DEVELOPMENT

The seven steps of action plan development described by Christino (2021:1) were applicable and follows.

5.5.1 Step one: Defining the problem

Various contexts can determine an organisation's competitiveness and performance, such as organisational behaviour and culture, employees' capacity to perform their duties, and the efficiency of internal processes (Xenidis and Theocharous 2014:562). The first step in developing an action plan is also mentioned as one of the principles in action plan development (see Section 5.3). It entails defining the demographic and sociocultural context, exploring the existing policies, strategies, and guidelines, behavioural change and communication issues. The cost and financial issues of healthcare, and the availability of infrastructure and medical resources in the healthcare system must also be clearly defined to develop an action plan (UNESCO 2015:15) (see Section 5.8). A SWOT analysis based on an organisation's situation also assists in formulating an appropriate action plan (Crone et al., 2017:13).

In this study, challenges were mentioned in integrating abortion care with HIV-FP services both by abortion care users and healthcare providers. The challenges abortion care users specified included increased waiting times, the healthcare providers not providing quality care, the services not being available in the health facility, and healthcare being expensive (see Section 4.3.1). A lack of operational policies and guidelines, poor infrastructure, shortage of healthcare providers, poor support and monitoring systems, inadequate medical supplies, and inadequate budget allocation were challenges mentioned by healthcare providers (see Section 4.3.2). These specified challenges and evidence obtained in phase two's literature review (see Section 5.8) supported the researcher's aim to define the existing problems in public health facilities. The developed action plan was therefore based on evidence as perceived by the respondents in this study and available literature.

5.5.2 Step two: Collecting the data

Data from abortion care users, healthcare providers (see section 4.3), and literature were used to develop the first draft action plan. To improve on the action plan and ensure stakeholder involvement, e-Delphi panellists (abortion programme officers and HIV-FP programme officers) (see Section 6.3) participated in validating the action plan (see Chapter Six).

5.5.3 Step three: Clarify and prioritise the problems

All possible strategies should be developed based on identified problems and the availability of resources. Limited financial resources are often a problem in developing nations (MOYS Republic of Serbia 2014:18). Prioritising problems and designing appropriate and achievable actions are thus vital (MOYS Republic of Serbia 2014:18). Consulting experts or persons with experience prioritising problems and developing appropriate solutions are useful to reach an attainable action plan (Athuraliya 2020:1). A statistician and senior public health expert (see Annexure 14) were consulted in the process of developing the action plan for this study.

5.5.4 Step four: Write goal statements (action statements) for each solution

The goal of the action plan is based on the researcher's vision, principles, and strategic objectives (MOYS Republic of Serbia 2014:7). In this study, action statements were formulated based on the findings and interpretations from phase one (see Section 4.3) and the literature review of phase two (see Section 5.8).

5.5.5 Step five: Apply the draft action plan

The purpose of developing the draft action plan was to address the action goal or action statements through agreed actions. The draft action plan with an embedded assessment validation tool was built on the web-based platform "Google Forms" to test and determine whether it was understandable and addressed the desired goals. The pre-tested and amended draft action plan with an embedded assessment validation tool was used for the first round of the e-Delphi (see Table 6.3).

5.5.6 Step six: Monitor and evaluate the draft action plan

A well-formulated and prepared draft action with an embedded assessment validation tool is necessary before starting the validation process using the e-Delphi technique (WHO 2018:9). To ensure the proposed action plan is comprehensive for validation, it is essential to test the assessment validation tool and comments from senior public health experts and biostatisticians, as mentioned in step five. A panel of experts used the e-Delphi technique to participate in three validation rounds. The researcher analysed their level of agreement versus disagreement with the action statements and proposed methods. The analysis was performed after every round until an 80% consensus was reached among panellists on the strategies, responsible body/persons carrying out the actions, and the time frame within which action methods/statements should occur (see Chapter Six).

5.5.7 Step seven: Implement the action plan

Validated action plans must be implemented using the agreed actions. In order to execute the action plan, active involvement from stakeholders, such as healthcare providers and programme officers, will be necessary (UNESCO 2015:25). Sharing the developed action plan with all levels of the health system is important (UNESCO 2015:25). In this study, the validated action plan to integrate abortion care with HIV-FP services is presented in Chapter Six. However, the plan's implementation is not part of this study, although recommendations on its implementation are shared in Chapter Seven.

5.6 DEVELOPMENT OF THE DRAFT ACTION PLAN

The five principles and seven steps of action plan development were used to develop the first draft action plan. The analysed data from women who received abortion care and healthcare providers in phase one and literature reviewed in phase two were used to develop the draft action plan while following the principles and steps of action plan development. Embedding the assessment validation tool in the draft action plan was a requirement from the start due to the inability to separate the plan from the validation

assessment tool. Thus, the assessment validation tool was embedded into the action plan (see Tables 5.6 to 5.12).

5.7 THE DRAFT ACTION PLAN

The draft action plan was developed based on the research findings (see Section 4.3). The seven sections (referred to as themes in the draft action plan) that constitute the questionnaire (see Tables 5.6 to 5.12) were based on the “inputs”, according to the change logic model, as the theoretical framework. The literature reviewed in phase two (see Section 5.8) also contributed to the layout and content of the first draft action plan. The seven themes were:

1. Geographic accessibility (6 questions)
2. Human resources (6 questions)
3. Medical resources (5 questions)
4. The infrastructure (8 questions)
5. Fiscal resources (3 questions)
6. Policies, guidelines, and strategies (3 questions)
7. Behavioural change and communication (5 questions)

The draft action plan contains goals/action statements, methods, responsible body/persons, and timeframes, described as follows:

5.7.1 Goals

Goal setting is a powerful process of thinking about the ideal future and motivating to change the existing situation to promote future essential healthcare practices (Northern territory government 2015:8; UN-Habitat 2017:8). Goal setting should be easily achieved by following a sequence of events, scheduling time and allocating financial resources as necessary (UN-Habitat 2017:14). As described in the steps of action plan development, the goals or action statements were formulated based on the identified problems in phase one and literature reviewed in phase two of the study.

Table 5.3: Example of goal setting for the draft action plan

Theme - Geographic accessibility of healthcare

The results of phase one indicated challenges in the geographic accessibility of healthcare services for women who required abortion care. Challenges were attributed to poor healthcare facility access (see Section 4.3.1.12), poor public transportation (see Section 4.3.1.13), and poor road infrastructure (see Section 4.3.1.13).

Proposed goal setting (equal to action statements within this study's context. One goal can have more than one statement, in this study, referred to as action statements).

Action statement 1: Improve access to healthcare facilities offering integrated abortion and HIV-FP services.

5.7.2 Action statements

The action statements were constructed based on the findings from phases one (see Section 4.3) and two (see Section 5.8). The constructed action statements are presented in the draft action plan considering the inputs (referred to as themes according to the seven sections in the questionnaire).

5.7.3 Action methods

Action methods are activities to be implemented to address the respective action statements. In this study's context, two or more action methods are indicated for each action statement.

5.7.4 Responsible person/s

Stakeholders are responsible persons in the development of the action plan. A multi-stakeholder approach is always recommended for the action plan to become a reality (UN-Habitat 2017:5). Individuals who could be involved in developing the draft action plan were identified (see Table 5.6). Even though the implementation phase is not part of this study, responsible persons for the action plan's implementation are recommended in Chapter Seven.

5.7.5 Time frames

For the attainment of a specific action plan, a clearly defined time frame needs to be set. Setting the time frame is important to mobilise human and financial resources (European Commission 2015:11). It also ensures stakeholders' participation remains high and they work towards achieving the specified goal within the provided time frame (UN-Habitat 2017:5). In this study, a realistic time within which the proposed action statements should be achieved was set (see Section 5.8).

5.8 FORMULATING THE DRAFT ACTION PLAN

The inputs, such as geographic accessibility, human resources, fiscal resources, infrastructure, policies, strategies, guidelines, and behavioural change and communication findings, as well as a literature review, were used to formulate the draft action plan. Table 5.4 summarises the main findings and recommendations from phase one.

Table 5.4: Summary of the findings and respondents' recommendations

Themes/Inputs	Findings	Respondents' recommendations
Geographic accessibility and accessibility in general (see section 5.8.1 and table 5.6)	<ul style="list-style-type: none"> ➤ One hundred and sixty-three (39.5%) abortion care users travel vast distances to healthcare facilities; they travel more than 45 minutes (see Section 4.3.1.12). ➤ Walking was the main (f= 54.4%; n= 226) means of transportation for abortion care users to the nearest healthcare facilities. ➤ Two hundred and fifty-four (f= 61.5%) abortion care users waited for more than 30 minutes in the healthcare facilities before healthcare was offered. 	<ul style="list-style-type: none"> ➤ The public healthcare facilities (health centres and hospitals) must be accessible to communities (see Section 4.3.2.35). ➤ The waiting time in healthcare facilities must be reduced to enhance the integration of abortion care with HIV-FP services (see Section 4.3.2.35).

Themes/Inputs	Findings	Respondents' recommendations
Human resources (see Section 5.8.2 and Table 5.7)	<ul style="list-style-type: none"> ➤ Capacitating human resources is of concern as the majority (f=74.1%; n=186) of respondents received in-service training more than 12 months ago (see Section 4.3.2.9). ➤ Among 251 (82%) healthcare providers who received in-service training, nearly half (f= 47.4%; n= 119) only received training on specific topics (not integrated), i.e. abortion, FP or HIV-related topics. Only five (1.9%) respondents received abortion and FP-HIV training in an integrated manner (see Section 4.3.2.9). ➤ The majority (f= 72.1%; n= 181) of in-services training was organised and provided by NGOs (see Section 4.3.2.9). 	<ul style="list-style-type: none"> ➤ In-service training for healthcare providers (see Section 4.3.2.35) must be offered to improve integrated abortion care with HIV-FP services. ➤ Public healthcare facilities must collaborate with NGOs to enhance abortion, FP, and HIV-service integration (see Section 4.3.2.34).
Medical resources (see Section 5.8.3 and Table 5.8)	<ul style="list-style-type: none"> ➤ There was an inconsistent supply of drugs for abortion care in the healthcare facilities. Seventeen (11.1%) abortion care providers indicated there was no drug for abortion care in the healthcare facilities in the last six months. Contradictory, 28 (18.3%) abortion care providers indicated the availability of three different abortion drugs in the healthcare facilities in the last six months (see Section 4.3.2.19). 	<ul style="list-style-type: none"> ➤ Ensure a consistent and equitable supply of medical resources so public healthcare facilities can integrate abortion care with HIV-FP services (see Section 4.3.2.35). ➤ The availability of medical equipment in public healthcare facilities must be ensured to enhance the delivery of quality healthcare (see Section 4.57).

Themes/Inputs	Findings	Respondents' recommendations
	<ul style="list-style-type: none"> ➤ Most (f=91%; n=140) abortion care providers had manual vacuum aspirators, 27 (17.6%) had electric vacuum aspirators, and only 21 (13.7%) had both manual and electric vacuum aspirators to provide abortion care (see Section 4.3.2.19). ➤ Medical supplies, such as syringes and needles, gloves, gauze sponges or cotton balls, and antiseptic solutions were indicated to be available in almost all healthcare facilities in the last six months (see Section 4.3.2.19). ➤ Contraceptive commodities such as IUDs, pills, implants, injectables, and male condoms were readily available according to HIV-FP service providers (see Section 4.3.2.26). ➤ Almost all (n= 151; f= 98.7%) HIV-FP service providers indicated the availability of HIV test kits in the healthcare facilities in the last six months (see Section 4.3.2.24) 	
<p>Infrastructure (see Section 5.8.4 and Table 5.9)</p>	<ul style="list-style-type: none"> ➤ Fifty (32.7%) abortion care providers indicated the rooms were ventilated and the temperature was comfortable for abortion service (see Section 4.3.2.21). 	<ul style="list-style-type: none"> ➤ Infrastructure such as adequate service-providing areas, electricity, telephones, water, sanitation, computers, and internet connectivity must be improved to enhance the provision of integrated

Themes/Inputs	Findings	Respondents' recommendations
		abortion care with HIV-FP services (see Section 4.3.2.32).
Fiscal resources (see Section 5.8.5 and Table 5.10)	<ul style="list-style-type: none"> ➤ Three hundred and nine (74.8%) respondents received abortion care free of charge, and 42 (10.2%) respondents' cost was covered by community healthcare insurance. However, 62 (15%) abortion care users paid for the service out of pocket (see Section 4.3.1.15). ➤ FP service was three-times more likely to be used by women who used the service free of charge compared to those covered by community health insurance AOD=3.532 with 95% CI (1.155 10.803) P=0.0027 (see Table 4.19). 	<ul style="list-style-type: none"> ➤ An adequate budget needs to be allocated by the government treasury to provide maternal health services free of charge and strengthen the provision of abortion and FP-HIV services (see Section 4.3.2.35). ➤ Healthcare services must be free of charge, or costs must be reduced to ensure integrated FP, HIV and abortion care services (see Section 4.57).
Policies, guidelines, and strategies (see Section 5.8.6 and Table 5.11)	<ul style="list-style-type: none"> ➤ One hundred and twenty-five (40.8%) respondents mentioned abortion-related regulatory documents (see Section 4.3.2.10), 141 (46.1%) FP regulatory documents (see Section 4.3.2.11), 105 (34.3%) HIV/AIDS regulatory documents (see Section 4.3.2.12), and 35 (11.4%) respondents indicated the presence of integrated healthcare regulatory documents (see Section 4.3.2.13) are available in their settings. 	<ul style="list-style-type: none"> ➤ Policies, strategies, and guidelines on the integration of abortion and FP-HIV health services must be available in healthcare facilities to enhance integrated maternal health services (see Section 4.3.2.35).

Themes/Inputs	Findings	Respondents' recommendations
	<ul style="list-style-type: none"> ➤ One hundred and sixty-one (52.6%) respondents indicated they did not have any regulatory documents in their healthcare facilities (see Section 4.3.2.14). 	
Behavioural change and communication (see Section 5.8.7 and Table 5.12)	<ul style="list-style-type: none"> ➤ The community obtained abortion-related information during health education at healthcare facilities, from health extension workers and radio messages (see Section 4.3.2.17). ➤ Nurses, friends, partners, family members and health extension workers were primary sources of information on FP services (see Section 4.3.1.23). ➤ Radio, television, and health education in healthcare facilities were the main sources of information on HIV/AIDS services (see Section 4.3.1.25). ➤ Leaflets, brochures, and posters were the health education tools healthcare providers used to provide different maternal health services (see Section 4.3.2.31). 	<ul style="list-style-type: none"> ➤ Health education should be offered to the community through women's development armies to enhance the provision of integrated abortion and FP-HIV services (see Section 4.3.2.35). ➤ Awareness (health education) of the provision of abortion care and other healthcare services must be addressed among communities using radio, TV, newspaper leaflets, brochures, and banners.

The draft action plan was prepared based on the identified findings in phase one (see Section 4.3) and evidence accumulated from the literature review (see Section 5.8) considering the inputs (referred to as themes according to the seven sections in the questionnaire).

IMPORTANT TO NOTE:

Each theme (the inputs according to the change logic model) is discussed, followed by the part of the draft action plan with the embedded assessment validation tool that addresses the specific theme. This allows for easy reading as the discussion will be in the same order as portrayed in the complete draft action plan.

5.8.1 Theme 1: Geographic accessibility of abortion care and HIV-FP service integration in public health facilities of Ethiopia

Universal health service coverage is a key component of the 2030 SDGs (Wigley, Tejedor-Garavito, Alegana, Carioli, Ruktanonchai, Pezzulo, Matthews, Tatem and Nilsen 2020:237). However, health service coverage around the globe still falls short of providing accessible, high-quality, comprehensive, and integrated healthcare (WHO 2017:1). Despite most countries meeting the targets of healthcare coverage at the national level, there is still a substantial difference in the delivery of healthcare at sub-national levels (Wigley et al., 2020:273).

In Ethiopia, it is common to see the mal-distribution of healthcare facilities and healthcare providers, particularly between rural and urban areas. Rural communities typically receive disproportionately limited services compared to urban ones (WHO 2017:10). Despite remarkable progress in the expansion of healthcare facilities in all parts of the country (Argaw, Desta, Bele and Ayne 2019:2019:127; MOH Ethiopia 2015:41), there are still gaps in the accessibility of healthcare facilities between urban to rural areas and within regions, zones, and districts across the country (Argaw et al., 2019:127).

The presence of healthcare facilities enhances the provision of health services to the communities (Dos Anjos Luis and Cabral 2016:172). The availability of all (abortion care, FP, and HIV services) relevant and integrated health services within a reasonable distance is necessary, particularly for rural and underprivileged communities (Argaw et al., 2019:127). A healthcare facility that offers an integrated health service within two hours' walking distance or in a five-kilometre radius from the community has the potential to promote the use of all health services available at the facility (Teka et al., 2018:581; Alebachew and Waddington 2015:20).

Healthcare facilities, including facilities offering integrated care, must provide patient-centred health services, foster a healthy and respectful workforce environment, ensure accountable leadership and governance, and efficiently use the available health technologies to provide appropriate healthcare services (Manyazewal, Oosthuizen and Matlakala 2016:9).

Two hundred and twenty-six (54.4%) respondents in this study walked to the public healthcare facility to receive abortion care (see Section 4.3.1.11). Integrated services for abortion care users help ensure that the distance is travelled once (Milford et al., 2018:187) and not many times to access different services on different days. A distance taking 46 minutes or longer had a statistically significant association with lower utilisation of FP and HIV-FP integrated services ($p < 0.05$) (see Section 4.3.1.12), thus impacting abortion care utilisation as well. Respondents emphasised that healthcare facilities offering a variety of services, such as abortion care, FP, and HIV integrated services, need to be accessible to the community (see Section 4.3.1.29). Educating the community on integrated services and improving the referral system can also improve communities' use of health services (see Section 4.3.1.31). The draft action plan embedded with the assessment validation tool focused on geographic accessibility, as illustrated in Table 5.6.

The draft action plan was presented in colour to assist panellists in differentiating the different parts of the action plan. The colours are illustrated in Table 5.5.

Table 5.5: Descriptions and colours used in the draft action plan

Thematic areas	Descriptions	Colour used
Action statement/goal statements	A statement is used to address the identified problems based on inputs from the change logic model theoretical framework.	blue
Methods	Activities to be implemented to address the respective action statements	pink
Responsible person/s	Individuals who were responsible for performing the implementation of the specified methods/activities to reach the desired objectives.	green

Thematic areas	Descriptions	Colour used
Time frame	The period in which the strategies/activities must be completed based on the agreed schedules.	purple
Comments	Any ideas to improve on the action statements, the methods, the responsible person/s, and the timeframes suggested.	yellow

Table 5.6: Draft action plan with embedded assessment validation tool: Geographic accessibility of abortion care and HIV-FP service integration in public health facilities of Ethiopia

<p>Instructions: Please make a tick in the spaces provided to indicate your choice pertaining to your level of agreement or disagreement with the action statements and action methods. Tick the appropriate boxes indicating your choice of who the responsible person/s should be and the time frame within which actions need to be achieved. Please add any comment/s to improve the draft action plan in the open spaces provided.</p>	
<p>THEME 1: GEOGRAPHIC ACCESSIBILITY</p>	
<p>Action statement 1: Improve access to healthcare facilities offering integrated abortion care with HIV-FP services.</p> <p>Indicate your level of agreement with the inclusion of the action statement.</p> <p>1. Agree <input type="radio"/> 2. Disagree <input type="radio"/></p>	
<p>Method 1.1: Compile a report based on evidence to support the need to upgrade existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>1.1.1 Responsible person/s: Please indicate who must take responsibility for compiling an evidence-based report to support the upgrading of health posts to health centres or constructing new ones. Please tick next to your choice/s.</p>	
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>

3. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
4. Others, please specify _____	
1.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the evidence-based reports should be completed.	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Others, please specify _____	
1.1.3 Please add if you have any new ideas pertaining to improvements in the action statement, the method, responsible person/s, and the timeframe _____	
Method 1.2: Share the completed evidence-based report with governmental bodies, partners, civic societies, and community leaders to negotiate an upgrade in existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
1.2.1 Responsible person/s: Please indicate who must take responsibility for sharing the report and negotiating with concerned bodies. Please tick next to your choice/s.	
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the selected 3 district health offices.	<input type="radio"/>
3. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts, appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Others, please specify _____	
1.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the report must be shared and negotiations with concerned bodies must commence.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>

4. Others, please specify _____	
1.2.3 Please add if you have any new ideas pertaining to improvements in the action statement, the method, responsible person/s, and the timeframe _____	
Method 1.3: Develop strategies to strengthen the intra-facility referral system (within the healthcare facilities) to integrate abortion care with FP-HIV services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 1.3 (a): Please insert a tick in the circle next to your choice/s that indicate/s the applicable strategies to strengthen the intra-healthcare facility referral system.	
1. Implement referral slips in the healthcare facilities	<input type="radio"/>
2. Use runners (individuals responsible for the allocation/distribution of clients' family folders to different service delivery points) in the healthcare facilities	<input type="radio"/>
3. Use liaisons (individuals responsible for linking referral cases to the next higher levels) in the healthcare facilities	<input type="radio"/>
4. If you have any other ideas on how to strengthen the intra-healthcare facility referral system, please indicate them here _____	
1.3.1 Responsible person/s: Please indicate who must take responsibility to facilitate the strategies to strengthen the intra-healthcare facility referral system. Please make a tick next to your choice/s.	
1. The director of the public healthcare facility	<input type="radio"/>
2. The human resource development coordinator of the public healthcare facility	<input type="radio"/>
3. An ad-hoc committee (1 abortion care and 1 HIV-FP healthcare provider) appointed by the director of the public health facility	<input type="radio"/>
4. If others, please specify _____	
1.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the intra-healthcare facility referral system should be implemented.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Others, please specify _____	

1.3.3 Please add if you have any new ideas pertaining to improvements in the action statement, the method, responsible person/s, and the timeframe _____	
Method 1.4: Develop strategies to strengthen the referral system (from the community to the health centre/hospital) to improve integrated health services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 1.4 (a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies that can be implemented to enhance the use of integrated healthcare services.	
1. Offer health education to the community on integrated health services from health centre-health post networking focal persons (healthcare providers responsible for linking the healthcare services between the community (health post) and health centre/hospital).	<input type="radio"/>
2. Offer health education on integrated health services from healthcare providers.	<input type="radio"/>
3. Offer health education on integrated health services from the community leaders, such as kebele leaders and religious leaders	<input type="radio"/>
4 If you have any other idea on how to strengthen the community to healthcare facilities referral system, please indicate it here _____	
1.4.1 Responsible person/s: Please indicate who must take responsibility to facilitate the strategies to inform the community of the healthcare facility referral system. Please tick next to your choice/s.	
1. The head of the district health office	<input type="radio"/>
2. The director of the public healthcare facility	<input type="radio"/>
3. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
4. An ad-hoc committee (1 abortion care provider and 1 HIV-FP service provider) appointed by the director of the public health facility	<input type="radio"/>
5. Others, please specify _____	
1.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the community-to-healthcare facility referral system would be strengthened.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>

4. Other, please specify _____	
1.4.3 Please add if you have any new ideas pertaining to improvements in the action statement, the method, responsible person/s, and the timeframe _____	
Method 1.5: Establish new or strengthen mobile/outreach programmes that offer abortion care, FP, and HIV-integrated healthcare services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
1.5.1 Responsible person/s: Please indicate who must take responsibility for strengthening mobile or outreach health service programmes. Please tick next to your choice/s.	
1. The director of the public healthcare facility	<input type="radio"/>
2. Programme officers (1 abortion care and HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
3. An ad-hoc committee (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public healthcare facility	<input type="radio"/>
4. The health centre-health post networking focal person (One health worker responsible for linking the healthcare services from the community (health post) to the health centre/hospital)	<input type="radio"/>
5. Others, please specify _____	
1.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the mobile or outreach programmes should be established or strengthened.	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, please specify _____	
1.5.3 Please add if you have any new ideas pertaining to improvements in the action statement, the method, responsible person/s, and the timeframe _____	
Method 1.6: Rearrange healthcare service provision areas to reduce the waiting time for abortion care, HIV, and FP-integrated services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 1.6 (a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to reduce waiting times for integrated health services.	

1. Abortion care and HIV-FP services offered in the same room	<input type="radio"/>
2. Abortion care and FP-HIV service offered in adjacent rooms	<input type="radio"/>
3. Abortion care and HIV-FP service-providing areas near the main gate of the health facility's compound	<input type="radio"/>
4. Implement a scheduled client appointment system	<input type="radio"/>
5. If you have any other ideas on how to reduce waiting time and enhance the provision of integrated health services, please indicate them here _____	
1.6.1 Responsible person/s: Please indicate who must take responsibility for facilitating the strategies to rearrange healthcare service provision areas. Please tick next to your choice/s.	
1. The director of the public healthcare facility	<input type="radio"/>
2. Team leader of abortion care providers in the public healthcare facility	<input type="radio"/>
3. Team leader of HIV-FP service providers in the public healthcare facility	<input type="radio"/>
4. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
5. Others, please specify _____	
1.6.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the healthcare-providing areas should be rearranged.	
1 Within 3 months	<input type="radio"/>
2 Within 6 months	<input type="radio"/>
3 Within 9 months	<input type="radio"/>
4 Other, please specify _____	
1.6.3 Please add if you have any new ideas pertaining to the improvement of the action statement, the method, responsible person/s, and the timeframe _____	

5.8.2 Theme 2: Human resources for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

Human resource development refers to the process of enhancing the production and utilisation of the human workforce (Alhalboosi 2018:1). It is a set of systematic activities to enrich employees' skills, knowledge, and experiences to address short

and long-term organisational objectives (Alhalboosi 2018:3). Human resource development is at the forefront of global, regional, national, and sub-national agendas, as a requirement to meet populations' health needs (Pan American Health Organization and WHO 2017:1). In developing nations, public healthcare facilities are the potential providers of healthcare services. Thus, qualified, adequate, and a mix of health professionals (MOH Ethiopia 2015:45) are essential in public healthcare facilities to deliver abortion, FP, and HIV-integrated services (Pallikadavath, Singh, Ogollah, Dean and Stones 2013:26-32).

In Ethiopia, to address the need for human resources, the number and capacity of health training institutions increase from time to time (MOH Ethiopia 2019:73). However, the health sector transformation plan still indicates the doctor, health officer, nurse, and midwife to population ratio as 0.7 per 1 000 population, which is far below the minimum standard of 2.3 per 1 000 population (MOH Ethiopia 2015:46). The main reason attributed to the shortage of healthcare providers in public facilities is high attrition rates (WHO 2017:160) and the uneven distribution of the limited health workforce among and within regions, zones, and districts. The inappropriate use and shortage of available health professionals also exacerbate the described challenges (Alebachew and Waddington 2015:6). To combat the shortage to some extent, the government of Ethiopia trains and deploys lower and middle levels of healthcare professionals and upgrade the existing ones to higher professional levels (WHO 2017:16), where possible.

Professional development through in-service training is one of the strategies to improve the competency of healthcare professionals and retain them in the health system (MOH Ethiopia 2015:95; WHO 2016:5). In-service training is especially important for those who did not receive adequate pre-service training (WHO 2016:9). Therefore, ensuring the appropriateness of the pre-service educational curricula and the competency of healthcare providers are important to deliver integrated health services (WHO 2016:9).

Even though 251 (82%) healthcare providers in this study indicated they received at least one type of in-service training enabling them to perform their activities, 186 (74.1%) received the in-service training 12 months ago. Among healthcare providers

who received in-service training, only 3 (1.2%) received abortion care, FP, and HIV-integrated training (see Section 4.3.2.9).

While the public sector is expected to provide in-service training to healthcare providers (Dibaba et al., 2017:76), the majority (f=72.1%; n=181) of in-service training was organised and provided by NGOs in this study’s context. Governmental organisations, such as the Federal Ministry of Health Ethiopia, regional health bureau and zonal health departments contributed to professional development through in-service training to some extent; 44 (13.4%), 73 (22.3%), and 30 (9.1%), respectively (see Section 4.3.2.9). This indicates that healthcare providers’ competency largely depends on NGOs, illustrating the Federal Ministry of Health Ethiopia, regional health bureau, and zonal health departments must improve their efforts to sustainably enhance healthcare providers’ competency. Therefore, in-service training should be taken as an essential requirement for healthcare providers to update their skills and knowledge periodically (Dibaba et al., 2017:76) and make them confident and competent enough to provide integrated abortion, FP, and HIV services (WHO 2015:68). The draft action plan embedded with the assessment validation tool focused on human resources is elicited in Table 5.7.

Table 5.7: Draft action plan with embedded validation tool: Human resources for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

THEME 2: HUMAN RESOURCES	
Action statement 2: Ensure competent human resources for the provision of abortion care, FP, and HIV-integrated services.	
Indicate your level of agreement on the inclusion of the action statement.	
1. Agree <input type="radio"/>	2. Disagree <input type="radio"/>
Method 2.1: Compile an evidence-based report on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible for providing integrated abortion and HIV-FP services.	
Do you agree with the method? 1. Yes <input type="radio"/>	2. No <input type="radio"/>

<p>2.1.1 Responsible person/s: Please indicate who must take responsibility for compiling an evidence-based report on the need for healthcare providers who can deliver integrated abortion with HIV-FP services. Please tick next to your choice/s.</p>	
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments	<input type="radio"/>
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
4. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
5. Other, please specify _____	
<p>2.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the evidence-based report should be completed.</p>	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, please specify _____	
<p>2.1.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____</p>	
<p>Method 2.2: Enhance public healthcare facility directors' leadership and management skills through in-service training to enhance the integration of abortion care with HIV-FP services.</p>	
<p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>Method 2.2(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to enhance public healthcare facility directors' leadership and management skills.</p>	
1. Leadership skill development training offered at least twice a year to address the management of integrated services	<input type="radio"/>

2. Best leadership experience sharing sessions offered twice a year	<input type="radio"/>
3. Develop a web-based platform for information sharing about public healthcare facility management	<input type="radio"/>
4. If you have any other idea on how to enhance public healthcare facility directors' leadership and management skills, please indicate it here _____	
2.2.1 Responsible person/s: Please indicate who must take responsibility for enhancing public healthcare facility directors' leadership and management skills. Please tick next to your choice/s.	
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments to ensure an accurate attendance of the director of public healthcare facilities	<input type="radio"/>
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices to ensure an accurate attendance of the director of public healthcare facilities	<input type="radio"/>
3. An ad-hoc committee with one representative from domestic partner organisations and one from international partner organisations from each of the 3 zones appointed by the head of the 3 zone health departments	<input type="radio"/>
4. Other, please specify _____	
2.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the head of healthcare facilities' leadership and management skills should be enhanced.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify _____	
2.2.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
Method 2.3: Improve healthcare providers' (doctors, health officers, midwives, and nurses) knowledge and skills on the delivery of integrated abortion and HIV-FP services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 2.3(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to improve the knowledge and skills of healthcare providers.	
1. Integrate in-service training opportunities for healthcare providers at least twice a year	<input type="radio"/>

2. Develop a career structure that promotes healthcare providers to the next professional level based on their experience	<input type="radio"/>
3. Develop a web-based platform for sharing information on how to provide integrated services	<input type="radio"/>
4. If you have any other idea on how to improve the knowledge and skill of healthcare providers, please indicate it here _____	
2.3.1 Responsible person/s: Please indicate who must take responsibility to improve the knowledge and skill of healthcare providers. Please tick next to your choice/s.	
1. The director of the public healthcare facility	<input type="radio"/>
2. An ad-hoc committee with representation from healthcare providers (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with one representative from domestic and one from international partner organisations from each of the 3 zones appointed by the head of the 3 zone health departments	<input type="radio"/>
4 Other, please specify _____	
2.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the healthcare providers' knowledge and skill should be improved through in-service training.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify _____	
2.3.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
Method 2.4: Implement motivation plans for healthcare providers to enhance the integration of abortion with HIV-FP services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 2.4(a): Please make a tick in the circle next to your choice/s that indicate/s applicable strategies to motivate healthcare providers.	

1. Negotiate a budget allocation for overtime work with the head of the district health office	<input type="radio"/>
2. Implement a career enhancement programme to provide opportunities to improve healthcare providers' salary	<input type="radio"/>
3. Offer incentives for healthcare providers, especially those engaging in risky healthcare services (surgery, delivery, etc.)	<input type="radio"/>
4. Negotiate a budget allocation with the head of the district health office for mobile/outreach services	<input type="radio"/>
5. If you have any other idea on how to improve the healthcare providers' motivation, please indicate it here _____	
2.4.1 Responsible person/s: Please indicate who must take responsibility for improving healthcare providers' motivation. Please tick next to your choice/s.	
1. The head of the regional health bureau	<input type="radio"/>
2. The head of the zone health department	<input type="radio"/>
3. An ad-hoc committee with representation from healthcare providers (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
4. A group of public healthcare facility directors willing to assist with the negotiations	<input type="radio"/>
5 Any other, please specify _____	
2.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the healthcare provider motivational plan should be started.	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other, please specify _____	
2.4.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	

Method 2.5: Initiate/strengthen a mentorship programme (guidance provided by an individual with more experience and knowledge on integrated service) to support healthcare providers' integration of abortion care with HIV-FP services.

Do you agree with the method? 1. Yes 2. No

Method 2.5(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to initiate/strengthen mentorship on integrated health services.

1. Offer a formal mentorship programme for one-on-one mentorship opportunity to all healthcare providers (A trainer and a trainee conduct skill and knowledge transferring sessions)

2. Offer an online mentorship programme (conducting mentorship service in different locations using a web-based or other means of communication) to support and guide integrated services

3. Offer a group mentorship service (Providing mentorship services to a group of healthcare providers) to support and guide integrated services

4. If you have any other idea on how to initiate/strengthen mentorship, please indicate it here _____

2.5.1 Responsible person/s: Please indicate who must take responsibility for offering mentorship services to strengthen integrated abortion, FP, and HIV services. Please tick next to your choice/s.

1. Programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau

2. Maternal, neonatal, and child health directors of the zone health department

3. An ad-hoc committee representation from senior healthcare providers (1 abortion care and 1 HIV-FP service) from each of the 3 districts appointed by the head of the 3 district health offices

4. Other, please specify _____

2.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which mentorship on integrated abortion care with HIV-FP services should be started.

1. Within 6 months

2. Within 9 months

3. Within 12 months	<input type="radio"/>
4. Other, please specify _____	
2.5.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
Method 2.6: Conduct performance review meetings with healthcare providers (abortion care and HIV-FP providers) to improve the integration of abortion care with HIV-FP services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 2.6(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies for review meetings on integrated health services.	
1. Organise biannual review meetings on integrated health service at the district level	<input type="radio"/>
2. Organise biannual review meetings on integrated health service at the zonal level	<input type="radio"/>
3. Organise biannual review meetings on integrated health service at the regional level	<input type="radio"/>
4. If you have any other ideas on conducting a review meeting on integrated health services, please indicate them here _____	
2.6.1 Responsible person/s: Please indicate who must take responsibility for organising the biannual performance review meetings on integrated health services. Please tick next to your choice/s.	
1. Maternal, neonatal, and child health directors of the regional health bureau	<input type="radio"/>
2. Maternal, neonatal, and child health directors of the zone health department	<input type="radio"/>
3. Maternal, neonatal, and child health directors of the district health office	<input type="radio"/>
4. The director of the public healthcare facility	<input type="radio"/>
5. Other, please specify _____	
2.6.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the biannual performance review meetings should be started.	

1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	
2.6.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	

5.8.3 Theme 3: Medical resources for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

Drugs, equipment, and supplies are essential components of medical resources in the health system (WHO 2017:1). A well-functioning health system contains adequate medical products and technologies at all times (Ademe, Tebeje and Molla 2016:287). The rational use of these resources saves lives, reduces suffering, and improves healthcare outcomes (WHO 2017:1). On the contrary, a lack, scarcity and inappropriate use of medical products and technologies (Manyazewal, Oosthuizen and Matlakala 2016:10) limit healthcare facilities' capacity to deliver appropriate health services (Ademe, Tebeje and Molla 2016:287). Limited evidence on the availability and use of medical resources and technologies (Ademe, Tebeje and Molla 2016:287), deficient medical resource supply chain management, and poor-quality assurance mechanisms pose challenges in providing integrated healthcare services (WHO 2017:25).

In Ethiopia, the medical resource supply chain has various problems, including the inadequate supply of quality and affordable essential medicines, poor storage conditions, weak stock management, medicine theft and forged procurement, and stock-outs (Gebremariam and Unade 2019:2; MOH Ethiopia 2019:2). To ensure good procurement, distribution, storage, and utilisation of medical resources, public health facilities need to have a well-organised medical resource supply chain management and quality control system (Alebachew and Waddington 2015:15). Establishing a

revolving drug fund (MOH Ethiopia 2015:48), retaining revenue schemes (MOH Ethiopia 2015:50), and using biomedical engineers (MOH Ethiopia 2019:3) also enhance healthcare facilities' ability to use the available medical resource properly and deliver integrated maternal health services (MOH Ethiopia 2019:1).

The availability of drugs is important for the provision of abortion care. Among respondents, 28 (18.3%) had three different types of drugs at their disposal for abortion care in their health facilities in the last six months. On the contrary, 17 (11.1%) respondents had no drugs in their healthcare facility in the last six months. The finding indicated there is a big difference in the availability of drugs used for abortion care among public healthcare facilities (see Section 4.3.2.19).

Adequate equipment for abortion care provides options for quality abortion care. Manual vacuum aspiration (MVA), electric vacuum aspiration (EVA), and dilation and evacuation (D and C) are equipment that can be used for surgical abortions (WHO 2018:25). In this study, equipment such as MVAs, dilatation and curettage kits, and EVA kits were mentioned by 140 (91%), 34 (22.2%), and 27 (17.6%) respondents as available in the last six months, respectively (see Section 4.3.2.19).

Medical supplies such as syringes and needles, gloves, gauze sponges or cotton balls, and antiseptic solutions are essential in the provision of surgical and medical abortion care (WHO 2017:1). The majority (f=95%; n=146) of respondents had medical supplies in their health facilities in the last six months (see Section 4.3.2.19).

The use of FP services can be influenced by contraceptive commodities (Teka et al., 2018:50). The majority (84%) of contraceptives in Ethiopia are sourced to the community by public health facilities. The rest are covered by private sectors and NGOs (United Nations 2017:4). Blood pressure apparatus, weight scales, flashlights, uterine sound, scissors, tenaculum, antiseptic solutions, gloves, examination tables, thermometers, needles and syringes are necessary medical resources for the provision of contraceptive options (Tafese, Woldie and Megerssa 2013:248).

One hundred and forty-nine (97.4%), 135 (88.2%), 134 (87.6%), 129 (84.3%), and 116 (75.8%) respondents indicated the availability of contraceptive pills, male condoms,

injectable, implants, and intrauterine devices in their healthcare facilities in the last six months, respectively (see Section 4.3.2.26).

HIV/AIDS commodities are necessary for the screening, prevention and treatment of HIV/AIDS infections, clinical and laboratory monitoring, and management of opportunistic infections (MOH Ethiopia 2017:43). Medical resources, such as condoms and HIV test kits are critical medical resources in the provision of integrated abortion with HIV-FP services (see Section 4.3.2.24). HIV test kits were the most abundant (f=98.7%; n= 151) commodity in public health facilities in the last six months (see Section 4.3.2.24). The draft action plan embedded with an assessment validation tool on medical resources is elicited in Table 5.8.

Table 5.8: Draft action plan with embedded assessment validation tool: Medical resources for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

THEME 3: MEDICAL RESOURCES	
Action statement 3: Improve the availability of medical resources (drugs, equipment, and supplies) in public healthcare facilities to enhance the provision of abortion care, FP, and HIV-integrated services	
Indicate the level of agreement with the inclusion of the action statement	
1. Agree <input type="radio"/>	2. Disagree <input type="radio"/>
Method 3.1: Compile an evidence-based report on the availability of drugs, equipment and supplies essential to offer quality care at integrated healthcare facilities.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
3.1.1 Responsible person/s: Please indicate who must take responsibility for compiling an evidence-based report on the availability of drugs, equipment, and supplies essential to offer integrated healthcare. Please tick next to your choice/s.	
1. SNNPR pharmaceutical supply regional hub managers (all 4 of them)	<input type="radio"/>

2. Logistic and medical supply director of the zone health department	<input type="radio"/>
3. Logistic and medical supply director of the district health office	<input type="radio"/>
4. Logistic and medical supply coordinator of the public healthcare facility	<input type="radio"/>
4 Other, please specify _____	
3.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which evidence-based reports should be completed.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify _____	
3.1.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
Method 3.2: Deploy pharmacy professionals to public healthcare facilities to ensure the availability of resources (drugs) for integrated abortion care, FP, and HIV services	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
3.2.1 Responsible person/s: Please indicate who must take responsibility for deploying pharmacy professionals to public health facilities based on need and/or workload. Please tick next to your choice/s.	
1. The head of the zone health department	<input type="radio"/>
2. The head of the district health office	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. Other, please specify _____	
3.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which pharmacy professionals should be deployed to manage medical resources in public health facilities.	
1. Within 6 months	<input type="radio"/>

2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	
3.2.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
<p>Method 3.3: Based on the evidence-based report, address the availability of medical resources in public healthcare facilities to integrate abortion care with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>Method 3.3(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to address the availability of medical resources.</p>	
1. Avail medical resources in public healthcare facilities through donations from international and domestic NGOs	<input type="radio"/>
2. Improve the availability of medical resources in public healthcare facilities through a daily medical resource assessment and monitoring system	<input type="radio"/>
3. Negotiate with concerned government officials to periodically advocate for budget allocations for procuring the required medical resources.	<input type="radio"/>
4. If you have any other idea on addressing the availability of medical resources, please indicate it here _____	
3.3.1 Responsible person/s: Please indicate who must take responsibility for addressing the availability of medical resources in public healthcare facilities.	
1. SNNPR pharmaceutical supply regional hub managers (all 4 of them)	<input type="radio"/>
2. The coordinator of the pharmacy department of public healthcare facilities	<input type="radio"/>
3. An ad-hoc committee with one representative from domestic, one representative from international organisations, and one representative from healthcare providers, from each of the 3 zones appointed by the head of the 3 zone health departments.	<input type="radio"/>
4. Other, please specify _____	

3.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which medical resource availability in the public health facilities should be addressed.

1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	

3.3.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____

Method 3.4: Order or maintain medical equipment such as manual vacuum aspirator (MVA), electrical vacuum aspirator (EVA), and speculum that is necessary for the provision of integrated abortion care, FP, and HIV services.

Do you agree with the method? 1. Yes 2. No

Method 3.4(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to identify/or maintain medical equipment in public healthcare facilities.

1. Biomedical engineers from the regional health bureau to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input type="radio"/>
2. Biomedical officers from the zone health department to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input type="radio"/>
3. Biomedical officers from the district health office to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input type="radio"/>
4. If you have any other idea on how to identify and procure medical equipment, please indicate it here _____	

3.4.1 Responsible person/s: Please indicate who must take responsibility for facilitating strategies to identify and/or maintain medical equipment in public healthcare facilities. Please tick next to your choice/s.

1. Logistic and medical supply director of the regional health bureau	<input type="radio"/>
2. Logistic and medical supply director of the zone health department	<input type="radio"/>

3. Logistic and medical supply director of the district health office	<input type="radio"/>
4. The director of the public healthcare facility	<input type="radio"/>
5. Procurement officer in every integrated healthcare facility	<input type="radio"/>
6. Other, please specify _____	
3.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which medical equipment should be identified and/or maintained to use it properly.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify _____	
3.5.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
Method 3.5: Negotiate with the private sector (pharmacies, drug vendors, and stores) to sponsor medical resources necessary for abortion care, FP, and HIV services integrations Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 3.5(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies for sponsoring medical resources necessary for the integration of abortion care with HIV-FP services.	
1. Identify organisations in the private sector to sponsor identified medical resources	<input type="radio"/>
2. Identify an organisation in the government sector to sponsor identified medical resources	<input type="radio"/>
3. Appoint a team to take responsibility for obtaining sponsorships and memorandums of agreements/understanding (MOU)	<input type="radio"/>
4. If you have any other idea on how to encourage the private sector to avail medical resources, please indicate it here _____	

<p>3.5.1 Responsible person/s: Please indicate who must take responsibility to negotiate sponsorship with private sectors in availing medical resources necessary for integrated abortion care, HIV, and FP services. Please tick next to your choice/s.</p>	
1. SNNPR pharmaceutical supply region hub managers (all 4 of them)	<input type="radio"/>
2. The head of the zone health department	<input type="radio"/>
3. The head of the district health office	<input type="radio"/>
4. An ad-hoc committee with one representative from private companies, one representative from healthcare providers, and one representative from the community leaders, from each of the 3 districts appointed by the head of the 3 zone health departments.	<input type="radio"/>
5. Other, please specify _____	
<p>3.5.2 Timeframe: Please indicate the time frame, after approval of the action plan, within which sponsorship on MOU is signed with private sectors.</p>	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, please specify _____	
<p>3.5.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____</p>	

5.8.4 Theme 4: Infrastructure for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

Infrastructure is a physical framework through which health services are provided in a coordinated fashion to the community (Scholz, Ngoli and Flessa 2015:1). Multiple factors influence the provision of maternal and child health services in healthcare facilities (WHO 2017:6-10). Infrastructure is one of the determinant factors (Scholz, Ngoli and Flessa 2015:1) that positively or negatively affects integrated maternal

health services (Theodros, Asfaw, Abebe, Atkure, Habtamu, Mekonnen, Assefa, Kassahun Kebede and Habtamu 2016:62).

The government of Ethiopia has made great efforts in the construction of health posts, health centres, and hospitals across the country over the last decade (MOH Ethiopia 2015:64). However, most healthcare facilities were made operational without having the necessary infrastructures, such as road access, public transport, electricity, water systems, telecommunication, and computer technology to assist in the delivery of integrated maternal health services (Fisseha, Berhane, Worku and Terefe 2017:1). Therefore, infrastructures necessary in public health facilities need to be in place to deliver integrated maternal healthcare services, especially for rural and underserved communities (Pan American Health Organization and WHO 2017:2).

As indicated in the Ethiopian health sector transformation plan, 88-100% of public hospitals and 57% of public health centres have regular electricity or other sources of power systems (2015:49). Over three-quarters of all healthcare facilities have an improved water source in their facility, including 49% of health posts. Over two-thirds of health facilities, including 70% of health posts, have access to emergency transport systems (MOH Ethiopia 2015:49).

Poor road accessibility and insufficient transportation options can compromise life-threatening obstetric emergency management (Broni, Aikins, Asbeyi and Agyemang-Duah 2014:32). An effective variety of means of transport options, including ambulances, must be available, particularly in rural areas (Broni et al. 2014:35).

As per IPAS national standards, service-providing rooms need to have couches, a waste disposal system, sanitary napkins (2018:48), adequate space and good air circulation, maintaining the privacy of clients (WHO 2018:41). However, in this study's context, abortion care rooms were not adequate, rooms were not ventilated, and had no comfortable temperature, according to 83 (54.2%), 97 (73.9%), and 103 (67.3%) respondents, respectively (see Section 4.3.2.21). Respondents also indicated that reducing transport costs can improve communities' use of integrated maternal health services (see Section 4.3.1.15). Thus, improving the necessary infrastructures enhances the provision of abortion care, FP, and HIV-FP-integrated health services

(see Section 4.3.1.15). The draft action plan embedded with the assessment validation tool focused on infrastructure is elicited in Table 5.9, as follows:

Table 5.9: Draft action plan with embedded validation tool: Infrastructure for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

THEME 4: INFRASTRUCTURE	
Action statement 4: Improve public health facilities' infrastructure to enhance the integration of abortion care with HIV-FP services.	
Indicate the level of agreement with the inclusion of the action statement	
1. Agree <input type="radio"/> 2. Disagree <input type="radio"/>	
Method 4.1: Compile an evidence-based report to assess the infrastructure of existing healthcare facilities to deliver integrated abortion care with HIV-FP services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
4.1.1 Responsible person/s: Please indicate who must take responsibility for compiling evidence-based reports on the infrastructure of the existing healthcare facilities. Please tick next to your choice/s.	
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
4. Other, please specify _____	
4.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an evidence-based report is to be completed.	
1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>

3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	
4.1.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
<p>Method 4.2: Share the evidence-based report with concerned governmental bodies, partners, civic societies, and communities to negotiate support to improve existing facilities and enhance the delivery of integrated abortion care with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>4.2.1 Responsible person/s: Please indicate who must take responsibility for sharing the evidence-based reports with concerned bodies to improve the infrastructure of existing healthcare facilities. Please tick next to your choice/s.</p>	
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
4. Others, please specify _____	
<p>4.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the report must be shared and negotiations with concerned bodies commence.</p>	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify _____	

4.2.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____

Method 4.3: Negotiate with the road and transport authority to allocate a budget for improving road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services.

Do you agree with the method? 1. Yes 2. No

Method 4.3(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to allocate a budget to improve road infrastructure

1. Compile a needs analysis to assess the status of road infrastructures in health facilities	<input checked="" type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input checked="" type="radio"/>
3. Share the report and the budget request with government officials for discussion and obtaining financial support	<input checked="" type="radio"/>
4. If you have any other ideas on improving government officials' awareness of the need for improved road infrastructure, please indicate them here _____	

4.3.1 Responsible person/s: Please indicate who must take responsibility for negotiating with government higher officials to allocate a budget for the improvement of road infrastructure.

1. The head of the zone road and transport department	<input checked="" type="radio"/>
2. The head of the zone health department	<input checked="" type="radio"/>
3. The director of the public healthcare facility	<input checked="" type="radio"/>
4. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices.	<input checked="" type="radio"/>
5. Other, please specify _____	

4.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which negotiation with government higher officials must be finalised.

1. Within 3 months	<input checked="" type="radio"/>
2. Within 6 months	<input checked="" type="radio"/>
3. Within 9 months	<input checked="" type="radio"/>
4. Other, please specify _____	

4.3.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____

Method 4.4: Organise an advocacy meeting on the needs analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.

Do you agree with the method? 1. Yes 2. No

4.4.1 Responsible person/s: Please indicate who must take responsibility for organising advocacy meetings on the need for ambulance transportation. Please tick next to your choice/s.

1. Medical service director of the regional health bureau

2. Medical service director of the zone health department

3. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from healthcare providers from each of the 3 districts appointed by the head of the 3 district health offices.

4. Other, please specify _____

4.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an advocacy meetings on the need analysis of ambulance transportation must be conducted.

1. Within 3 months

2. Within 6 months

3. Within 9 months

4. Other, please specify _____

4.4.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____

Method 4.5 Strengthen the transportation system to public healthcare facilities to enhance the delivery of integrated abortion care, HIV, and FP services.

Do you agree with the method? 1. Yes 2. No

Method 4.5(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to strengthen the transportation system to public healthcare facilities.

1. Negotiate with private transport associations to increase daily trips to public health facilities

2. Negotiate with public transport associations to increase the daily trips to public health facilities

3. Increase the number of motorbikes to enhance access to public health facilities	<input type="radio"/>
4. If you have any other ideas on how to strengthen public transport to enhance the integration of health services, please indicate them here _____	
4.5.1 Responsible person/s: Please indicate who must take responsibility for facilitating the above-mentioned strategies to strengthen transport accessibility to public health facilities. Please tick next to your choice/s.	
1. Medical service director of the zone health department	<input type="radio"/>
2. Medical service director of the district health office	<input type="radio"/>
3. An ad-hoc committee with one representative from road and transport workers, one representative from the community leaders, and one representative from healthcare providers, from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
4. Other, please specify _____	
4.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the facilitation of the transport system should be initiated.	
1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	
4.5.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
Method 4.6: Ensure safe and adequate water supplies to public health facilities to enhance the integration of abortion care, HIV, and FP services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 4.6(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to ensure safe and adequate water supply systems to public health facilities.	

1. Compile a needs analysis of the availability of safe and adequate water supplies to public healthcare facilities	<input type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input type="radio"/>
3. Compile a report to motivate a budget allocation for water and sanitation based on the needs analysis	<input type="radio"/>
4. If you have any other idea on how to ensure a safe and adequate water supply system to public healthcare facilities, please indicate it here _____	
4.6.1 Responsible person/s: Please indicate who must take responsibility for implementing the mentioned strategies to ensure a safe and adequate water supply to public healthcare facilities. Please tick next to your choice/s.	
1. The head of water and sewerage/sanitation authority of the zone department	<input type="radio"/>
2. The head of water and sewerage/sanitation authority of the district office	<input type="radio"/>
3. An ad-hoc committee with one representative from water and sewerage workers, one representative from the community leaders, and one representative from healthcare providers, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Other, please specify _____	
4.6.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the strategies to ensure safe and adequate water supply to public healthcare facilities should be established.	
1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	
4.6.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	

Method 4.7: The installation of hydroelectric or other sources of power (generator and solar light) to ensure 24-hour power sources that can enhance the integration of abortion care with HIV-FP services.

Do you agree with the method? 1. Yes 2. No

Method 4.7(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to allocate budgets for hydroelectric/generator/solar power installation.

1. Compile a needs analysis of the availability of hydroelectric or other sources of power in public healthcare facilities	<input type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input type="radio"/>
3. Compile a report to motivate a budget allocation for hydroelectric or other sources of power based on the needs analysis	<input type="radio"/>
4. If you have any other idea on how to allocate a budget for the installation of various power sources, please indicate it here _____	

4.7.1 Responsible person/s: Please indicate who must take responsibility for facilitating strategies for the allocation of budgets for various power sources. Please tick next to your choice/s.

1. Planning, monitoring, and economic development director of the zone health department	<input type="radio"/>
2. Planning, monitoring, and economic development director of the district health office	<input type="radio"/>
3. An ad-hoc committee with one representative from healthcare providers, one representative from hydroelectric and power workers, and one representative from an NGO, from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
4. Other, please specify _____	

4.7.2 Time frame: Please indicate the time frame, after approval of the action plan, within which power sources should be installed in public healthcare facilities.

1. Within 9 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	

4.7.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____

Method 4.8: Construct accommodation for healthcare providers in the public health compounds, particularly in rural areas to enhance the delivery of integrated abortion care with HIV-FP services.

Do you agree with the method? 1. Yes 2. No

Method 4.8(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to construct accommodation for healthcare providers in public healthcare facilities.

1. Compile a needs analysis of the availability of healthcare provider accommodation in public healthcare facilities	<input type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input type="radio"/>
3. Identify organisations from the government and private sectors sponsoring the construction of healthcare provider accommodation	<input type="radio"/>
4. Compile a report to motivate a budget allocation for the construction of healthcare provider accommodation based on the needs analysis	<input type="radio"/>

4. If you have any other idea on how to allocate a budget for the construction of accommodation in public healthcare facilities, please indicate it here _____

4.8.1 Responsible person/s: Please indicate who must take responsibility for facilitating strategies to mobilise financial resources for the construction of healthcare provider accommodation. Please tick next to your choice/s.

1. Planning, monitoring, and economic development director of the zone health department	<input type="radio"/>
2. Planning, monitoring, and economic development director of the district health office	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from healthcare providers, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>

5. Other, please specify _____

4.8.2 Time frame: Please indicate the time frame, after approval of the action plan, within which healthcare providers will start living in the constructed accommodation.

1. Within 1 year	<input type="radio"/>
2. Within 2 years	<input type="radio"/>
3. Within 3 years	<input type="radio"/>
4. Other, please specify _____	
4.8.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	

5.8.5 Theme 5: Fiscal resources for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

Globally, development assistance has played a significant role in strengthening the health system through financial support since 1990 (Berman, Mann, and Ricculli 2018:227). The financial support from global development assistance for health increased from 7 billion USD in 1990 to more than 30 billion USD by 2015 (Berman, Mann and Ricculli 2018:227).

Ethiopia is one of the countries obtaining financial support from global development assistance (WHO 2017:14). Bilateral and multilateral donors, international and local non-governmental organisations, and private and insurance companies are increasing their financial support to the Ethiopian health system (WHO 2017:14). The Ethiopian government has also increased budget allocation for health sectors from the government treasury (Federal, regional, zonal, and district levels). However, the expansion of healthcare facilities, the increased staffing incentives, healthcare providers' salaries, and administrative costs are demanding greater financial resources in the health system (Ministry of Health Ethiopia 2019:73). Maternal, neonatal and child healthcare is one of the most resource-demanding health services, requiring financial support from governmental and global developmental assistance (MOH Ethiopia 2015:525).

Maternal health service is often affected by the cost of healthcare (Banke-Thomas et al., 2019:2); thus, the cost needs to be financed/subsidised by concerned government

bodies (WHO 2012:8). Reducing or eliminating the cost of healthcare, particularly for the poor, could increase healthcare utilisation (Ilboudo et al. 2015:505). The uptake of health services can also be increased by eliminating unnecessary routine investigations such as x-rays, CT scans, ultrasounds, and a wide range of laboratory tests (Ilboudo et al. 2015:505). Moreover, financial support from volunteer community members and healthcare facilities' revenue is necessary to support integrated maternal health services (Alebachew, Mitiku, Carlyn and Berman 2018:5). Adequate financial resources from the government treasury need to be the priority in sustaining the healthcare system to deliver integrated maternal health services (Banke-Thomas et al., 2019:2). As suggested by respondents, avoiding or reducing the cost of maternal healthcare proportionally improves service utilisation in the public health facilities (see Section 4.3.1.31). The draft action plan embedded with the assessment validation tool focused on fiscal resources is elicited in Table 5.10 as follows:

Table 5.10: Draft action plan with embedded assessment validation tool: Fiscal resources for the integration of abortion care with HIV-FP services in public health care facilities of Ethiopia

THEME 5: FISCAL RESOURCES	
Action statement 5: Avoid/reduce out-of-pocket payments for health services to enhance the uptake of abortion, HIV, and FP-integrated health services.	
Indicate the level of agreement with the inclusion of the action statement	
1. Agree <input type="radio"/>	2. Disagree <input type="radio"/>
Method 5.1: Compile an evidence-based report on the need for free abortion care, HIV, and FP integrated services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
5.1.1 Responsible person/s: Please indicate who must take responsibility for compiling an evidence-based report to negotiate with higher government officials on the allocation of budgets for integrated abortion, FP, and HIV services to allow for free service delivery. Please tick next to your choice/s.	
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>

2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from finance and economic development workers from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Other, please specify _____	
5.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which free abortion, FP, and HIV integrated services should be initiated.	
1. Within 9 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	
5.1.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
<p>Method 5.2: Strengthen community-based health insurance (CBHI) to avoid out-of-pocket payments and cover the expense of abortion care, HIV, and FP integrated services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>Method 5.2(a): Please make a tick in the circle next to the applicable strategies of your choice/s that indicate/s how to strengthen CBHI.</p>	
1. Educate the community on the importance of CBHI initiatives	<input type="radio"/>
2. Assign a CBHI focal person to the district health office	<input type="radio"/>
3. Educate and work with the community leaders on CBHI initiatives	<input type="radio"/>
4. Obtain support for the CBHI initiative from concerned government officials	<input type="radio"/>
5. If you have any other ideas on how to strengthen community-based health insurance, please indicate them here _____	
5.2.1 Responsible person/s: Please indicate who must take responsibility for facilitating the mentioned strategies to strengthen CBHI. Please tick next to your choice/s.	

1. SNNPR health insurance agency branch managers (all 4 of them)	<input type="radio"/>
2. Medical service director of the zone health department	<input type="radio"/>
3. Medical service director of the district health office	<input type="radio"/>
4. An ad-hoc committee with one representative from civic society, one from the community leaders, and one representative from healthcare providers from each of the 3 zones appointed by the head of the 3 zone health departments.	<input type="radio"/>
5. Other, please specify _____	
5.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which CBHI initiatives should be started to enhance the integration of abortion care, HIV, and FP services.	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other, please specify _____	
5.1.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
Method 5.3: Secure incentives to motivate healthcare providers to enhance the integration of abortion care with HIV-FP services.	
Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 5.3(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to motivate healthcare providers.	
1. Pay incentives to healthcare providers working in integrated services based on performance criteria	<input type="radio"/>
2. Allocate a budget for overtime based on performance	<input type="radio"/>
3. Allow free integrative healthcare services to healthcare providers and their families	<input type="radio"/>

4. If you have any other idea on how to increase healthcare providers' motivation, please indicate it here _____	
5.3.1 Responsible person/s: Please indicate who must take responsibility for facilitating the implementation of strategies related to healthcare providers' incentives. Please tick next to your choice/s.	
1. The head of the zone health department	<input type="radio"/>
2. The head of the district health office	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. Other, please specify _____	
5.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which healthcare providers' incentives must be addressed	
1. Within 9 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	
5.3.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	

5.8.6 Theme 6: Policies, guidelines, and strategies for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

The Federal Ministry of Health Ethiopia is mandated to formulate policies, strategies, and guidelines in consultation with regional health bureaus and other partner organisations (MOH Ethiopia 2019:2; MOH Ethiopia 2015:63). The first health policy in Ethiopia was formulated in 1993 (MOH Ethiopia 2019:1). The development of frontline and middle-level healthcare providers has been a priority of Ethiopia's health policy (Alebachew and Waddington 2015:6) that emphasises preventive, curative, and

rehabilitative health services for the population (MOH Ethiopia 2015:3). Following the health policy, a 20-year health sector development strategy was developed and implemented over four phases, using a series of five-year plans from health sector development programmes (MOH Ethiopia 2015:64).

The Health Extension Programme (HEP), as part of the health sector development programme, was launched in 2003 to deliver health promotion, disease prevention, and curative health services at the community level to achieve universal primary healthcare coverage (MOH Ethiopia 2019:47). Furthermore, the health sector has been using a health development army (mainly women) to ensure community participation in the implementation of HEP with the support of health extension workers in the primary healthcare units (MOH Ethiopia 2015:22).

One of the policies formulated in Ethiopia to improve women's health status was the abortion legislation (Astrid, Haldis, Getnet, Marte, Haaland, Richard, Joseph and Karen 2019:126). Abortion legislation may be classified as liberal, semi-liberal, and restrictive, as in the case of Zambia, Ethiopia, and Tanzania, respectively (Astrid et al., 2019:126). The abortion legislation may be used as a guideline on how, where, and when to provide abortion services (Erdman and Johnson 2018:35). Ethiopia initially developed the abortion legislation in 2006 and made revisions in 2014 (Berer 2017:15; Erdman and Johnson 2018:120; MOH Ethiopia 2006; WHO 2012:8; MOH Ethiopia 2014). The healthcare providers working in public health facilities are encouraged to offer abortion services based on the principles set in the revised abortion law (MOH 2014:11; WHO 2012:8). However, public healthcare facilities often do not have abortion-related documents to use as a reference for abortion services (Johnson, Lavelanet and Schlitt 2018:35).

In this study's context, 125 (40.8%) healthcare providers were aware of the availability of abortion regulatory documents (see Section 4.4.10), and 100 (32.7%) had at least one abortion-related regulatory document in their healthcare facilities (see Section 4.3.2.10). As indicated in Section 4.3.2.10, seven different abortion-related policies, guidelines, and strategies were mentioned by healthcare providers.

The first FP guideline was developed in 1996 and revised in 2011 based on existing national health policy and strategic documents (MOH Ethiopia 2020:11). Since then, different policies, guidelines, and strategies have been developed to improve access and the use of FP services (MOH Ethiopia 2020:11). The developed regulatory documents assist healthcare providers in delivering FP services safely (Jay and Kavita 2018:18). In this study, 105 (34.3%) healthcare providers were aware of the availability of FP regulatory documents (see Section 4.3.2.12) and 91 (29.3%) had at least one FP related regulatory document in their healthcare facilities (see Section 4.3.2.14). As indicated in Section 4.3.2.11, nine different FP-related policies, guidelines and strategies were mentioned by respondents.

Between 2000 and 2017, Ethiopia remarkably reduced morbidity and mortality attributed to HIV/AIDS. It happened as a result of the development of relevant policy frameworks, strategic plans, and technical guidelines aimed at strengthening the overall national response (National HIV road map of Ethiopia 2018:7). The development of policies enables healthcare providers to deliver appropriate health services (MOH Ethiopia 2014:111).

The HIV/AIDS assessment survey by Deribaw et al. (2018:535) indicated 43.8% of public hospitals and 17.8% of public health centres had national standards on HIV/AIDS documents, and 33% of public health facilities used available guidelines on HIV/AIDS services. In this study's context, 105 (34.3%) healthcare providers were aware of at least one HIV/AIDS-related regulatory document (see Section 4.3.2.12), and 57 (18.6%) had one HIV/AIDS-related regulatory document in their healthcare facilities (see Section 4.3.2.14). A total of six different HIV/AIDS-related regulatory documents were mentioned by 105 (34.3%) respondents (see Table 4.42).

The formulation of policies on integrated maternal healthcare services has drawn the attention of governmental and non-governmental organisations (Johnson, Varallyay and Ametepi 2012:1). However, policies, strategies, and guidelines on integrated health services are limited in Ethiopia. Integrated regulatory documents provide an opportunity for healthcare providers to improve clinical skills, management skills, and communication skills (Mutemwa, Mayhew, Colombini, Busza, Kivunaga and Ndwiga 2013:18). In this study, 35 (11.4%) healthcare providers were aware of integrated

regulatory documents (see Section 4.3.2.13) and 9 (3%) had one integrated regulatory document in the healthcare facilities (see Section 4.3.2.14). Five different integrated regulatory documents were mentioned by 35 (11.4%) respondents (see Section 4.3.2.13). The draft action plan embedded with the assessment validation tool focused on policies, strategies, and guidelines is elicited in Table 5.11 as follows:

Table 5.11: Draft action plan with embedded assessment validation tool: Policies, guidelines, and strategies for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

THEME 6: POLICIES, STRATEGIES, AND GUIDELINES	
<p>Action statement 6: Avail comprehensive regulatory documents to enhance the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.</p> <p>Indicate the level of agreement with the inclusion of the action statement</p> <p>1. Agree <input type="radio"/> 2. Disagree <input type="radio"/></p>	
<p>Method 6.1: Develop or update regulatory documents that can facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>Method 6.1(a): Please make a tick in the circle next to the applicable strategies of your choice/s to avail regulatory documents.</p>	
1. Negotiate with policymakers to appoint experienced professionals to assess the relevancy of the applicable regulatory documents	<input type="radio"/>
2. Negotiate with the directors of the Ministry of Health to assign experts to develop or adapt regulatory documents to be available at all public healthcare facilities.	<input type="radio"/>
3. Healthcare providers working in the integrated healthcare service should provide input on the draft regulatory documents to ensure the theoretical and practical aspects of integrated services are addressed	<input type="radio"/>
4. If you have any other ideas on how to develop or update regulatory documents, please indicate them here _____	

<p>6.1.1 Responsible person/s: Please indicate who must take responsibility for developing/updating regulatory documents. Please tick next to your choice/s.</p>	
1. The federal MOH Ethiopia maternal, neonatal, and child health director	<input type="radio"/>
2. Maternal neonatal and child health director of the regional health bureau	<input type="radio"/>
3. An ad-hoc committee with one representative from the abortion case team, one representative from the HIV-FP case team, and one representative from the Ethiopian midwife association appointed by the FMOH Ethiopia maternal, neonatal, and child health director.	<input type="radio"/>
4. Other, please specify _____	
<p>6.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which regulatory documents should be developed/updated.</p>	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other, please specify _____	
<p>6.1.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____</p>	
<p>Method 6.2: Upload all regulatory documents to the regional health bureau telegram group to make them available to all healthcare facilities providing integrated health services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>6.2.1 Responsible person/s: Please indicate who must take responsibility for uploading regulatory documents to the regional health bureau telegram group. Please tick next to your choice/s.</p>	
1. The director of maternal, neonatal, and child health of the regional health bureau	<input type="radio"/>
2. Programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau	<input type="radio"/>
3. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments	<input type="radio"/>
4. Other, please specify _____	

6.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which regulatory documents should be ready and available on the regional health bureau telegram group	
4. Within 12 months	<input type="radio"/>
5. Within 18 months	<input type="radio"/>
6. Within 24 months	<input type="radio"/>
7. Other, please specify _____	
6.2.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
Method 6.3: Provide professional development training on the use of regulatory documents within all integrated health services. Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
Method 6.3(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to provide technical support.	
1. Provide training on how to access the regulatory documents from the websites and/or Google Drive on the available computer/s in the healthcare facilities	<input type="radio"/>
2. Provide technical support through supportive supervision	<input type="radio"/>
3. Provide technical support by conducting review meetings	<input type="radio"/>
4. If you have any other idea on how to provide technical support on regulatory document utilisation, please indicate it here _____	
6.3.1 Responsible person/s: Please indicate who must take responsibility for facilitating professional development training on the use of regulatory documents. Please tick next to your choice/s.	
1. Programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau	<input type="radio"/>
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	<input type="radio"/>
3. Programme officers (1 abortion care and 1 HIV-FP service) from each of the selected 3 district health offices	<input type="radio"/>
4. An ad-hoc committee representing senior healthcare providers (1 abortion care and 1 HIV-FP service) appointed by the director of the public healthcare facility.	<input type="radio"/>
5. Other, please specify _____	

6.3.2. Time frame: Please indicate the time frame, after approval of the action plan, within which technical support on regulatory documents use should be provided.	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other specify _____	
6.3.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	

5.8.7 Theme 7: Behavioural change and communication for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

Health education and communication is the art of informing, influencing, and motivating individuals or communities about the importance of health-related information (MOH Ethiopia 2016:24). It can also be defined as a process of providing information to individuals and communities to promote healthy behaviours (MOH Ethiopia 2016:6) that strive to address intended changes (USAID 2017:8). Hence, behavioural change and communication is a widely used intervention that enables individuals, families, communities, and societies to acquire new knowledge and skills to adopt a healthier lifestyle (Laverack 2017:1).

An important aspect of behaviour change is a person’s perception of adopting the new behaviour. The four most significant determinants of a person’s behaviour changes are (a) Perceived self-efficacy or skills (an individual’s belief to do things with the existing skill and knowledge), (b) Perceived social norms (the desire to be accepted by the community), (c) Perceived positive consequences (effectiveness of various actions to reduce threat or illness) (Ngigi and Busolo 2018:87), and (d) Perceived negative consequences (a person thinks desperately as a result of performing unwanted behaviour) (USAID 2017:13; Ngigi and Busolo 2018:87).

Health messages can be shared with audiences through face-to-face, group discussions, telecommunication, and mass media (Ngigi and Busolo 2018:87). Interpersonal communication is a face-to-face exchange of information between trusted sources, such as healthcare providers, faith-based organisations, and community outreach health workers to influence attitudes, knowledge, and promote social norms (Ngigi and Busolo 2018:88) and sustain positive health behaviours (MOH Ethiopia 2016:70). Mass media such as radio, television, and newspapers are important to raise awareness and increase knowledge of health-related issues, stimulate audiences to seek services, and promote social norms that favour healthy practices (SNV 2016:23; MOH Ethiopia 2016:67). Mobile and wireless technologies are also currently used to impart health-related messages to individuals and communities in remote, hard-to-reach areas where transportation and infrastructure are less developed (Lapão, Dussault and WHO 2017:463).

In this study's context, abortion care users obtained information on abortion care during health education at healthcare facilities, from health extension workers, and radio messages (see Section 4.3.2.17). Nurses, friends, partners, family members, and health extension workers were the sources of information on FP services (see Section 4.3.1.23), whereas radio, television, and health education in the healthcare facilities were sources of information on HIV/AIDS services (see Section 4.3.1.25).

Healthcare providers and health extension workers are responsible for providing information on integrated health services to the community at the healthcare facility and community levels, respectively (see Section 4.3.2.30). Health education materials such as leaflets, brochures, and posters were used by healthcare providers to impart information on abortion, FP, and HIV services (see Section 4.3.2.31). The draft action plan embedded with the assessment validation tool focused on behavioural change and communications is elicited in Table 5.12 as follows:

Table 5.12: Draft action plan with embedded assessment validation tool: Behavioural change and communication for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia

THEME 7: BEHAVIOURAL CHANGE AND COMMUNICATION	
<p>Action statement 7: Provide health-related information to communities to enhance the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.</p> <p>Indicate the level of agreement with the inclusion of the action statement</p> <p>1. Agree <input type="radio"/> 2. Disagree <input type="radio"/></p>	
<p>Method 7.1: Advocacy meetings with political leaders, religious leaders, the elderly, and other communities to share information on the advantages of abortion care, FP, and HIV services integration.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>7.1.1 Responsible person/s: Please indicate who must take responsibility for sharing information with political leaders, religious leaders, the elderly, and communities on the advantages of abortion care, FP, and HIV services integration.</p>	
1. The head of the zone health department	<input type="radio"/>
2. The head of the district health office	<input type="radio"/>
3. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
4. An ad-hoc committee representation from healthcare providers (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public health facility	<input type="radio"/>
5. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
6. Other, please specify _____	
<p>7.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an advocacy meeting should be initiated with political leaders, religious leaders, the elderly, and other community members.</p>	

1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, please specify _____	
7.1.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
<p>Method 7.2: Develop and avail health education material (leaflets, brochures, pamphlets, and banners) to enhance the integration of abortion care with HIV-FP services in public healthcare facilities.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>Method 7.2(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to produce and distribute health education materials.</p>	
1. Compile a budget report based on the quotations for the development and availability of health education materials	<input type="radio"/>
2. The healthcare facility allocates a budget to develop the content of the health education materials relevant to integrated health services	<input type="radio"/>
3. Identify organisations in the private sector to sponsor, develop and avail health education materials.	<input type="radio"/>
4. Identify NGOs to sponsor, develop and avail health education materials	<input type="radio"/>
5. Avail the health education materials in the integrated public healthcare facilities	<input type="radio"/>
6. If you have any other ideas on how to avail financial resources for the production and distribution of health education materials, please indicate them here _____	
7.2.1 Responsible person/s: Please indicate who must take responsibility for facilitating the production and distribution of health education materials in the healthcare facilities. Please tick next to your choice/s.	
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	<input type="radio"/>
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>

4. An ad-hoc committee with one representative from civic society, one from the community leaders, and one representative from healthcare providers, from each of the 3 zones appointed by the head of the 3 zone health departments.	<input type="radio"/>
5. Other, please specify _____	
7.2.1 Time frame: Please indicate the time frame, after approval of the action plan, within which health education materials should be produced and distributed.	
1. Within 9 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify _____	
7.2. Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	
<p>Method 7.3: Use mass media (radio, social media, and texts) to increase community awareness on the provision of abortion care, FP, and HIV-integrated services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>Method 7.3(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to use mass media.</p>	
1. Negotiate with radio journalists on health education slots/time available to discuss the advantages of integrated health service information	<input type="radio"/>
2. Convey messages through social media (Facebook, Telegram, Instagram etc.) on the advantages of providing integrated health services in public health facilities	<input type="radio"/>
3. Negotiate with the Ethiopian telecom sponsors to send a text message on the advantages of integrated health services	<input type="radio"/>
4. If you have any other ideas on how to use mass media, please indicate them here _____	

<p>7.3.1 Responsible person/s: Please indicate who must take responsibility for using mass media on integrated abortion care with HIV-FP services. Please tick next to your choice/s.</p>	
1. The manager of communication and broadcasting of the zone	<input type="radio"/>
2. The head of the zone health department	<input type="radio"/>
3. The head of the district health office	<input type="radio"/>
3. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from the journalists, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Other, please specify _____	
<p>7.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which mass media should be used to integrate abortion care with HIV-FP services.</p>	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify _____	
<p>7.3.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____</p>	
<p>Method 7.4: Organise awareness campaigns in the community on integrated abortion care, FP, and HIV services by community healthcare providers.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>Method 7.4(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to improve community awareness of integrated health services.</p>	
1. Healthcare providers and health extension workers should provide health information to the community (using developed materials)	<input type="radio"/>

2. Women health development army leaders should provide health information to the community (using developed materials)	<input type="radio"/>
3. Health post and health centre focal persons should provide health information to the community (using developed materials)	<input type="radio"/>
4. If you have any other ideas on how to improve community awareness of integrated services, please indicate them here _____	
7.4.1 Responsible person/s: Please indicate who must take responsibility for organising awareness campaigns on integrated abortion care with HIV-FP services. Please tick next to your choice/s.	
1. Programme officer (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	<input type="radio"/>
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. An ad-hoc committee (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public healthcare facility	<input type="radio"/>
5. Other, please specify _____	
7.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which information on integrated abortion care and HIV-FP services should be addressed.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify _____	
7.4.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	

Method 7.5: Enhance the integration of abortion care, HIV, and FP services using an electronic communication system.

Do you agree with the method? 1. Yes 2. No

Method 7.5(a): Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to enhance integrated health services using electronic technology.


1. Enhance the provision of integrated health services in the healthcare facilities using internet technology	<input type="radio"/>
2. Enhance the provision of integrated health services in healthcare facilities using telephone communication	<input type="radio"/>
3. Enhance the provision of integrated health services in the healthcare facilities using fax technology	<input type="radio"/>
4. If you have any other ideas on how to enhance integrated healthcare services using an electronic technology system, please indicate them here _____	

7.5.1 Responsible person/s: Please indicate who must take responsibility for using an electronic system to enhance the integration of abortion care with HIV-FP services. Please tick next to your choice/s.

1. The director of the public healthcare facility	<input type="radio"/>
2. The head of Information and technology of the zone health department	<input type="radio"/>
3. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
4. Other, please specify _____	

7.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an electronic communication system should be used.

1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>

3. Within 12 months	
4. Other, please specify _____	
7.5.3 Please add if you have any new ideas pertaining to improvements of the action statement, the method, responsible person/s, and the timeframe _____	

5.9 SUMMARY

In this chapter, a draft action plan for the integration of abortion care with HIV-FP services was developed. The action plan was developed based on the data collected in phase one from women who received abortion care, healthcare providers and the literature review on action plan development from phase two.

The draft action plan with an embedded assessment validation tool was used by programme officers in phase three, and the outcome is presented in the next chapter (Chapter Six).

CHAPTER SIX

PHASE III: VALIDATION OF THE ACTION PLAN

6.1 INTRODUCTION

In this chapter, the research methodology pertaining to phase three, the applicable population, sample of the e-Delphi panellists and the e-Delphi as data gathering technique are described. The ethical considerations, validation process, the research findings and final action plan are also presented as the study's completed phase three. The research progress is illustrated in Table 6.1.

Table 6.1: Chapter layout and progress

Chapter 1	Overview of the study
Chapter 2	Literature review on: <ul style="list-style-type: none"> ➤ Change logic model ➤ Ethiopian healthcare services ➤ Abortion in Ethiopia ➤ Abortion services ➤ FP service ➤ HIV/AIDS service ➤ Integrated healthcare services
Chapter 3	1. The overall methodology of the study 2. Phase 1 <ul style="list-style-type: none"> ➤ Methodology followed ➤ Data analysis ➤ Data interpretation and presentation
Chapter 4	Phase 1: data presentation, analysis, and description of the research findings <ul style="list-style-type: none"> ➤ Abortion care users ➤ Healthcare providers
Chapter 5	Phase 2 <ul style="list-style-type: none"> ➤ Literature review on action plan development ➤ Principles and processes for action plan development ➤ Draft action plan with an embedded assessment validation tool

Chapter 6	Phase 3 <ul style="list-style-type: none"> ➤ Methodology ➤ Validation process and final action plan ➤ interpretation of the findings ➤ Action plan for the implementation of one-stop integrated abortion care, HIV and FP service in public health facilities of Ethiopia (The so-called AFH Service)
Chapter 7	Conclusions, limitations and recommendations

6.2 STUDY DESIGN

Research designs are strategies or procedures that are followed to obtain information through quantitative, qualitative or mixed-method approaches (Creswell and Creswell 2018:42; Creswell 2014:42). Designing an appropriate method is critically important to address the intended research outcome (Bordens and Abbott 2018:103). In this study, a mixed-method research design was used, with the quantitative method used in phase one, and the qualitative (using the e-Delphi technique) used in phase three.

6.3 POPULATION

A study population refers to the group of people or elements from which research subjects are drawn (Leavy 2017:76) to apply the findings from a sample to a larger group of the population (Bordens and Abbott 2018:165). The population was health programme officers coordinating HIV-FP and abortion care services, working at regional, zonal and district health offices of southern Ethiopia. A total of 135 abortion care and 135 HIV-FP service programme officers were working at regional, zonal, and district levels of southern Ethiopia during the study period (Southern People Health Bureau 2018 annual report).

6.4 SAMPLING AND SAMPLE SIZE

A sample can be defined as a group of individuals or subjects who have a typical characteristic of the population from which they are drawn (Bruce, Pope and Stanistreet 2018:127). Broadly, there are two types of sampling methods, namely

probability and non-probability sampling (Gliner, Morgan and Leech 2017:143; Leavy 2017:78). The most widely used technique to obtain a sample for a population is the probability sampling method, and this approach was used in phase one of this study (see Section 3.5.5). The non-probability sampling method entails participants being selected based on the researcher's predefined criteria (Edmonds and Kennedy 2017:20). Purposive sampling is a non-probability sampling technique where participants are selected from the accessible population that are apparent or typical to the study population (Gliner, Morgan and Leech 2017:498). Qualitative researchers often use the purposive sampling method in the qualitative phase of mixed-method research (Leavy 2017:79).

Purposive sampling was used to recruit 14 programme officers (7 abortion care and 7 FP-HIV programme officers) from the region, zones and district offices. They provided comprehensive information and input on the draft action plan developed for the implementation of integrated abortion care with HIV-FP services.

Participants were selected in collaboration with the regional health bureau, zonal health departments, and district health offices. These offices agreed to facilitate the recruitment of experienced programme officers by sharing the recruitment letter (see Annexure 8). To this end, two programme officers were purposefully selected from the regional health bureau, six from zonal health departments, and six from district health offices to ensure representativeness at all levels relevant to the study. These individuals received recruitment letters from the head of the respective health office, as sent by the researcher. The programme officers assured their voluntary participation by clicking the link at the end of the recruitment letter (see Annexure 8).

6.5 THE E-DELPHI TECHNIQUE

The Delphi technique is a systematic process of gathering information on specific issues by involving a group of experts (Shariff 2015:1; Soliman and Khaton 2015:50) to explore ideas and generate appropriate information or input for the decision-making process (Guglyuvatyy and Stoianoff 2015:186).

The technique was developed by the Rand Corporation in the 1950s. It is an interactive research methodological for obtaining opinions from a panel of independent experts concerning a specific subject or matter to address research questions (Skinner, Nelson, Chin and Land 2015:32). It is also a widely used and accepted method for gathering data from respondents within their domain of expertise and is suited as a method for consensus-building using a series of questionnaires and iterations. Experts are encouraged to revise or adopt their earlier answers based on the replies from other panellists (Soliman and Khaton 2015:50; Satia and Chauhan 2018:105). Researchers play an important role in facilitating the process of iteration (Avella 2016:307). In this study's context, three rounds (see Sections 6.14, 6.15 and 6.15) took place to obtain the required information (reach consensus) from the panel of experts.

The e-Delphi participants could live in different locations (experts do not meet physically and may be geographically dispersed) and forward their opinion to the panel of experts using a web-based or other opinion-sharing technology (Sekayi and Kennedy 2017:2762; Shariff 2015:1; Guglyuvatyy and Stoianoff 2015:186). The literature on the e-Delphi technique does not provide clear guidelines on the number of experts that should be involved (Taylor 2019:13). The sample size could be decided on and depends on the problem being investigated. Some researchers indicated that a panel size of 10–15 individuals could be sufficient (Ab Latif, Dahlan, Mulud and Nor 2017:90; Taylor 2019:13).

Ultimately, the most crucial part of the e-Delphi technique is maintaining participation from the panel of experts (Avella 2016:39). The four characteristics of the e-Delphi technique are (1) the use of experts, (2) the panel of experts, (3) anonymity, and (4) iteration rounds and control feedback (Skinner et al., 2015:33).

6.5.1 Use of experts

One of the essential parts of the e-Delphi technique is selecting individuals who meet the requirements for panel membership (Avella 2016:309). Experts need to have knowledge and experience of the research phenomenon and can see the thematic areas being studied from different angles, including scientific and cultural points of view (Skinner et al. 2015:33). Potential participants need to have and express their

interest in the subject matter under study and show their willingness to participate throughout the designed e-Delphi process (Avella 2016:310). The volunteer programme officers who participated in this study had at least five years of experience working in their respective programmatic areas.

6.5.2 Panel of experts (sampling)

A purposive sampling method is used in the e-Delphi to ensure a high response rate (Vogel, Zwolinsky, Griffiths, Hobbs, Henderson and Wilkins 2019:2574). There is no standard when it comes to panel size (Avella 2016:30). Ideally, 12 participants are considered sufficient to enable consensus to be achieved (Vogel et al., 2019:2574). A panel exceeding 30 might be difficult to manage and diminish the response rates (Sekayi and Kennedy 2017:2757). In this study, the researcher used a purposive sampling method to select 14 e-Delphi participants from the region, zone, and district levels (see Section 6.4).

6.5.3 Anonymity

Anonymity is another important characteristic of the e-Delphi method that enhances and maintains panellists' participation by omitting their position or status. Consequently, individuals do not influence the opinions of the entire group (Massaroli, Martini, Lino, Spenassato and Massaroli 2017:5), and every panellist has an equal voice. When using the e-Delphi, researchers could obtain more accurate data using questionnaires or validation tools distributed to a group of anonymous experts at their own place and time through their email address without any influences (Green 2014:1; Skinner et al., 2015:2). More importantly, anonymity prevents participants feeling threatened in reporting their opinions and positions in the e-Delphi process (Avella 2016:315).

In this study, all panellists received a recruitment letter (see Annexure 8), including a link to access the draft action plan with the assessment validation tool (see Annexure 9). The link gave them the opportunity to provide their input anonymously by completing the validation assessment tool online using a web-based platform "Google

Forms". All input received from the software were anonymously provided to the researcher in bulk.

6.5.4 Rounds iteration and feedback

Often, more than one round of e-Delphi is needed to reach a consensus. The draft action plan with an embedded validation tool was delivered to the panel of experts using their email addresses. The recruitment letter and link to access the draft action plan with the validation tool continued to be sent until consensus was reached among the panel of experts (Avella 2016:309). This process takes place through a systematic communication structure controlled by the researcher, allowing the experts to receive feedback about the opinions raised. The panel of experts may revise their initial opinion in the subsequent rounds as their feedback is implemented by the researcher. The draft action plan was revised (after the first round) based on the responses of all panellists, and distributed a second time for comments (second round). In subsequent rounds, the received data were used until consensus between the panels of experts (Massaroli et al., 2017:3) was reached, which happened after the third round.

6.6 ADVANTAGES OF THE E-DELPHI TECHNIQUE

The e-Delphi technique has received increasing acceptance in recent times as it offers a flexible and simple approach to obtain information on experts' views (Avella 2016:314). The anonymity of the technique and of a participant's position or status prevents their influence on the group. It helps panellists provide their views honestly and freely and reduces the risk of dominance by other Delphi members (Massaroli, Martini, Lino, Spenassato and Massaroli 2017:5). The interactive rounds offer experts the opportunity to make valuable contributions to research in their own time, place and at their own pace (Fisher, Erasmus and Vijoen 2020:823).

6.7 LIMITATIONS OF THE DELPHI TECHNIQUE

Despite numerous benefits (see Section 6.6) there are also some limitations of the e-Delphi technique. The time-consuming nature of the process due to its iterative

process is one of the most significant limitations (Sekayi and Kennedy 2017:2762) that may result in an increased rate of attrition, hindering consensus (Shariff 2015:3; Skinner et al., 2015:34). To overcome the possible attrition challenge, the researcher used volunteer abortion and HIV-FP programme officers who were recognised by their respective offices and had a minimum of five years' experience in their field of expertise. The online method and absolute anonymity allowed participants to provide responses in their own time without the influence of group members (Massaroli et al., 2017:5).

The participants were informed in the recruitment letter that it would take time to reach a consensus (more than one round of participation in the Delphi might be needed) and they could participate at their own convenience (off duty) (see Annexure 8). The representatives of the region, zones, and districts ensured the availability of internet connectivity where volunteer programme officers were selected. The draft action plan with an embedded validation tool built was posted on the web-based platform "Google Forms". The participants could easily access the tool by clicking the link in their email shared by the respective heads of health offices to complete the validation process on their desktop, computers or mobile devices online.

6.8 TRUSTWORTHINESS

Trustworthiness reflects the degree of confidence that researchers have that their findings and recommendations are truthful, unbiased, and credible (Sloan and Quan-Haase 2017:354). The information obtained from the e-Delphi panellist needs to be trustworthy to reach the intended study outcome. The framework of trustworthiness by Guba and Lincoln (1994:107) was thus employed by the researcher to enhance the quality of the study. The framework includes the principles of credibility, dependability, confirmability, transferability, and authenticity.

6.8.1 Credibility

Credibility refers to the confidence in the truth of the data and the researcher's interpretation of the participants' original views (Korstjens and Moser 2017:12; Lorelli, Nowell, Jill, Norris, Deborah, White and Nancy 2017:6). The validation tool was pre-

tested in this study to ensure the credibility of the data collected from the Delphi participants (see Section 6.12).

The e-Delphi participants were programme officers selected based on their areas of expertise. They had more than five years' experience and participated voluntarily in the e-Delphi after giving their consent in the recruitment letter (see Annexure 8). They agreed to provide credible personal opinions on the development of a valid action plan to integrate abortion care with HIV-FP services in public health facilities in Ethiopia.

6.8.2 Dependability

Dependability refers to the findings being consistent and repeatable from the existing data; thus, dependability is attained by securing the credibility of the findings (Jason and Glenwick 2016:39). It is a criterion that is considered equivalent to reliability and similarly concerned with the stability of results over time (Lorelli et al., 2017:3). In this study, pre-testing the validation tool, adhering to the rules of the e-Delphi technique (see Section 6.5), and reaching a consensus on all aspects of the action plan ensured dependability.

6.8.3 Confirmability

Confirmability refers to objectivity; that is, the accuracy, relevance, or meaning of the data collected from two or more independent people (Polit and Beck 2017:788). Three rounds of e-Delphi were done to ensure an 80% or higher consensus, indicating that the panellists agreed on the final validated action plan. Delphi techniques were strictly followed to validate the drafted action plan and confirmability was ensured through the recorded data representing the information provided by panellists. The findings reflected the panellists' views and not the researcher's motivation or opinion. A complete data trail that describes the context and all processes followed allows for repetition in the same context, similar contexts, or even in different contexts.

6.8.4 Transferability

Transferability refers to the ability to transfer research findings from one context to another (Jason and Glenwick 2016:39). The findings' transferability from one context to another depends on the similarity or fittingness of the two contexts (Leavy 2017:80). A complete data trail and a description of the study's context will allow other researchers to decide whether they can transfer the findings to a similar context.

6.8.5 Authenticity

Authenticity in qualitative research refers to the fairness, sophistication, mutual understanding, and empowerment of participants and consumers of the knowledge to take action (Jason and Glenwick 2016:18). In this study, authenticity was enhanced by participants' involvement in the qualitative research (Delphi technique). They were encouraged to develop a collective idea (consensus), which the researcher developed into a validated action plan.

6.9 ETHICAL CONSIDERATIONS

Ethical considerations are a collection of principles and values that should be followed while dealing with human participants. The ethical considerations of phase three (e-Delphi technique) that were adhered to were thoroughly explained in Section 3.4. Ethics approval was obtained from the Research Ethics Committee of the Department of Health Studies at UNISA (see Annexure 5) and the Southern Region Research and Technology Transfer Core Process (see Annexure 6). Support letters were also obtained from respective zonal health departments to facilitate the recruitment and participation of volunteer programme officers in the e-Delphi (see Annexure 7). The programme officers were asked to indicate their voluntary participation in the recruitment letter that was sent to their email addresses, containing relevant information and ethical aspects were explained (see Annexure 8).

6.10 DATA GATHERING PROCESS

The Delphi technique is a widely accepted method of data collection. The method is designed to collect data using a validation tool. In this study's context, the draft action

plan embedded with the assessment validation tool was shared with a panel of experts (see Table 6.3) to aid the decision-making process. The draft action plan and embedded assessment validation tool was used to validate the action plan to integrate abortion care with HIV-FP services in the public health facilities in Ethiopia.

The recruitment letter and link that directed panellists to the draft action plan with the assessment validation tool was shared with the Delphi panellists by the head of respective health offices. The tool was built on “Google Forms” and the panel of experts automatically accessed the online data when they clicked the link at the bottom of the recruitment letter (see Annexure 8). The researcher would obtain the online data when the panellists clicked the submit button at the end of the uploaded draft action plan.

The recruitment letter clearly explained why it is needed and how panellists may participate in the e-Delphi process (see Annexure 8). The panellists who agreed to participate indicated this by clicking on the link and submitting their validation on the draft action plan. The validation process continued until an 80% consensus on each aspect of the action plan was reached among all the e-Delphi panellists.

6.11 THE E-DELPHI VALIDATION PROCESS

The developed action plan included an embedded validation tool (see Table 6.3) to ensure only one document was circulated, making the validation process easy for the panellists. As described in Section 6.9, all the panellists received the recruitment letter explaining the process and the link to gain access to the draft action plan with the assessment validation tool. Clear instructions were provided in the validation tool on how the panellists should validate the draft action plan.

The process followed is illustrated in Figure 6.1. The first step was to draft the action plan with an embedded validation tool using the data obtained from phase one of the study (see Section 3.5) and phase two’s literature review (see Section 5.8). The draft action plan was then pre-tested by recruiting e-Delphi panellists who would not participate in the actual validation process (see Table 6.2). The comments obtained from the panellists were incorporated into the first draft action plan (see Table 6.2).

The first draft action plan with an embedded validation tool was sent to the panellists through their respective gatekeepers (see Annexure 9). Responses from panellists were received and analysed through the software programme “Google Forms”. Based on responses to the first draft action plan (round 1), suggested changes were implemented and the second draft action plan was then developed and again shared with the panellist. Similarly, the third round of the action plan was developed based on panellists’ suggestions and again circulated by the respective heads of health offices. The e-Delphi was conducted by means of a step-by-step structured process. Controlled feedback processes were applied to achieve the desired level of consensus and any changes in judgments among panellists. The process was carried out over three rounds until an 80% and higher consensus was reached among panellists on all aspects of the draft action plan, as illustrated in Figure 6.1.

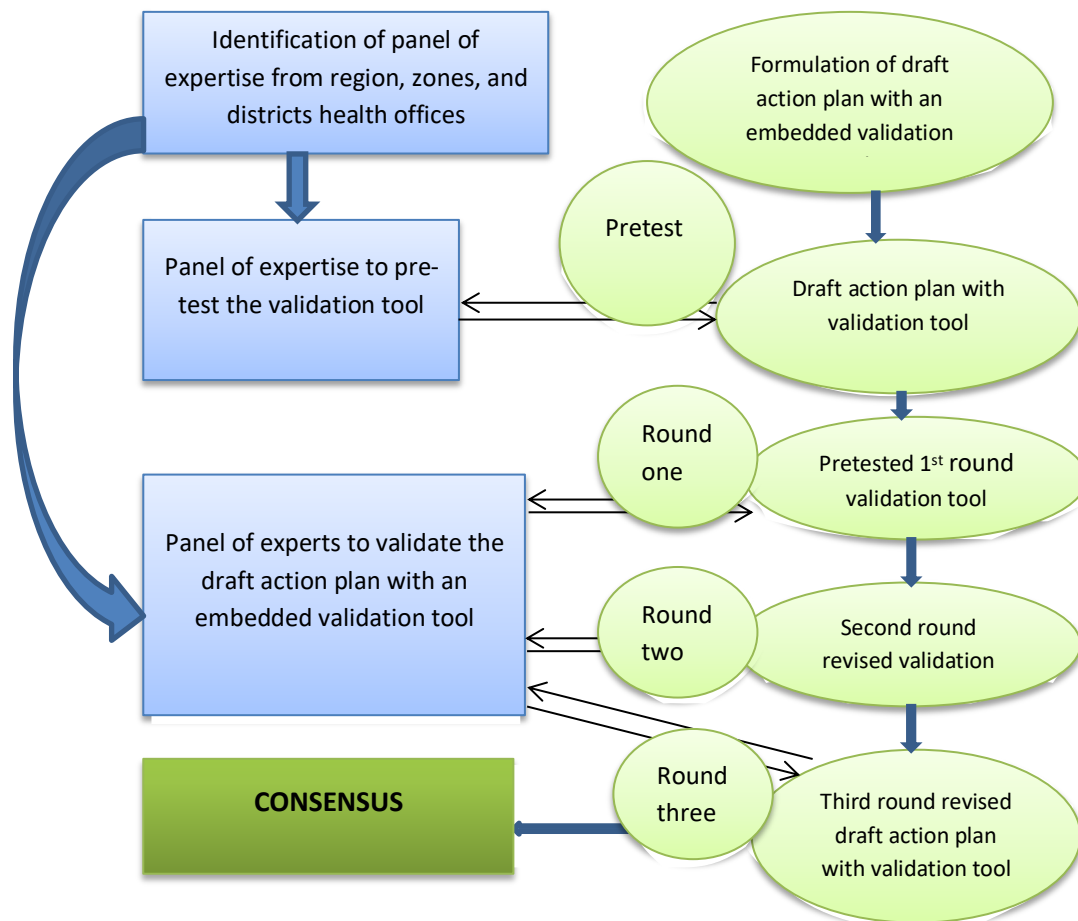


Figure 6.1: Validation processes

6.12 PRE-TESTING

Pre-testing is useful to identify weaknesses, vagueness or a lack of clarity in questions or techniques to attain the research objectives (Bordens and Abbott 2018:144). It also improves the acceptability of the data collection tool by obtaining information on the coherence of the questions, length and understandability. Researchers also obtain comments on the relevance of the questions to the subject matter to be investigated or studied (Bruce, Pope and Stanistreet 2018:166).

The researcher consulted a senior public health expert in the field and the research supervisor to obtain comments and suggestions on the drafted action plan. All comments were incorporated before building it on a web-based platform, “Google Forms”. The link to the draft action plan and embedded validation tool was then shared via the recruitment letter to be pre-tested by programme officers working in abortion and HIV-FP services. Abortion care programme officers and integrated HIV-FP officers were selected by representatives from the zone and district health offices. The representative of the zone health departments and district health offices shared the recruitment letter and link to the draft action plan. The pre-testing was aimed at assessing the draft action plan embedded with validation tool’s feasibility to gather the required information and determine how well the panellist understood and provided responses. Panellists’ willingness to participate in pre-testing the validation tool was indicated by clicking on the link at the bottom of the recruitment letter (see Annexure 8). The data received from the pre-test panellists were analysed, and their comments and suggestions were addressed, as illustrated in Table 6.2. Recommendations are reflected in **blue bold** text.

Table 6.2: Summarised comments of the pre-test of the draft action plan with an embedded validation tool

Thematic areas	Original statements	Recommended changes
Action methods	The action methods ask the participants for agreement and disagreement without indicating what they should do next.	Clear instructions were included in each method (action) as follows. If the answer to the method was no, they would add their ideas in the comment part and go to the next method.

Thematic areas	Original statements	Recommended changes
Method 6.2	Upload all regulatory documents at the regional level to make them available to all healthcare facilities providing integrated health services.	Upload all regulatory documents to the regional health bureau telegram group to make them available to all healthcare facilities providing integrated health services.
6.2.2 Time frame:	Please indicate the time frame, after approval of the action plan, within which regulatory documents should be ready and available.	Please indicate the time frame, after approval of the action plan, within which regulatory documents should be ready and available at the regional health bureau telegram group.
Strategies 6.3.1a (1)	Provide training on how to access the regulatory documents from the websites and/or the available computer/s in the healthcare facilities	Provide training on how to access the regulatory documents from the websites and/or Google Drive on the available computer/s in the healthcare facilities.

The amended draft action plan (referred to as draft 1) with embedded validation tool (see Annexure 9) was then rebuilt in “Google Forms” to gather data from volunteer programme officers in a series of e-Delhi rounds.

Table 6.3: Example of a part of theme 1 of the draft action plan with embedded validation assessment tool (round one)

<p>Instructions: Please make a tick in the spaces provided to indicate your choice pertaining to your level of agreement or disagreement with the action statements and action methods. Tick the appropriate boxes indicating your choice of who the responsible person/s should be and the time frame within which actions need to be achieved. Please add any comment/s to improve the draft action plan in the open spaces provided.</p>	
<p>THEME 1: GEOGRAPHIC ACCESSIBILITY</p>	
<p>Action statement 1: Improve access to healthcare facilities offering integrated abortion care with HIV-FP services.</p> <p>Indicate your level of agreement with the inclusion of the action statement.</p> <p>1. Agree <input type="radio"/> 2. Disagree <input type="radio"/></p>	
<p>Method 1.1: Compile a report based on evidence to support the need to upgrade existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	

If your answer is no to this question, please complete 1.1.3 and move the next method 1.2	
1.1.1 Responsible person/s: Please indicate who must take responsibility for compiling an evidence-based report to support the upgrading of health posts to health centres or constructing new ones. Please tick next to your choice/s.	
5. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices	<input type="radio"/>
6. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
7. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
8. Others, please specify _____	
1.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the evidence-based reports should be completed.	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Others, please specify _____	
1.1.3 Please add if you have any new ideas pertaining to improvements in the action statement, the method, responsible person/s, and the timeframe _____	

6.13 ANALYSIS OF THE E-DELPHI DATA

The recruitment letter (see Annexure 8) with the link to the first draft action plan with an embedded validation tool (see Annexure 9) was shared with the panellists and programme officers to validate. Volunteer health programme officers who were involved in the e-Delphi provided their responses in the web-based platform “Google Forms”. Their responses were gathered in five thematic areas: (1) the level of agreement or disagreement with the action statements, (2) the level of agreement or disagreement with the methods, (3) the appropriate person/persons responsible for implementing the indicated methods to reach the desired goal, (4) when to start taking action on the agreed action statement, and (5) comments for improvements on any aspect of the specific action statements.

The aim of analysing the responses during each round of the e-Delphi was to ensure the panellists' comments after each round were incorporated before the next round commenced. This process was followed until consensus was reached among panellists pertaining to the final draft action plan. Consensus is referred to as the percentage of panellist agreement on action statements, action methods, strategies, responsible person/s, and the time frame within which the actions should be implemented (Sekayi and Kennedy 2017:2756). The Delphi consensus typically ranges from 55 to 100% (Avella 2016:307). As described by Sekayi and Kennedy (2017:2756), an agreement of 80% and higher among the panellists is considered as consensus.

The panellists' responses were received in "Google Forms" and the tool automatically analysed the closed-ended responses and displayed the results in graphs. The responses could also be exported to an Excel sheet for further analysis. Individuals' responses were calculated and presented in frequencies and percentages for each option. Comments obtained in each option were categorised and incorporated into the action plan and validation tool for the subsequent rounds. Responses that were not reaching 80% consensus were summarised and sent again for the next rounds. After a series of rounds, the action statements, action methods, strategies, responsible person/s, and the timeframe reached 80% and higher. It was thus adapted as a validated action statement in the development of a validated action plan for the implementation of integrated abortion care with FP-HIV in public health facilities of Ethiopia.

6.14 FINDINGS: ROUND 1

In the first round of the e-Delphi, 14 panellists participated and submitted their opinions on each action statement, action method, the responsible person/s, as well as the timeframe. They also provided comments in the spaces provided as required. A detailed analysis of the data and the interpretation thereof are presented in the sections that follow.

The participating panellists were health professionals working at regional, zonal and district health offices. Nine panellists had a master's degree in public health and the

remaining five were health officers (BSc in public health). Therefore, all panellists had at least a BSc degree in health sciences. Moreover, they were considered experts as they all served for a minimum of five years in the field of their specialty.

Twelve (f= 85.7%) Delphi panellists were men and two (f=14.3 %) were women. A study conducted by Yimmam (2018:1) on healthcare leadership in south Ethiopia indicated no female health professionals held executive officer and medical director leadership positions in healthcare facilities. The need to empower women in health sectors is important to maximise the benefit of women receiving integrated maternal health services in the healthcare facilities.

The responses of all 14 panellists were analysed as described, and the findings were discussed under the headings (1) Geographic accessibility, (2) Human resources, (3) Medical resources, (4) Infrastructures, (5) Financial resources, (6) Policies, strategies and guidelines, and (7) Behavioural change and communications.

6.14.1 Geographic accessibility

Action statement 1: Improve access to healthcare facilities offering integrated abortion care with HIV-FP services (N=14)

As illustrated in Table 6.4, 92.9% consensus (n=13; N= 14) was reached among panellists to improve access to healthcare facilities offering integrated abortion care with HIV-FP services. Although consensus was reached on all of the action methods proposed under action statement 1, a consensus was not reached on some of the action methods and responsible person/s to carry out the actions. Panellists were also not in agreement about the timeframes within which the actions should be implemented, as indicated in Table 6.4.

Consensus reached: Action method 1.1-1.6 (see Table 6.4)

Method 1.1: As illustrated in Table 6.4, 85.7% consensus (n=12; N= 14) was reached on compiling a report based on evidence to support the need to upgrade existing

health posts to health centres or constructing new ones to comply with the 5-km radius to integrate abortion care with FP-HIV services.

Method 1.2: The panellists reached 92.9% consensus (n=13; N= 14) to share the completed evidence-based report with government bodies, partners, civic societies, and community leaders who could negotiate to upgrade the existing health posts to health centres or construct new ones to comply with the 5-km radius to integrate abortion care with FP-HIV services (see Table 6.4)

Method 1.3: 100% consensus (n=14; N= 14) was reached to develop strategies that enhance the intra-facility referral system (within the healthcare facilities) to integrate abortion care with FP-HIV services. The panellists also reached 92.9% (n=13; N= 14) consensus on the applicable strategies to enhance the intra-healthcare facility referral system (see method 1.3).

Method 1.4: 100% consensus (n= 14; N= 14) was reached to strengthen strategies in the referral system (from the community to the health centre/hospital).

Method 1.5: The panellists reached a 92.9% consensus (n=13; N= 14) to establish new or strengthen mobile/outreach programmes that offer abortion care, FP, and HIV integrated healthcare services (see Table 6.4).

Method 1.6: Panellists reached a 100% consensus (n=14; N= 14) to rearrange healthcare service provision areas to reduce the waiting time for abortion care, HIV, and FP-integrated services. Consensus was not reached (n= 11; N= 14) among panellists on the applicable strategies to reduce waiting times while receiving integrated health services (method 1.6).

Consensus reached: Responsible person/s for methods 1.1.1-1.1.6 (see Table 6.4)

As illustrated in Table 6.4, 85.7% consensus (n= 12; N= 14) was reached that programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices are responsible for compiling an evidence-based report to support the

upgrading of health posts to health centres or constructing new ones (method 1.1). An 85.7% consensus (n= 12; N= 14) was also reached that programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices are responsible for sharing the report and negotiating with concerned bodies (method 1.2). A 92.9% consensus (n= 13, N= 14) was reached that the director of the public healthcare facility is responsible for facilitating the strategies to inform the community of the healthcare facility referral system (see method 1.4). Moreover, a 92.9% consensus (n=13; N= 14) was reached that the team leader of abortion care providers in the public healthcare facility is responsible for facilitating strategies to rearrange healthcare service provision areas (method 1.6). As indicated in Table 6.4, a consensus was not reached on responsible person/s for carrying out the action method 1.3 and action method 1.5.

Timeframes to achieve action methods 1.1.2- 1.6.2 (see Table 6.4)

The panellists reached 85.7%% consensus (n= 12; N= 14) that the report must be shared and negotiations with concerned bodies must be commenced within six months after the action plan's approval (method 1.2). An 85.7% consensus (n= 13; N= 14) was also reached to implement the intra-healthcare facility referral system within six months after the approval of the action plan to enhance integrated health service (method 1.3). Moreover, 85.7% consensus (n=12; N= 14) was reached to rearrange the healthcare-providing areas within three months after the approval of the action plan to reduce the waiting time for abortion care, HIV, and FP-integrated health services (method 1.6). A consensus was not reached on the time frame, after approval of the action plan, within which action method 1.1, action method 1.4, and action method 1.5 should be implemented.

Table 6.4: Geographic accessibility of abortion care and HIV-FP services integration in public health facilities of Ethiopia (N=14)

Action statement 1: To Improve access to healthcare facilities offering integrated abortion care with HIV-FP services.	n=	f=	Consensus
1. Agree	13	92.9	Yes
2. Disagree	1	7.1	
Method 1.1 Compile a report based on evidence to support the need to upgrade existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.			
1. Yes	12	85.7	Yes
2. No	2	14.3	
1.1.1 Responsible person for compiling an evidence-based report to support the upgrading of health posts to health centres or constructing new ones.			
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	12	85.7	Yes
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	8	57.1	
3. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	3	23.1	
4. Zone health department/Wereda health office	1	7.1	
1.1.2 Time frame after approval of the action plan, within which the evidence-based reports should be completed.			
1. Within 3 months	4	28.6	No
2. Within 6 months	7	50	
3. Within 9 months	3	21.4	
Method 1.2 Share the completed evidence-based report with governmental bodies, partners, civic societies, and community leaders to negotiate an upgrade in existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.			
1. Yes	13	92.9	Yes
2. No	1	7.1	
1.2.1 Responsible person/s for sharing the report and negotiating with concerned bodies			
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	12	85.7	Yes

2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the selected 3 district health offices.	4	28.6	
3. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts, appointed by the head of the 3 district health offices.	8	57.1	
1.2.2 Time frame after approval of the action plan, within which the report must be shared and negotiations with concerned bodies must commence.			
1. Within 6 months	12	85.7	Yes
2. Within 9 months	0	0	
3. Within 12 months	2	14.3	
Method 1.3 Develop strategies to strengthen the intra-facility referral system (within the healthcare facilities) to integrate abortion care with FP-HIV services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 1.3 (a) The applicable strategies to strengthen the intra-healthcare facility referral system.			
1. Implement referral slips in the healthcare facilities	13	92.9	Yes
2. Use runners (individuals who are responsible for allocation/distribution of clients' family folders to different service delivery points) in the healthcare facilities	5	35.7	
3. Use liaisons (individuals who are responsible to link referral cases to the next higher levels) in the healthcare facilities	6	42.9	
1.3.1 Responsible person/s for facilitating the strategies to strengthen the intra-healthcare facility referral system.			
1. The director of the public healthcare facility	9	64.3	No
2. The human resource development coordinator of the public healthcare facility	1	7.1	
3. An ad-hoc committee (1 abortion care and 1 HIV-FP healthcare provider) appointed by the director of the public health facility	11	78.6	
1.3.2 Time frame after approval of the action plan within which the intra-healthcare facility referral system should be implemented.			
1. Within 6 months	13	92.9	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	0	0	
Method 1.4 Develop strategies to strengthen the referral system (from the community to the health centre/hospital) to improve integrated health services.			
1. Yes	14	100	Yes
2. No	0	0	

Method 1.4 (a) the applicable strategies that can be implemented to enhance the use of integrated healthcare services.			
1. Offer health education to the community on integrated health services from health centre-health post networking focal persons (healthcare providers responsible for linking the healthcare services between the community (health post) and health centre/hospital).	12	85.7	Yes
2. Offer health education on integrated health services from healthcare providers.	9	64.3	
3. Offer health education on integrated health services from the community leaders, such as kebele leaders and religious leaders	7	50	
4. Develop health post-health centre and health centre/hospital referral slips and introduce the system	1	7.1	
1.4.1 Responsible person/s for facilitating the strategies to inform the community of the healthcare facility referral system.			
1. The head of the district health office	7	50	Yes
2. The director of the public healthcare facility	13	92.9	
3. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	8	57.1	
4. An ad-hoc committee (1 abortion care provider and 1 HIV-FP service provider) appointed by the director of the public health facility	5	35.7	
5. Health extension workers and health development arm	1	7.1	
1.4.2 Time frame after approval of the action plan, within which the community to healthcare facility referral system would be strengthened.			
1. Within 6 months	11	78.6	No
2. Within 9 months	2	14.3	
3. Within 12 months	1	7.1	
Method 1.5 Establish new or strengthened mobile/outreach programmes that offer abortion care, FP, and HIV integrated healthcare services.			
1. Yes	13	92.9	Yes
2. No	1	7.1	
1.5.1 Responsible person/s for strengthening mobile or outreach health service programmes.			
1. The director of the public healthcare facility	11	78.6	No
2. Programme officers (1 abortion care and HIV-FP) from each of the selected 3 district health offices	8	57.1	
3. An ad-hoc committee (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public healthcare facility	7	50	
1.5.2 Time frame , after approval of the action plan, within which the mobile or outreach programmes should be established or strengthened.			

1. Within 3 months	10	71.4	No
2. Within 6 months	2	14.3	
3. Within 9 months	1	7.1	
4. above 9 months	1	7.1	
Method 1.6 Rearrange healthcare service provision areas to reduce the waiting time for abortion care, HIV, and FP-integrated services.			
1. Yes	1	100	Yes
2. No	0	0	
Method 1.6 (a) the applicable strategies to reduce waiting times for integrated health services.			
1. Abortion care and HIV-FP services offered in the same room	9	64.3	No
2. Abortion care and FP-HIV service offered in adjacent rooms	11	78.6	
3. Abortion care and HIV-FP service-providing areas near the main gate of the healthcare facility's compound	3	21.4	
4. Implement a scheduled based client appointment system	2	14.3	
1.6.1 Responsible person/s for facilitating the strategies to rearrange healthcare service provision areas.			
1. The director of the public healthcare facility	11	78.6	Yes
2. Team leader of abortion care providers in the public healthcare facility	12	85.7	
3. Team leader of HIV-FP service providers in the public healthcare facility	8	57.1	
4. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	4	28.6	
1.6.2 Time frame after approval of the action plan, within which the healthcare providing areas should be rearranged.			
1 Within 3 months	12	85.7	Yes
2 Within 6 months	1	7.1	
3 Within 9 months	1	7.1	

6.14.2 Human resources

Action statement 2: Ensure competent human resources for the provision of abortion care, FP, and HIV-integrated services (N=14).

Table 6.5 indicates that 100% consensus (n= 14; N= 14) was reached ensuring competent human resources for the provision of abortion care, FP, and HIV integrated services. A consensus was also reached on all of the action methods proposed under action statement 2 (see Table 6.5). However, a consensus was not reached on some

of the action methods regarding the responsible person/s to carry out the implementation and the time frame within which the action method should be implemented, as indicated in Table 6.5.

Consensus reached: Action method 2.1-2.6 (see Table 6.5)

Method 2.1: As illustrated in Table 6.5, 92.9% consensus (n= 13; N= 14) was reached to compile an evidence-based report on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible for providing integrated abortion and HIV-FP services.

Method 2.2: The panellists reached 100% consensus (n= 14; N= 14) to capacitate public healthcare facility directors with leadership and management skills through in-service training to enhance the integration of abortion care with HIV-FP services (see Table 6.5).

Method 2.3: As illustrated in Table 6.5, the panellists reached 100% consensus (n= 14; N= 14) to capacitate the healthcare providers (doctors, health officers, midwives, and nurses) with knowledge and skills in delivering integrated abortion and HIV-FP services.

Method 2.4: Table 6.5 indicated that 100% consensus (n= 14; N=14) was reached to implement motivation strategies for healthcare providers to enhance the integration of abortion care and HIV-FP services. An 85.7% consensus (n= 12; N=14) was also reached to negotiate a budget allocation for overtime work with the head of the district health office as an applicable strategy to motivate healthcare providers (method 2.4).

Method 2.5: The panellists reached 100% consensus (n=14; N=14) to strengthen a mentorship programme (guidance provided by an individual with more experience and knowledge on integrated service) to support healthcare providers enhance the integration of abortion care with HIV-FP services (see Table 6.5). Moreover, 100% consensus (n= 14; N=14) was reached to offer a formal mentorship programme to provide a one-on-one mentorship opportunity for all healthcare providers (a trainer and

a trainee conduct skill and knowledge transferring sessions) to initiate/strengthen mentorship services (see method 2.5).

Method 2.6: As indicated in Table 6.5, 100% consensus (n=14: N= 14) was reached to conduct performance review meetings with healthcare providers (abortion care and HIV-FP providers) to improve the integration of abortion care with HIV-FP services. Furthermore, 92.9% consensus (n= 13: N=14) was reached to organise biannual review meetings on integrated health services at the district level as an applicable strategy (method 2.6).

Consensus reached: Responsible person/s for methods 2.1.1–2.6.1 (see Table 6.5)

As illustrated in Table 6.5, 85.7% consensus (n= 12; N= 14) was reached that programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices are responsible for compiling an evidence-based report on the need for healthcare providers who can deliver integrated abortion with HIV-FP services (Method 2.1). A 92.9% consensus (n= 13; N= 14) was also reached that programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices should ensure an accurate attendance of the director of public healthcare facilities responsible for capacitating facility directors with leadership and management skills (method 2.2). The panellists reached 92.9% consensus (n= 13, N= 14) that programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau are responsible for conducting mentorship services to strengthen integrated abortion care, FP, and HIV services (see method 5). Moreover, 92.9% (n=13; N= 14) consensus was reached that maternal, neonatal, and child health directors of the district health offices are responsible for organising biannual performance review meetings on integrated health services (method 2.6). As indicated in Table 6.5, a consensus was not reached on the responsible person/s to implement action method 2.3 and action method 2.4.

Timeframes to achieve action methods 2.1.2-2.6.2 (see Table 6.5)

As indicated in Table 6.5, panellists reached 85.7% consensus (n=12; N=14) that capacitating healthcare providers with knowledge and skills through in-service training should be initiated within three months after approval of the action plan (method 2.3). Nevertheless, a consensus was not reached on the timeframe after approval of the action plan within which the action methods 2.1, 2.2, 2.4, 2.5 and 2.6 should be implemented (see Table 6.5).

Table 6.5: Human resources for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (N=14)

Action statement 2: Ensure competent human resources for the provision of abortion care, FP, and HIV-integrated services.	n=	f=%	Consensus
1. Agree	14	100	Yes
2. Disagree	0	0	
3. Uncertain			
Method 2.1: Compile an evidence-based report on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible for providing integrated abortion and HIV-FP services.			
1. Yes	13	92.9	Yes
2. No	1	7.1	
2.1.1 Responsible person/s for compiling an evidence-based report on the need for healthcare providers who can deliver integrated abortion with HIV-FP services.			
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments	11	78.6	Yes
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	12	85.7	
3. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices.	5	35.7	
4. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices.	4	28.6	
2.1.2 Time frame after approval of the action plan, within which the evidence-based report should be completed.			
1. Within 3 months	11	78.6	No
2. Within 6 months	2	14.3	

3. Within 9 months	1	7.1	
Method 2.2: Enhance public healthcare facility directors' leadership and management skills through in-service training to enhance the integration of abortion care with HIV-FP services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 2.2(a): The applicable strategies to enhance public healthcare facility directors' leadership and management skills.			
1. Leadership skill development training offered at least twice a year to address the management of integrated services	12	85.7	Yes
2. Best leadership experience sharing sessions offered twice a year	9	64.3	
3. Develop a web-based platform for information sharing about public healthcare facility management	8	57.1	
2.2.1 Responsible person/s who must take responsibility for enhancing public healthcare facility directors' leadership and management skills.			
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments to ensure an accurate attendance of the director of public healthcare facilities	8	57.1	Yes
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices to ensure an accurate attendance of the director of public healthcare facilities	13	92.9	
3. An ad-hoc committee with one representative from domestic partner organisations and one from international partner organisations from each of the 3 zones appointed by the head of the 3 zone health departments	5	35.7	
2.2.2 Time frame after approval of the action plan, within which the head of healthcare facilities' leadership and management skills should be enhanced.			
1. Within 6 months	10	71.4	No
2. Within 9 months	2	14.3	
3. Within 12 months	2	14.3	
Method 2.3: Improve healthcare providers' (doctors, health officers, midwives, and nurses) knowledge and skills in delivering integrated abortion and HIV-FP services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 2.3(a): the applicable strategies to improve the knowledge and skills of healthcare providers.			
1. Integrated in-service training opportunities for healthcare providers at least twice a year	13	92.9	Yes
2. Develop a career structure that promotes healthcare providers to the next higher level based on their experience	10	71.4	

3. Develop a web-based platform for sharing information on how to provide integrated services	6	42.9	
4. Develop integration guidelines on abortion-FP service	1	7.1	
5. Off-site training	1	7.1	
6. Monitoring and evaluation services	1	7.1	
2.3.1 Responsible person/s to improve the knowledge and skill of healthcare providers.			
1. The director of the public healthcare facility	11	78.6	No
2. An ad-hoc committee with representation from healthcare providers (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	8	57.1	
3. An ad-hoc committee with one representator from domestic and one from international partner organisations from each of the 3 zones appointed by the head of the 3 zone health departments.	6	42.9	
2.3.2 Time frame after approval of the action plan, within which the healthcare providers' knowledge and skill should be improved through in-service training.			
1. Within 6 months	12	85.7	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	1	7.1	
Method 2.4: Implement motivation plans for healthcare providers to enhance the integration of abortion with HIV-FP services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 2.4(a): the applicable strategies to motivate healthcare providers,			
1. Negotiate a budget allocation for overtime work with the head of the district health office	12	85.7	Yes
2. Implement a career enhancement programme to provide opportunities to improve healthcare providers' salary	10	71.4	
3. Offer incentives for healthcare providers, especially those engaging in risky healthcare services (surgery, delivery etc).	7	50	
4. Negotiate a budget allocation with the head of the district health office for mobile/outreach services.	5	35.7	
2.4.1 Responsible person/s who must take responsibility for improving healthcare providers' motivation.			
1. The head of the regional health bureau	8	57.1	No
2. The head of the zone health department	10	71.4	
3. An ad-hoc committee with representation from healthcare providers (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	4	28.6	

4. A group of public healthcare facility directors willing to assist with the negotiations	5	35.7	
2.4.2 Time frame , after approval of the action plan, within which the healthcare provider motivational plan should be started.			
1. Within 12 months	11	78.6	No
2. Within 18 months	3	21.4	
3. Within 24 months	0	0	
Method 2.5: Initiate/strengthen a mentorship programme (guidance provided by an individual with more experience and knowledge on integrated service) to support healthcare providers' integration of abortion care with HIV-FP services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 2.5(a): the applicable strategies to initiate/strengthen mentorship on integrated health services.			
1. Offer a formal mentorship programme for one-on-one mentorship opportunity to all healthcare providers (A trainer and a trainee conduct skill and knowledge transferring sessions)	14	100	Yes
2. Offer an online mentorship programme (conducting mentorship service in different locations using a web-based or other means of communication) to support and guide integrated services	6	42.6	
3. Offer a group mentorship service (Providing mentorship services to a group of healthcare providers) to support and guide integrated services.	5	35.7	
2.5.1 Responsible person/s for offering mentorship to strengthen integrated abortion, FP, and HIV services.			
1. Programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau	13	92.9	Yes
2. Maternal, neonatal, and child health directors of the zone health department	10	71.4	
3. An ad-hoc committee representation from senior healthcare providers (1 abortion care and 1 HIV-FP service) from each of the 3 districts appointed by the head of the 3 district health offices	5	35.7	
2.5.2 Time frame after approval of the action plan, within which mentorship on integrated abortion care with HIV-FP services should be started.			
1. Within 6 months	11	78.6	No
2. Within 9 months	2	14.3	
3. Within 12 months	1	7.1	
Method 2.6: Conduct performance review meetings with healthcare providers (abortion care and HIV-FP providers) to improve the integration of abortion care with HIV-FP services.			
1. Yes	14	100	

2. No	0	0	Yes
Method 2.6(a): the applicable strategies for review meeting on integrated health services			
1. Organise biannual review meetings on integrated health services at the district level	13	92.9	Yes
2. Organise biannual review meetings on integrated health services at the zonal level	10	71.4	
3. Organise biannual review meetings on integrated health services at the regional level	7	50	
2.6.1 Responsible person/s for organising the biannual performance review meetings on integrated health services.			
1. Maternal, neonatal, and child health directors of the regional health bureau	7	50	Yes
2. Maternal, neonatal, and child health directors of the zone health department	10	71.4	
3. Maternal, neonatal, and child health directors of the district health office	13	92.9	
2.6.2 Time frame , after approval of the action plan, within which the biannual performance review meetings should be started.			
1. Within 6 months	7	50	No
2. Within 12 months	6	42.9	
3. Within 18 months	1	7.1	

6.14.3 Medical resources

Action statement 3: Improve the availability of medical resources (drugs, equipment, and supplies) for public healthcare facilities to enhance the provision of abortion care, FP, and HIV-integrated services (N= 14)

Table 6.6 indicated a 100% consensus (n=14; N= 14) was reached to improve the availability of medical resources (drugs, equipment, and supplies) so public healthcare facilities can enhance the provision of abortion care, FP, and HIV-integrated services. All Delphi panellists reached consensus on all of the action methods and responsible person/s proposed under action statement 3.1 (see Table 6.6). On the contrary, a consensus was not reached on any of the time frames within which the action method should be implemented, as indicated in Table 6.6.

Consensus reached: Action method 3.1-3.5 (see Table 6.6)

Method 3.1: Table 6.6 indicates 100% consensus (n= 14; N= 14) was reached on compiling an evidence-based report on the availability of drugs, equipment and supplies essential for offering quality care at integrated healthcare facilities.

Method 3.2: Panellists reached 100% consensus (n= 14; N= 14) on deploying pharmacy professionals to public healthcare facilities to ensure the availability of resources (drugs) for integrated abortion care, FP, and HIV services (see Table 6.6).

Method 3.3: As indicated in Table 6.6, 100% consensus (n= 14; N= 14) was reached on an evidence-based report that can address the availability of medical resources so public healthcare facilities can integrate abortion care with HIV-FP services. Moreover, 92.9% consensus (n= 13; N= 14) was also reached on availing medical resources in public healthcare facilities through a donation from international and domestic non-governmental organisations as the applicable strategy to address the need for medical resources in healthcare facilities (see method 3.3).

Method 3.4: As illustrated in Table 6.6, 100% consensus (n= 14; N= 14) was reached on ordering or maintaining medical equipment such as MVAs, EVAs, and speculums that are necessary for the provision of integrated abortion care, FP, and HIV services. However, a consensus was not reached on the applicable strategies to identify/or maintain medical equipment in public healthcare facilities (see method 3.4).

Method 3.5: The panellists reached 85.7% consensus (n= 12; N= 14) on negotiating with the private sectors (pharmacies, drug vendors, and stores) to sponsor medical resources necessary for abortion care, FP, and HIV service integrations (see Table 6.6). Yet, a consensus was not reached on the applicable strategies to gain sponsorship for medical resources necessary for the integration of abortion care with HIV-FP services (see method 3.5).

Consensus reached: Responsible person/s for methods 3.1.1–3.5.1 (see Table 6.6)

As illustrated in Table 6.6, 100% consensus (n= 14; N= 14) was reached that SNNPR pharmaceutical supply regional hub managers (all 4 of them) are responsible for compiling an evidence-based report on the availability of drugs, equipment, and supplies essential to offer integrated healthcare (method 3.1). An 85.7% consensus (n=12; N= 14) was reached that the head of the district health office is responsible for the deployment of pharmacy professionals to public health facilities based on the need and/or workload (method 3.2). The panellists reached 92.9% consensus (n= 13; N= 14) that SNNPR pharmaceutical supply regional hub managers (all 4 of them) are responsible for addressing the availability of medical resources in the public healthcare facilities (method 3.3). An 85.7% consensus (n= 12; N= 14) was reached that the logistic and medical supply director of the district health office is responsible for facilitating strategies to identify and/or maintain medical equipment in the public healthcare facilities (method 3.4). Also, panellists reached an 85.7% consensus (n= 12; N= 14) that SNNPR pharmaceutical supply region hub managers (all 4 of them) are responsible for negotiating sponsorship with private sectors to attain medical resources necessary for integrated abortion care, HIV, and FP services (method 3.5).

Timeframes to achieve action methods 3.1.2-3.5.2 (see Table 6.6)

As indicated in Table 6.6, no consensus was reached on the time frame for method 3.1, method 3.2, method 3.3, method 3.4 and method 3.5.

Table 6.6: Medical resources for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (N=14).

Action statement 3: Improve the availability of medical resources (drugs, equipment, and supplies) in public healthcare facilities to enhance the provision of abortion care, FP, and HIV-integrated services	n=	f=%	Consensus
1. Agree	14	100	Yes
2. Disagree	0	0	
Method 3.1 Compile an evidence-based report on the availability of drugs, equipment and supplies essential to offer quality care at integrated healthcare facilities.			
1. Yes	14	100	Yes
2. No	0	0	

3.1.1 Responsible person/s for the compilation of an evidence-based report on the availability of drugs, equipment, and supplies essential to offer integrated healthcare.			
1. SNNPR pharmaceutical supply regional hub managers (all 4 of them)	14	100	Yes
2. Logistic and medical supply director of the zone health department	9	64.3	
3. Logistic and medical supply director of the district health office	9	64.3	
4. logistic and medical supplies coordinator of the public healthcare facility	7	50	
3.1.2 Time frame after approval of the action plan, within which evidence-based reports should be completed.			
1. Within 6 months	11	78.6	No
2. Within 9 months	2	14.3	
3. Within 12 months	1	7.1	
Method 3.2: Deploy pharmacy professionals to public healthcare facilities to ensure the availability of resources (drugs) for integrated abortion care, FP, and HIV services			
1. Yes	14	100	Yes
2. No	0	0	
3.2.1 Responsible person/s for the deployment of pharmacy professionals to public health facilities based on need and/or workload.			
1. The head of the zone health department	11	78.6	Yes
2. The head of the district health office	12	85.7	
3. The director of the public healthcare facility	6	42.9	
4. Zonal programme officers	1	7.1	
3.2.2 Time frame , after approval of the action plan, within which pharmacy professionals should be deployed to manage medical resources in public health facilities.			
1. Within 6 months	11	78.6	No
2. Within 12 months	2	14.3	
3. Within 18 months	1	7.1	
Method 3.3: Based on the evidence-based report, address the availability of medical resources in public healthcare facilities to integrate abortion care with HIV-FP services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 3.3(a): the applicable strategies to address the availability of medical resources.			
1. Avail medical resources in public healthcare facilities through donations from international and domestic NGOs	13	92.9	Yes
2. Improve the availability of medical resources in public healthcare facilities through a daily medical resource assessment and monitoring system	12	85.7	
3. Negotiate with concerned government officials to periodically advocate for budget allocations for procuring the required medical resources.	7	50	

3.3.1 Responsible person/s to address the availability of medical resources in the public healthcare facilities.			
1. SNNPR pharmaceutical supply regional hub managers (all 4 of them).	13	92.9	Yes
2. The coordinator of the pharmacy department of public healthcare facility	10	71.4	
3. An ad-hoc committee with one representative from domestic, one representative from international organisations, and one representative from healthcare providers, from each of the 3 zones appointed by the head of the 3 zone health departments.	6	42.9	
3.3.2 Time frame after approval of the action plan, within which medical resource availability in the public health facilities should be addressed.			
1. Within 6 months	11	78.6	No
2. Within 12 months	2	14.3	
3. Within 18 months	1	7.1	
Method 3.4: Order or maintain medical equipment such as manual vacuum aspirator (MVA), electrical vacuum aspirator (EVA), and speculum that is necessary for the provision of integrated abortion care, FP, and HIV services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 3.4 (a): the applicable strategies to identify/or maintain medical equipment in public healthcare facilities.			
1. Biomedical engineers from the regional health bureau to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	11	78.6	No
2. Biomedical officers from the zone health department to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	9	43.3	
3. Biomedical officers from the district health office to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	11	78.6	
3.4.1 Responsible person/s for facilitating strategies to identify and/or maintain medical equipment in the public healthcare facilities.			
1. Logistic and medical supply director of the regional health bureau	7	50	Yes
2. Logistic and medical supply director of the zone health department	8	57.1	
3. Logistic and medical supply director of the district health office	12	85.7	
4. The director of the public healthcare facility	8	57.1	
5. Procurement officer in every integrated healthcare facility	5	35.7	
3.4.2 Time frame after approval of the action plan, within which medical equipment should be operated and/or maintained to use it properly.			
1. Within 6 months	11	78.6	No

2. Within 9 months	1	7.1	
3. Within 12 months	2	14.3	
Method 3.5: Negotiate with the private sector (pharmacies, drug vendors, and stores) to sponsor medical resources necessary for abortion care, FP, and HIV services integrations			
1. Yes	12	85.7	Yes
2. No	2	14.3	
Method 3.5(a): the applicable strategies for sponsoring medical resources necessary for the integration of abortion care with HIV-FP services.			
1. Identify organisations in the private sector to sponsor identified medical resources	10	71.4	No
2. Identify organisations in the government sectors to sponsor identified medical resources	8	57.1	
3. Appoint a team to take responsibility for obtaining sponsorships and memorandums of agreements/understanding (MOU)	6	42.9	
4. EPSA Branch	1	7.1	
3.5.1 Responsible person/s who must take responsibility to negotiate sponsorship with private sectors in availing medical resources necessary for integrated abortion care, HIV, and FP services.			
1. SNNPR pharmaceutical supply region hub managers (all 4 of them)	12	85.7	Yes
2. The head of the zone health department	9	64.3	
3. The head of the district health office	4	28.6	
4. An ad-hoc committee with one representative from private companies, one representative from healthcare providers, and one representative from the community leaders, from each of the 3 districts appointed by the head of the 3 zone health departments.	2	14.3	
3.5.2 Timeframe after approval of the action plan, within which sponsorship on MOU is signed with private sectors.			
1. Within 3 months	1	7.	No
2. Within 6 months	9	64.3	
3. Within 9 months	4	28.6	

6.14.4 Infrastructures

Action statement 4: Improve the infrastructures of public health facilities to enhance the integration of abortion care with HIV-FP services (N= 14).

The panellists reached 100% consensus (n= 14; N= 14) that the improvement of infrastructure in public health facilities enhances the integration of abortion care with HIV-FP services (see Table 6.7). Consensus on all of the action methods under action

statement 4 was also reached among panellists (see Table 6.7). However, a consensus was not reached on some of the responsible person/s and all of the time frames within which the action methods should be implemented, as indicated in Table 6.7.

Consensus reached: Action method 4.1-4.8 (see Table 6.7)

Method 4.1: As indicated in Table 6.7, 100% consensus (n= 14; N= 14) was reached on compiling an evidence-based report to assess the infrastructure of existing healthcare facilities to deliver integrated abortion care with HIV-FP services.

Method 4.2: Panellists reached 100% consensus (n= 14; N= 14) on sharing the evidence-based report with concerned governmental bodies, partners, civic societies, and communities to negotiate for improvements in existing facilities to enhance the delivery of integrated abortion care with HIV-FP services (see Table 6.7).

Method 4.3: As shown in Table 6.7, 92.9% consensus (n= 13; N= 14) was reached to negotiate with road and transport authorities to allocate a budget for the improvement of road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services.

Method 4.4: As it is illustrated in Table 6.7, 92.9% consensus (n= 13; N= 14) was reached to organise an advocacy meeting on the needs analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.

Method 4.5: The panellists reached 92.9% consensus (n= 13; N= 14) to strengthen the transportation system to public healthcare facilities to enhance the delivery of integrated abortion care, HIV, and FP services (see Table 6.7). Yet, consensus was not reached on the applicable strategies to strengthen the transportation system to public healthcare facilities (see method 4.5).

Method 4.6: The panellists reached a 100% consensus (n= 14; N= 14) to ensure safe and adequate water supplies to public health facilities to enhance the integration of

abortion care, HIV, and FP services. Furthermore, 92.9% consensus (n= 13; N= 14) was reached among panellists to compile a needs analysis of the availability of safe and adequate water supplies to public healthcare facilities. Moreover, 85.7% (n= 12; N= 14) consensus was reached on an evidence-based report to motivate a budget allocation based on the needs analysis as applicable strategies to ensure a safe and adequate water supply system to public health facilities (see Table 6.7).

Method 4.7: As indicated in Table 6.7, 100% consensus (n= 14; N= 14) was reached on the installation of hydroelectric or other sources of power (generator and solar light) to ensure a 24-hour power services that can enhance the integration of abortion care with HIV-FP services. Similarly, a 100% consensus (n= 14; N= 14) was also reached on compiling an evidence-based report to motivate a budget allocation based on the needs analysis as the applicable strategy for hydroelectric/generator/solar power installation (method 4.7).

Method 4.8: As shown in Table 6.6, 92.9% consensus (n= 13; N= 14) was reached to construct healthcare provider accommodation in the public healthcare facility compounds, particularly in rural areas, to enhance the delivery of integrated abortion care with HIV-FP services. Moreover, 85.7% consensus (n= 12; N= 14) was also reached that identifying organisations from government and private sectors to sponsor the construction of healthcare provider accommodation as the applicable strategy to employ in this case (see Table 6.7).

Consensus reached: Responsible person/s for methods 4.1.1–4.8.1 (see Table 6.7)

As illustrated in Table 6.7, 85.7% consensus (n= 12; N= 14) was reached that programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices are responsible for compiling evidence-based reports on the status of the existing healthcare facilities (method 4.1). The panellists reached 85.7% consensus (n= 12; N=4) that the medical service director of the zone health department is responsible for organising advocacy meetings on the need for ambulance transportation (method 4.4). An 85.7% consensus (n= 12; N= 14) was also reached that the head of water and sewerage/sanitation authority of the zone is

responsible for implementing a safe and adequate water supply to public healthcare facilities (method 4.6). The panellists reached a 92.9% consensus (n= 13; N= 14) that the planning, monitoring, and economic development director of the zone health department is responsible for facilitating strategies for the allocation of budgets for various sources of power (method 4.7). Yet, a consensus was not reached on responsible person/s to facilitate the implementation of method 4.2, method 4.3, and method 4.8 as indicated in Table 4.7.

Timeframes to achieve action methods 4.1.2-4.8.2 (see Table 6.7)

As indicated in Table 6.7, no consensus was reached on any of the time frames of action methods under action statement 4.1.

Table 6.7: Infrastructure for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (N= 14)

Action statement 4: Improve public health facilities' infrastructure to enhance the integration of abortion care with HIV-FP services.	n=	f=%	Consensus
1. Agree	14	100	Yes
2. Disagree	0	0	
Method 4.1: Compile an evidence-based report to assess the infrastructure of existing healthcare facilities to deliver integrated abortion care with HIV-FP services.			
1. Yes	14	100	Yes
2. No	0	0	
4.1.1 Responsible person/s to compile the evidence-based reports on the status of the existing healthcare facilities.			
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	12	85.7	Yes
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	9	64.3	
3. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	5	35.7	

4.1.2 Time frame after approval of the action plan, within which an evidence-based report is to be completed.			
1. Within 6 months	5	35.7	No
2. Within 12 months	8	57.1	
3. Within 18 months	1	7.1	
Method 4.2: Share the evidence-based report with concerned governmental bodies, partners, civic societies, and communities to negotiate support to improve existing facilities and enhance the delivery of integrated abortion care with HIV-FP services.			
1. Yes	14	100	Yes
2. No	0	0	
4.2.1 Responsible person/s to share the evidence-based reports with concerned bodies to improve the infrastructure of the existing healthcare facilities.			
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	11	78.6	No
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	4	28.6	
3. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	4	28.6	
4. Zone health department or wereda health office	1	7.1	
4.2.2 Time frame , after approval of the action plan, within which the report must be shared and negotiations with concerned bodies commence.			
1. Within 3 months	0	0	No
2. Within 6 month	7	50	
3. Within 9 months	7	50	
Method 4.3: Negotiate with the road and transport authority to allocate a budget for improving road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services.			
1. Yes	13	92.9	Yes
2. No	1	7.1	
Method 4.3(a): the applicable strategies to allocate a budget to improve road infrastructure			
1. Compile a needs analysis to assess the status of road infrastructures to health facilities	8	57.1	No
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	9	64.3	
3. Share the report and the budget request with government officials for discussion and obtaining financial support.	10	71.4	

4.3.1 Responsible person/s to negotiate with the government higher officials to allocate a budget for the improvement of road infrastructure.			
1. The head of the zone road and transport department	11	78.6	No
2. The head of the zone health department	6	42.9	
3. The director of the public healthcare facility	2	14.3	
4. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices.	2	14.3	
4.3.2 Time frame after approval of the action plan, within which negotiation with government higher officials must be finalised.			
1. Within 3 months	1	7.1	No
2. Within 6 months	7	50	
3. Within 9 months	5	35.7	
4. Greater than 9 months	1	7.1	
Method 4.4: Organise an advocacy meeting on the needs analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services. Do you agree with the method?			
1. Yes	13	92.9	Yes
2. No	1	7.1	
4.4.1 Responsible person/s to organise advocacy meetings on the need for ambulance transportation.			
1. Medical service director of the regional health bureau	7	50	Yes
2. Medical service director of the zone health department	12	85.7	
3. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from healthcare providers from each of the 3 districts appointed by the head of the 3 district health offices.	5	37.5	
4.4.2 Time frame after approval of the action plan, within which an advocacy meeting on the need analysis of ambulance transportation must be conducted.			
1. Within 3 months	3	21.4	No
2. Within 6 months	6	42.9	
3. Within 9 months	5	35.7	
Method 4.5: Strengthen the transportation system to public healthcare facilities to enhance the delivery of integrated abortion care, HIV, and FP services.			
1. Yes	13	92.9	Yes
2. No	1	7.1	
Method 4.5(a): the applicable strategies to strengthen the transportation system to public healthcare facilities.			

1. Negotiate with private transport associations to increase daily trips to public healthcare facilities	8	57.1	No
2. Negotiate with public transport associations to increase daily trips to public healthcare facilities	7	50	
3. Increase the number of motorbikes to enhance access to public healthcare facilities	5	35.7	
4.5.1 Responsible person/s to facilitate the above-mentioned strategies to strengthen transport accessibility to public healthcare facilities.			
1. Medical service director of the zone health department	5	35.7	No
2. Medical service director of the district health office	5	35.7	
3. An ad-hoc committee with one representative from road and transport workers, one representative from the community leaders, and one representative from healthcare providers, from each of the 3 districts appointed by the head of the 3 district health offices	11	78.6	
4.5.2 Time frame after approval of the action plan, within which the facilitation of the transport system should be initiated.			
1. Within 6 months	9	64.3	No
2. Within 12 months	3	21.4	
3. Within 18 months	1	7.1	
4. More than 18 months	1	7.1	
Method 4.6: Ensure safe and adequate water supplies to public health facilities to enhance the integration of abortion care, HIV, and FP services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 4.6(a): the applicable strategies to ensure a safe and adequate water supply system to public health facilities.			
1. Compile a needs analysis of the availability of safe and adequate water supplies to public healthcare facilities	13	92.9	Yes
2. Compile an evidence-based report to motivate a budget allocation for water and sanitation based on the needs analysis	12	85.7	
3. Compile a report to motivate a budget allocation for water and sanitation based on the needs analysis	7	50	
4.6.1 Responsible person/s to implement the mentioned strategies to ensure a safe and adequate water supply to public healthcare facilities.			
1. The head of water and sewerage/sanitation authority of the zone department	12	85.7	Yes
2. The head of water and sewerage/sanitation authority of the district office	8	57.1	

3. An ad-hoc committee with one representative from water and sewerage workers, one representative from the community leaders, and one representative from healthcare providers, from each of the 3 districts appointed by the head of the 3 district health offices.	5	35.7	
4.6.2 Time frame after approval of the action plan, within which the strategies to ensure safe and adequate water supply to public healthcare facilities should be established.			
1. Within 6 months	3	21.4	No
2. Within 12 months	10	71.4	
3. Within 18 months	1	7.1	
Method 4.7: The installation of hydroelectric or other sources of power (generator and solar light) to ensure 24-hour power sources that can enhance the integration of abortion care with HIV-FP services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 4.7(a): the applicable strategies to allocate budgets for hydroelectric/generator/solar power installation.			
1. Compile a needs analysis of the availability of hydroelectric or other sources of power to public healthcare facilities	10	71.4	Yes
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	14	100	
3. Compile a report to motivate a budget allocation for hydroelectric or other sources of power based on the needs analysis	6	42.9	
4.7.1 Responsible person/s to facilitate strategies for the allocation of budgets for various power sources.			
1. Planning, monitoring, and economic development director of the zone health department	13	92.9	Yes
2. Planning, monitoring, and economic development director of the district health office	11	78.6	
3. An ad-hoc committee with one representative from healthcare providers, one representative from hydroelectric and power workers, and one representative from an NGO, from each of the 3 districts appointed by the head of the 3 district health offices	2	14.3	
4.7.2 Time frame after approval of the action plan, within which power sources should be installed in public healthcare facilities.			
1. Within 9 months	1	7.1	No
2. Within 12 months	10	71.4	
3. Within 18 months	3	21.4	
Method 4.8: Construct accommodation for healthcare providers in the public health compounds, particularly in rural areas to enhance the delivery of integrated abortion care with HIV-FP services.			
1. Yes	13	92.9	

2. No	1	7.1	Yes
Method 4.8(a): the applicable strategies to construct accommodation for healthcare providers in public healthcare facilities.			
1. Compile a needs analysis of the availability of healthcare provider accommodation in public healthcare facilities	7	50	Yes
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	11	78.6	
3. Identify organisations from the government and private sectors sponsoring the construction of healthcare provider accommodation	12	85.7	
4. Compile a report to motivate a budget allocation for the construction of healthcare provider accommodation based on the needs analysis	5	35.7	
4. Consultancy healthcare providers	1	7.1	
5. Communities	1	7.1	
4.8.1 Responsible person/s to facilitate strategies to mobilise financial resources for the construction of healthcare provider accommodation.			
1. Planning, monitoring, and economic development director of the zone health department	10	71.4	No
2. Planning, monitoring, and economic development director of the district health office	11	78.6	
3. The director of the public healthcare facility	5	35.7	
4. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from healthcare providers, from each of the 3 districts appointed by the head of the 3 district health offices.	6	42.9	
4.8.2 Time frame after approval of the action plan, within which healthcare providers will start living in the constructed accommodation.			
1. Within 1 year	5	35.7	No
2. Within 2 years	5	35.7	
3. Within 3 years	3	21.4	
4. Above 3 years	1	7.1	

6.14.5 Fiscal resource

Action statement 5: Avoid/reduce out-of-pocket payments for health services to enhance the uptake of abortion care, HIV, and FP-integrated health services (N=14).

The panellists reached an 85% consensus (n=12; N= 14) that avoiding/reducing the out-of-pocket payment for health services could enhance the uptake of abortion, HIV, and FP-integrated health services (see Table 6.8). The panellists also reached a consensus on all the action methods under action statement 5, as described in Table 6.8. Similarly, a consensus was also reached on the responsible person/s to facilitate the implementation of the action methods described under action statement 5 (see Table 6.8). On the contrary, a consensus was not reached on any of the time frames within which the action methods should be implemented, as indicated in Table 6.8 below.

Consensus reached: Action method 5.1-5.3 (see Table 6.8)

Method 5.1: As indicated in Table 6.8, 100% consensus (n= 14; N= 14) was reached on compiling an evidence-based report on the need for the delivery of abortion care, HIV, and FP-integrated services free of charge.

Method 5.2: The panellists reached a 100% consensus (n= 14; N= 14) on strengthening CBHI to avoid out-of-pocket payments and cover the expense of abortion care, HIV, and FP-integrated services (see Table 6.8). Moreover, 92.9% consensus (n= 13; N= 14) was reached to educate the community on the importance of CBHI initiatives and assign a CBHI focal person at the district health office as the applicable strategy to strengthen CBHI (see Table 6.8).

Method 5.3: As shown in Table 6.8, 85% consensus (n= 12; N= 14) was reached among participants on securing incentives to motivate healthcare providers to enhance the integration of abortion care with HIV-FP services. Yet, a consensus was not reached on the applicable strategies to motivate the healthcare providers working in public healthcare facilities (see method 5.3).

Consensus reached: Responsible person/s for methods 5.1.1–5.3.1 (see Table 6.8)

As illustrated in Table 6.8, 92.9% consensus (n= 13; N= 14) was reached that programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices are responsible for compiling an evidence-based report to negotiate with higher government officials on the allocation of budget for integrated abortion, FP, and HIV services (method 5.1). The panellists reached 100% consensus (n= 14; N= 14) that the medical service director of the district health office is responsible for facilitating a strategy to strengthen community-based health insurance. Additionally, 92.9% consensus (n= 13; N= 14) was also reached that the medical service director of the zone health department is responsible for facilitating a strategy to strengthen community-based health insurance (method 5.2). A 92.9% consensus (n= 13; N= 14) was reached that the head of the district health office are responsible for facilitating the implementation of incentives for healthcare providers. Similarly, an 85.7% consensus (n= 12; N= 14) was reached that the heads of the zone health department are also responsible to facilitating strategies related to incentives for healthcare providers (method 5.3).

Timeframes to achieve action methods 5.1.2-5.3.2 (see Table 6.8)

As shown in Table 6.8, a consensus was not reached on the timeframes within which methods 5.1, 5.2, and 5.3 should be implemented.

Table 6.8: Fiscal resources for the integration of abortion care with HIV-FP services in public health care facilities of Ethiopia (N= 14).

Action statement 5: Avoid/reduce out-of-pocket payments for health services to enhance the uptake of abortion, HIV, and FP-integrated health services.	n=	f=%	Consensus
1. Agree	12	85.7	Yes
2. Disagree	2	14.3	
Method 5.1 Compile an evidence-based report on the need for free abortion care, HIV, and FP-integrated services.			
1. Yes	14	100	Yes
2. No	0	0	

5.1.1 Responsible person/s to compile an evidence-based report to negotiate with higher government officials on the allocation of budgets for integrated abortion, FP, and HIV services to allow for free service delivery			
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	13	92.9	Yes
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	9	64.3	
3. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from finance and economic development workers from each of the 3 districts appointed by the head of the 3 district health offices.	6	42.9	
5.1.2 Time frame after approval of the action plan, within which a free abortion, FP, and HIV integrated services should be initiated.			
1. Within 9 months	3	21.4	No
2. Within 12 months	9	64.3	
3. Within 18 months	2	14.3	
Method 5.2 Strengthen community-based health insurance (CBHI) to avoid out-of-pocket payments and cover the expense of abortion care, HIV, and FP integrated services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 5.2 (a) the applicable strategies of your choice/s that indicate/s how to strengthen CBHI.			
1. Educate the community on the importance of CBHI initiatives	13	92.9	Yes
2. Assign a CBHI focal person at the district health office	13	92.9	
3. Educate and work with the community leaders on CBHI initiatives	9	64.3	
4. Obtain support for the CBHI initiative from concerned government officials	9	64.3	
5.2.1 Responsible person/s to facilitate the mentioned strategies to strengthen CBHI.			
1. SNNPR health insurance agency branch managers (all 4 of them)	6	42.9	Yes
2. Medical service director of the zone health department	13	92.9	
3. Medical service director of the district health office	14	100	
4. An ad-hoc committee with one representative from civic society, one from the community leaders, and one representative from healthcare providers from each of the 3 zones appointed by the head of the 3 zone health departments.	7	50	
5.2.2 Time frame after approval of the action plan, within which CBHI initiatives should be started to enhance the integration of abortion care, HIV, and FP services.			
1. Within 12 months	9	64.3	No

2. Within 18 months	3	21.4	
3. Within 24 months	2	14.3	
Method 5.3 Securing incentives to motivate healthcare providers to enhance the integration of abortion care with HIV-FP services.			
1. Yes	12	85.7	Yes
2. No	2	14.3	
Method 5.3(a) the applicable strategies to motivate the healthcare providers.			
1. Pay incentives to healthcare providers working in integrated services based on performance criteria	9	64.3	No
2. Allocate a budget for overtime based on performance	11	78.6	
3. Allow free integrative healthcare services to healthcare providers and their families	4	28.6	
5.3.1 Responsible person/s to facilitate the implementation of the strategies related to healthcare providers' incentives.			
1. The head of the zone health department	12	85.7	Yes
2. The head of the district health office	13	92.9	
3. The director of the public healthcare facility	7	50	
5.3.2 Time frame after approval of the action plan, within which healthcare providers' incentives must be addressed			
1. Within 9 months	1	7.1	No
2. Within 12 months	11	78.6	
3. Within 18 months	2	14.3	

6.14.6 Policies, strategies and guidelines

Action statement 6: Avail comprehensive regulatory documents to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (N= 14).

The panellists reached 92.9% consensus (n=13; N= 14) that comprehensive regulatory documents enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (see Table 6.9). Consensus was also reached on all the action methods described under action statement 6 (see Table 6.9). Similarly, a consensus was also reached on all the responsible person/s to facilitate the implementation of the action methods described under action statement 6 (see Table

6.9). On the contrary, a consensus was not reached on any of the time frames within which the action methods should be implemented as indicated in Table 6.9 below.

Consensus reached: Action method 6.1-6.3 (see Table 6.9)

Method 6.1: The panellists reached 92.9% consensus (n= 13; N= 14) on developing or updating regulatory documents that can facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia (see Table 6.9). Moreover, 85.7% consensus (n= 12; N= 14) was also reached to negotiate with the directors of the Ministry of Health to assign experts to develop or adapt regulatory documents to be available at all public healthcare facilities as an applicable strategy (method 6.1).

Method 6.2: As shown in Table 6.9, 100% consensus (n= 14; N= 14) was reached on uploading all regulatory documents to the regional health bureau telegram group to make them available to all healthcare facilities providing integrated health services.

Method 6.3: As indicated in Table 6.9, 100% consensus (n= 14; N= 14) was reached on providing professional development training on the utilisation of regulatory documents within all integrated health services. Also, 92.9% consensus (n= 13; N = 14) was reached on providing training on how to access the regulatory documents from websites and/or Google Drive on the available computer/s in the healthcare facilities, and 85.7% consensus (n= 12; N= 14) was reached that providing technical support through supportive supervision are applicable strategies in providing professional development training on the utilisation of regulatory documents (see method 6.3).

Consensus reached: Responsible person/s for methods 6.1.1–6.3.1 (see Table 6.9)

As shown in Table 6.9, 85.7% consensus (n= 12; N= 14) was reached that the maternal neonatal and child health director of the regional health bureau is responsible for facilitating the development/updating of regulatory documents (method 6.1). An

85.7% consensus (n=12; N= 14) was reached that the director of maternal, neonatal, and child health of the regional health bureau and programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau are responsible for uploading regulatory documents to the regional health bureau telegram group (method 6.2). A 92.9% consensus (n= 13; N= 14) was also reached that programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau and programme officers (1 abortion care and 1 HIV-FP) from each of the selected zonal health department are responsible for facilitating professional development training on the use of regulatory documents (method 6.3).

Timeframes to achieve action methods 2.1.2-2.6.2 (see Table 6.5)

As shown in Table 6.9, a consensus was not reached on any of the time frames within which methods 6.1, 6.2, and 6.3 should be implemented.

Table 6.9: Policies, guidelines, and strategies for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (N=14)

Action statement 6: Avail comprehensive regulatory documents to enhance the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.	n=	f= %	Consensus
1. Agree	13	92.9	Yes
2. Disagree	1	7.1	
Method 6.1 Develop or update regulatory documents that can facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia.			
1. Yes	13	92.9	Yes
2. No	1	92.9	
Method 6.1(a) the applicable strategies of your choice/s to avail regulatory documents.			
1. Negotiate with policymakers to appoint experienced professionals to assess the relevancy of the applicable regulatory documents	6	42.9	Yes
2. Negotiate with the directors of the Ministry of Health to assign experts to develop or adapt regulatory documents to be available at all public healthcare facilities.	12	85.7	

3. Healthcare providers working in the integrated healthcare service should provide inputs on the draft regulatory documents to ensure the theoretical and practical aspects of integrated services are addressed	7	50	
6.1.1 Responsible person/s who must take responsibility for developing/updating regulatory documents.			
1. The federal MOH Ethiopia maternal, neonatal, and child health director	6	42.9	Yes
2. Maternal neonatal and child health director of the regional health bureau	12	85.7	
3. An ad-hoc committee with one representative from the abortion case team, one representative from the HIV-FP case team, and one representative from the Ethiopian midwife association appointed by the FMOH Ethiopia maternal, neonatal, and child health director	8	57.1	
6.1.2 Time frame after approval of the action plan, within which regulatory documents should be developed/updated.			
1. Within 12 months	9	64.3	No
2. Within 18 months	3	21.4	
3. Within 24 months	1	7.1	
4. After 24 months	1	7.1	
Method 6.2 Upload all regulatory documents to the regional health bureau telegram group to make them available to all healthcare facilities providing integrated health services.			
1. Yes	14	100	Yes
2. No	0	0	
6.2.1 Responsible person/s to facilitate uploading of regulatory documents to the regional health bureau telegram group.			
1. The director of maternal, neonatal, and child health of the regional health bureau	12	85.7	Yes
2. Programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau	12	85.7	
3. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments	8	57.1	
6.2.2 Time frame after approval of the action plan, within which regulatory documents should be ready and available at the regional health bureau telegram group			
1. Within 12 months	11	78.6	No
2. Within 18 months	2	14.3	
3. Within 24 months	1	7.1	
Method 6.3 Provide professional development training on the use of regulatory documents within all integrated health services.			
1. Yes	14	100	Yes
2. No	0	0	

Method 6.3(a) the applicable strategies to provide technical support.			
1. Provide training on how to access the regulatory documents from the websites and/or Google Drive on the available computer/s in the healthcare facilities	13	92.9	Yes
2. Provide technical support through supportive supervision	12	85.7	
3. Provide technical support by conducting review meetings	8	57.1	
6.3.1 Responsible person/s to facilitate professional development training on the use of regulatory documents.			
1. Programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau	13	92.9	Yes
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	13	92.9	
3. Programme officers (1 abortion care and 1 HIV-FP service) from each of the selected 3 district health offices	8	57.1	
4. An ad-hoc committee representing senior healthcare providers (1 abortion care and 1 HIV-FP service) appointed by the director of the public healthcare facility	5	35.7	
6.3.2. Time frame after approval of the action plan, within which technical support on regulatory documents' use should be provided			
1. Within 12 months	11	78.6	No
2. Within 18 months	3	21.4	
3. Within 24 months	0	0	

6.14.7 Behavioural change and communication

Action statement 7: Provide health-related information to communities to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (N= 14).

As indicated in Table 6.10, the panellists reached 100% consensus (n= 14; N= 14) that providing health-related information to communities enhances the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia. The panellists also reached consensus on all the action methods described under action statement 7 (see Table 6.10). However, a consensus was not reached on some of the responsible person/s to facilitate the implementation of the action methods and all of

the time frames within which the action methods should be implemented, as indicated in Table 6.10 below.

Consensus reached: Action method 7.1-7.5 (see Table 6.10)

Method 7.1: The panellists reached 100% consensus (n= 14; N= 14) on advocacy meetings with political leaders, religious leaders, the elderly, and other communities to share information on the advantages of abortion care, FP, and HIV service integration (see Table 6.10).

Method 7.2: As shown in Table 6.10, 100% consensus (n= 14; N= 14) was reached on developing and availing health education material (leaflets, brochures, pamphlets, and banners) to enhance the integration of abortion care with HIV-FP services in public healthcare facilities. However, a consensus was not reached on applicable strategies to produce and distribute health education materials (method 7.2).

Method 7.3: As described in Table 6.10, 100% consensus (n= 14; N= 14) was reached on the use of mass media (Radio, social media, and texts) to increase communities' awareness of the provision of abortion care, FP, and HIV-integrated services. Moreover, 100% consensus (n= 14; N= 14) was reached to negotiate with radio journalists on health education slots/time available to discuss the advantages of integrated health service as an applicable strategy to use mass media (see method 7.3).

Method 7.4: Table 6.10 indicates that 100% consensus (n= 14; N= 14) was reached on organising awareness campaigns in the community on integrated abortion care, FP, and HIV services by community healthcare providers. Furthermore, 100% consensus (n= 14; N= 14) was reached on providing health information to the community (using developed materials) by healthcare providers and health extension workers, and 85.7% consensus (n= 12; N= 14) was also reached on providing health information to the community (using developed materials) by women health development army leaders are the applicable strategies to improve the community awareness on integrated health services (method 7.4).

Method 7.5: The panellists reached a 100% consensus (n= 14; N= 14) to enhance the integration of abortion care, HIV, and FP services by using an electronic communication system (see Table 6.10). Additionally, 92.9% consensus (n= 13; N= 14) was reached to enhance the provision of integrated health services in healthcare facilities by using internet technology as the applicable strategy to enhance integrated health services (method 7.5).

Consensus reached: Responsible person/s for methods 7.1.1–7.5.1 (see Table 6.10)

As shown in Table 6.10, 92.9% consensus (n= 13; N= 14) was reached that the head of the zone health department is responsible for sharing information with political leaders, religious leaders, the elderly, and communities on the advantages of abortion care, FP, and HIV-service integration (method 7.1). The panellists reached 92.9% consensus (n= 13; N= 14) that programme officers (1 abortion care and 1 HIV-FP) from each of the selected zone health departments are responsible for facilitating the production and availability of health education materials in the healthcare facilities. An 85.7% consensus (n= 12; N= 14) was also reached that programme officers (1 abortion care and 1 HIV-FP) from each of the selected three district health offices are responsible for facilitating the production and availability of health education materials in the healthcare facilities (method 7.2). As illustrated in Table 6.10, 92.9% consensus (n=13; N= 14) was reached that the head of the zone health department and 85.7% consensus (n= 12; N= 14) that the manager of communication and broadcasting of the zone both are responsible for using mass media on integrated abortion care with HIV-FP services (method 7.3). The panellists reached 92.9% consensus (n= 13; N= 14) that programme officers (1 abortion care and 1 HIV-FP) from each of the selected zone health departments, and 85.7% said (n= 12; N=14) programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices are responsible for organising awareness campaigns on integrated abortion care and HIV-FP services (method 7.4). The panellists also reached a 100% consensus (n= 14; N= 14) that the director of the public healthcare facility is responsible for using an electronic system to enhance the integration of abortion care with HIV-FP services (method 7.5).

Timeframes to achieve action methods 7.1.2-7.5.2 (see Table 6.10)

As shown in Table 6.10, a consensus was not reached on any of the time frames within which methods 7.1, 7.2, 7.3, 7.4, and 7.5 should be implemented.

Table 6.10: Behavioural change and communication for the integration of abortion care with HIV-FP services in public health facilities of Ethiopia (N=14).

Action statement 7: Provide health-related information to communities to enhance the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.	n=	f=%	Consensus
1. Agree	14	100	Yes
2. Disagree	0	0	
Method 7.1 Advocacy meetings with political leaders, religious leaders, the elderly, and other communities to share information on the advantages of abortion care, FP, and HIV services integration.			
1. Yes	14	100	Yes
2. No	0	0	
7.1.1 Responsible person/s to share information with political leaders, religious leaders, the elderly, and communities on the advantages of abortion care, FP, and HIV services integration.			
1. The head of the zone health department	13	92.9	Yes
2. The head of the district health office.	12	85.7	
3. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	8	57.1	
4. An ad-hoc committee representation from healthcare providers (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public health facility	4	28.6	
5. An ad-hoc committee with one representative from civic society and one representative from the community leaders from each of the 3 districts appointed by the head of the 3 district health offices	4	28.6	
7.1.2 Time frame after approval of the action plan, within which an advocacy meeting should be initiated with political leaders, religious leaders, the elderly, and other community members.			
1. Within 3 months	2	14.3	No
2. Within 6 months	11	78.6	
3. Within 9 months	1	7.1	
Method 7.2 Develop and avail health education material (leaflets, brochures, pamphlets, and banners) to enhance the integration of abortion care with HIV-FP services in public healthcare facilities.			
1. Yes	14	100	Yes
2. No	0	0	
Method 7.2(a) the applicable strategies to produce and distribute health education materials.			

1. Compile a budget report based on the quotations for the development and availability of health education materials	7	50	No
2. The healthcare facility allocates a budget to develop the content of the health education materials relevant to integrated health services	9	64.3	
3. Identify organisations in the private sector to sponsor, develop and avail health education materials	11	78.6	
4. Identify NGOs to sponsor, develop and avail health education materials	9	64.3	
5. Avail the health education materials in the integrated public healthcare facilities	7	50	
7.2.1 Responsible person/s to facilitate the production and availability of health education materials in the healthcare facilities.			
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	13	92.9	Yes
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	12	85.7	
3. The director of the public healthcare facility	5	35.7	
4. An ad-hoc committee with one representative from civic society, one from the community leaders, and one representative from healthcare providers, from each of the 3 zones appointed by the head of the 3 zone health departments	2	14.3	
7.2.1 Time frame after approval of the action plan, within which job aids should be produced and distributed.			
1. Within 9 months	4	28.6	No
2. Within 12 months	10	71.4	
3. With 18 months	0	0	
Method 7.3 Use mass media (Radio, social media, and texts) to increase community awareness of the provision of abortion care, FP, and HIV-integrated services.			
1. Yes	14	100	Yes
2. No	0	0	
Method 7.3(a). the applicable strategies to use mass media.			
1. Negotiate with radio journalists on health education slots/time available to discuss the advantages of integrated health service information	14	100	Yes
2. Convey messages through social media (Facebook, Telegram, Instagram etc.) on the advantages of providing integrated health services in public health facilities	10	71.4	

3. Negotiate with the Ethiopian telecom sponsors to send a text message on the advantages of integrated health services	5	35.7	
7.3.1 Responsible person/s to use mass media on integrated abortion care with HIV-FP services.			
1. The manager of communication and broadcasting of the zone	12	85.7	Yes
2. The head of the zone health department	13	92.9	
3. The head of the district health office	8	57.1	
4. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from the journalists, from each of the 3 districts appointed by the head of the 3 district health offices	1	7.1	
7.3.2 Time frame after approval of the action plan, within which mass media should be used to integrate abortion care with HIV-FP services.			
1. Within 6 months	4	28.6	No
2. Within 9 months	5	35.7	
3. Within 12 months	5	35.7	
Method 7.4 Organise awareness campaigns in the community on integrated abortion care, FP, and HIV services by community healthcare providers.			
1. Yes	14	100	Yes
2. No	0	0	
Method 7.4(a) the applicable strategies to improve the community awareness of integrated health services.			
1. Healthcare providers and health extension workers should provide health information to the community (using developed materials)	14	100	Yes
2. Women health development army leaders should provide health information to the community (using developed materials)	12	85.7	
3. Health post and health centre focal persons should provide health information to the community (using developed materials)	6	42.9	
7.4.1 Responsible person/s to organise awareness campaigns on integrated abortion care with HIV-FP services.			
1. Programme officer (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	13	92.9	Yes
2. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	12	85.7	
3. The director of the public healthcare facility	8	57.1	
4. An ad-hoc committee (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public healthcare facility	3	21.4	

7.4.2 Time frame after approval of the action plan, within which information on integrated abortion care and HIV-FP services should be addressed.			
1. Within 6 months	4	28.6	No
2. Within 9 months	8	57.1	
3. Within 12 months	2	14.3	
Method 7.5 Enhance the integration of abortion care, HIV, and FP services using an electronic communication system.			
1. Yes	14	100	Yes
2. No	0	0	
Method 7.5(a) the applicable strategies to enhance integrated health services using electronics technology.			
1. Enhance the provision of integrated health services in the healthcare facilities using internet technology	13	92.9	Yes
2. Enhance the provision of integrated health services in the healthcare facilities using telephone communication	10	71.4	
3. Enhance the provision of integrated health services in the healthcare facilities using fax technology	3	21.4	
7.5.1 Responsible person/s to make use of an electronic system to enhance the integration of abortion care with HIV-FP services.			
1. The director of the public healthcare facility	14	100	Yes
2. The head of Information and technology of the zone health department	9	64.3	
3. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	7	50	
7.5.2 Time frame after approval of the action plan, within which an electronic communication system should be used.			
1. Within 6 months	9	64.3	No
2. Within 9 months	3	21.4	
3. Within 12 months	3	21.4	

6.15 FINDINGS: ROUND 2

All inputs from round 1, as discussed above, were taken into consideration for round 2. All items for which 80% consensus and more were reached, were indicated as “**CONSENSUS**” on the second draft. Options were not indicated or allowed in round 2, but all items for which consensus in round one were not reached were indicated and options were allowed. The second draft was then uploaded on “Google Forms” for validation (Annexure 11). The recruitment letter for round two (see Annexure 10)

indicated the purpose of the study, voluntary participation, ethical clearance, and included the embedded link that directed panellists to the second-round draft action plan with validation tool (see Annexure 11). The recruitment letter was sent to 14 e-Delphi panellists through their email addresses. Clear instructions were provided on the second draft to ensure the e-Delphi panellists knew what was expected when validating the second draft action plan.

An increased rate of attrition hinders consensus-building (Shariff 2015:3; Skinner et al. 2015:34) and is a limitation of the e-Delphi technique as the online platform is assumed to limit response rates. However, all participants in this study responded as the researcher used volunteer abortion and HIV-FP programme officers who were recognised by their respective offices and had a minimum of five years' experience in their field. In round 2, consensus was reached for all items except three on the time frames of method 4.7, method 5.3 and method 7.2. Only the findings of those methods (coloured as pink highlighted text), with the appropriate responsible person/s and timeframes where consensuses were not reached in round 1 are described below.

Method 1.1: An evidence-based report must be compiled to support the need for upgrading existing health posts to health centres or constructing new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.

Time frame: The panellists reached 92.9% consensus (n= 13; N=14) that an evidence-based report must be compiled within three months after the approval of the action plan to upgrade the existing health posts to health centres or construct new ones to comply with the 5-km radius to integrate abortion care with FP-HIV services (see Table 6.11).

Table 6.11: Time frame to upgrade the existing health posts to a health centre or construct new one (N= 14)

Time frame	n=	f=	Consensus
1. Within 3 months	13	92.9	Yes
2. Within 6 months	1	7.1	
3. Within 9 months	0	0	

Method 1.3: Strategies must be developed to strengthen the intra-facility referral system (within the healthcare facilities) to integrate abortion care with FP-HIV services.

Responsible person: As indicated in Table 6.12, 92.9% consensus (n= 13; N= 14) was reached that the director of the public healthcare facility is responsible for facilitating strategies to strengthen the intra-healthcare facility referral system to integrate abortion care with FP-HIV services.

Table 6.12: Responsible person to facilitate the strategies to strengthen the intra-healthcare facility referral system (N= 14)

Strategies to strengthen the intra-healthcare facility referral system.	n=	f=	Consensus
1. The director of the public healthcare facility	13	92.9	Yes
2. The human resource development coordinator of the public healthcare facility	4	28.6	
3. An ad-hoc committee (1 abortion care and 1 HIV-FP healthcare provider) appointed by the director of the public health facility)	10	71.4	

Method 1.4: Strategies must be developed to strengthen the referral system (from the community to the health centre/hospital) to improve integrated health services

Timeframe: The panellists reached 92.9% consensus (n= 13; N= 14) that strategies must be developed within six months after the approval of the action plan for the community-to-healthcare facility referral system to be strengthened (see Table 6.13).

Table 6.13: Timeframe the community to facility referral system to be strengthened (N= 14)

Timeframe	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	0	0	

Method 1.5: Mobile/outreach programmes must be established or strengthened to offer abortion care, FP, and HIV integrated healthcare services.

Responsible person/s: As shown in Table 9.14, 92.9% consensus (n= 13; N= 14) was reached that the director of the public healthcare facility is responsible for establishing or strengthening the mobile outreach programme to offer integrated abortion care with FP-HIV services.

Table 6.14: Responsible person to establish or strengthen mobile or outreach programmes (N= 14)

Responsible person	n=	f=	Consensus
1. The director of the public healthcare facility	13	92.9	Yes
2. Programme officers (1 abortion care and HIV-FP) from each of the selected 3 district health offices	10	71.4	
3. An ad-hoc committee (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public healthcare facility	6	42.9	

Method 1.6: The healthcare service provision areas must be rearranged to reduce the waiting time for abortion care, HIV, and FP integrated services.

Strategies: As illustrated in Table 6.15, the panellists reached 85.7% consensus (n= 12; N= 14) that abortion care and FP-HIV service-providing rooms must be placed in adjacent rooms to reduce the waiting time for abortion care, HIV, and FP-integrated services.

Table 6.15: Place of abortion and FP-HIV service providing rooms (N= 14)

Abortion and FP-HIV service providing rooms	f=	n=	Consensus
1. Abortion care and HIV-FP services are offered in the same room	7	50	Yes
2. Abortion care and FP-HIV service offered in the adjacent rooms	12	85.7	

Abortion and FP-HIV service providing rooms	f=	n=	Consensus
3. Abortion care and HIV-FP service providing areas near the main gate of the healthcare facility compound	4	28.6	
4. Implement a scheduled based client appointment system	2	14.3	

Method 2.1: An evidence-based report must be compiled on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible for providing integrated abortion and HIV-FP services.

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) that an evidence-based report on the need for healthcare providers must be compiled within three months after the approval of the action plan (see Table 6.16).

Table 6.16: Timeframe on the need for healthcare providers (N= 14)

Time frame	n=	f=	Consensus
1. Within 3 months	13	92.9	Yes
2. Within 6 months	1	7.1	
3. Within 9 months	0	0	

Method 2.2 The leadership and management skills of public healthcare facility directors must be increased through in-service training to enhance the integration of abortion care with HIV-FP services.

Time frame: As indicated in Table 6.17, 92.9% consensus was reached (n= 13; N= 14) to capacitate healthcare facility directors with leadership and management skills f within six months after approval of the action plan.

Table 6.17: Timeframe on the capacitation of healthcare facility directors (N= 14)

Timeframe	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	0	0	

Method 2.3 The healthcare providers' (doctors, health officers, midwives, and nurses) knowledge and skills must be improved to deliver integrated abortion and HIV-FP services

Responsible person/s: A 92.9% consensus was reached (n= 13; N= 14) that the director of the public healthcare facility is responsible for improving healthcare providers' knowledge and skill to deliver integrated abortion and HIV-FP services (see Table 6.18).

Table 6.18: Responsible person to improve the knowledge and skills of healthcare providers (N=14)

Responsible person/s	n=	f=	Consensus
1. The director of the public healthcare facility	13	92.9	Yes
2. An ad-hoc committee with representation from healthcare providers (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	9	64.3	
3. An ad-hoc committee with one representative from domestic and one from international partner organisations from each of the 3 zones appointed by the head of the 3 zone health departments	5	35.7	

Method 2.4 Motivation plans for healthcare providers must be implemented to enhance the integration of abortion with HIV-FP services.

Responsible person/s: The panellists reached 92.9% consensus (n= 13; N= 14) that the head of the zone health department is responsible for implementing motivational plan to enhance the integration of abortion care with FP-HIV services (see Table 6.19).

Table 6.19: Responsible person for implementation motivation plans (N=14)

Responsible person	n=	f=	Consensus
1. The head of the regional health bureau	5	35.7	Yes
2. The head of the zone health department	13	92.9	
3. An ad-hoc committee with representation from healthcare providers (1 doctor, 1 midwife, 1 nurse, and 1	8	57.1	

Responsible person	n=	f=	Consensus
health officer) appointed by the head of the 3 district health offices			
4. A group of public healthcare facility directors willing to assist with the negotiations	3	21.4	

Time frame: As indicated in Table 6.20, 92.9% consensus was reached (n= 13; N= 14) that healthcare providers' motivation should be increased within 12 months after the approval of the action plan to enhance the integration of abortion care with FP-HIV service.

Table 6.20: Timeframe to implement healthcare providers' motivation plan (N= 14)

Time frame	N=	F=	Consensus
1. Within 12 months	13	92.9	Yes
2. Within 18 months	1	7.1	
3. Within 24 months	0	0	

Method 2.5 A mentorship programme (Guidance provided by an individual with more experience and knowledge on integrated service) must be initiated and/or strengthened to support healthcare providers to enhance the integration of abortion care with HIV-FP services.

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) that a mentorship programme (Guidance provided by an individual with more experience and knowledge on integrated service) must be initiated within six months after approval of the action plan to enhance the integration of abortion care with HIV-FP services (see Table 6.21).

Table 6.21: Time frame to initiate mentorship on integrated abortion care with FP-HIV services (N= 14)

Time frame	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	0	0	

Method 2.6 Biannual performance review meetings must be conducted to improve the integration of abortion care with HIV-FP services.

Time frame: As shown in Table 6.22, 92.9% consensus was reached (n= 13; N= 14) to start conducting biannual review meetings within six months after approval of the action plan to improve the integration of abortion care with HIV-FP services.

Table 6.22: Time frame to start conducting biannual review meetings (N= 14)

Time frame	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 12 months	1	7.1	
3. Within 18 months	0	0	

Method 3.1 An evidence-based report must be compiled on the availability of drugs, equipment and supplies essential to offer quality care at integrated healthcare facilities.

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) that an evidence-based report must be compiled within six months after the approval of the action plan on the availability of drugs, equipment and supplies essential for offering quality care at integrated healthcare facilities (see Table 6.23).

Table 6.23: Time frame for compiling an evidence-based report on drugs, equipment and supplies (N= 14)

Time frame	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	0	0	

Method 3.2 Pharmacy professionals must be deployed to public healthcare facilities to ensure the availability of resources (drugs) to integrate abortion care, FP, and HIV services.

Time frame: As illustrated in Table 6.24, 92.9% consensus was reached (n= 13; N= 14) on the deployment of pharmacy professionals to health facilities within six months

after the approval of the action plan to ensure the availability of resources (drugs) to integrate abortion care, FP, and HIV services.

Table 6.24: Time frame on the deployment of pharmacy professionals (N= 14)

Time frame	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 12 months	1	7.1	
3. Within 18 months	0	0	

Method 3.3 Medical resources in public health facilities must be addressed based on the evidence-based reports to integrate abortion care with HIV-FP services

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) to address the availability of medical equipment in public health facilities within six months after the approval of the action plan to ensure integrated health services (see Table 6.25).

Table 6.25: Time frame to address medical equipment in public health facilities based on evidence-based reports (N= 14)

Time frame	f=	n=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 12 months	1	7.1	
3. Within 18 months	0	0	

Method 3.4 Medical equipment such as manual vacuum aspirator (MVA), electrical vacuum aspirator (EVA), and speculum must be ordered or maintained to provide integrated abortion care, FP, and HIV services

Strategies: The panellists reached 92.9% consensus (n= 13; N= 14) that biomedical officers from the district health office should identify and procure medical equipment needed for the delivery of integrated abortion care and HIV-FP services. Also, 85.7% consensus was reached (n= 12; N= 14) that the responsible parties are biomedical officers from the zone health department (see Table 6.26).

Table 6.26: Strategies to procure or/and maintain medical equipment for public health facilities (N=14)

Strategies	n=	f=	Consensus
1. Biomedical engineers from the regional health bureau to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	3	21.0	Yes
2. Biomedical officers from the zone health department to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	12	85.7	
3. Biomedical officers from the district health office to identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	13	92.9	

Time frame: As indicated in Table 6.27, the panellists reached 85.7% consensus (n= 12; f= 85.7%) that medical equipment necessary for integrated abortion care, FP, and HIV services should be operated and/or maintained within six months after approval of the action plan.

Table 6.27: Time frame to maintain and/or procure medical equipment for integrated health services (N= 14)

Time frame	f=	n=	Consensus
1. Within 6 months	12	85.7	Yes
2. Within 9 months	0	0	
3. Within 12 months	2	14.3	

Method 3.5 Negotiate with the private sector (pharmacies, drug vendors, and stores) to sponsor medical resources necessary for abortion care, FP, and HIV services integrations

Strategies: As illustrated in Table 6.28, 92.9% consensus was reached (n= 13; N= 14) on the appointment of a team to take responsibility for obtaining sponsorships and MOUs from private sectors as a strategy to obtain resources necessary for abortion care, FP, and HIV-service integration (see Table 6.28).

Table 6.28: Strategies for obtaining sponsorships and MOUs from the private sector (N=14)

Strategies	n=	f=	Consensus
1. Identify organisations in the private sector to sponsor identified medical resources.	9	64.3	Yes
2. Identify organisations in the government sectors to sponsor identified medical resources	5	35.7	
3. Appoint a team to take responsibility for obtaining sponsorships and MOUs	13	92.9	

Time frame: As shown in Table 2.29, 85.7% consensus was reached (n= 12; N= 14) to negotiate with the private sector and obtain signed sponsorship within six months after the approval of the action plan to enhance abortion care, FP, and HIV-service integrations.

Table 6.29: Time frame for obtaining signed sponsorships and MOUs from the private sector (N= 14)

Time frame	n=	f=	Consensus
1. Within 3 months	2	14.3	Yes
2. Within 6 months	12	85.7	
3. Within 9 months	0	0	

Method 4.1 An evidence-based report must be compiled to assess the infrastructure of existing healthcare facilities to deliver integrated abortion care with HIV-FP services

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) that an evidence-based report must be compiled within six months after approval of the action plan to assess existing healthcare facilities' infrastructure to deliver integrated abortion care with HIV-FP services (see Table 6.30).

Table 6.30: Time frame to compile an evidence-based report on the infrastructure of existing healthcare facilities (N= 14)

Time frame	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 12 months	1	7.1	
3. Within 18 months	0	0	

Method 4.2 Share the evidence-based report with concerned governmental bodies, partners, civic societies, and communities to negotiate support to improve existing facilities and enhance the delivery of integrated abortion care with HIV-FP services

Responsible person/s: As illustrated in Table 6.31, 100% consensus was reached (n= 14; N= 14) that programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices are responsible for sharing the evidence-based reports with concerned bodies to improve the infrastructure of existing healthcare facilities.

Table 6.31: Responsible person/s to share the evidence-based reports with concerned bodies (N= 14)

Responsible person/s	n=	f=	Consensus
1. Programme officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	14	100	Yes
2. An ad-hoc committee with representation from healthcare providers (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	8	57.1	
3. An ad-hoc committee with one representative from civic society and one representative from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices.	6	49.2	

Time frame: As shown in Table 6.32, 92.9% consensus (n= 13; N= 14) was reached to share an evidence-based report with concerned bodies within six months after the approval of the action plan to improve the infrastructure of existing healthcare facilities.

Table 6.32: Time frame for sharing the evidence-based report with concerned bodies (N=14)

Time frame	n=	f=	Consensus
1. Within 6 month	13	92.9	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	0	0	

Method 4.3 Negotiate with the road and transport authority to allocate a budget for improving road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services

Strategies: The panellists reached 85.7% consensus (n= 13; N= 14) that a needs analysis to assess the status of road infrastructure to healthcare facilities and negotiating with road and transport authorities must be a strategy to allocate a budget for the improvement of road infrastructure (see Table 6.33).

Table 6.33: Strategies to improve road infrastructures (N= 14)

Strategies	n=	f=	Consensus
1. Compile a needs analysis to assess the status of road infrastructure to health facilities	12	85.7	Yes
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	8	57.1	
3. Share the report and the budget request with government higher officials for discussion and obtaining financial support.	7	50	

Time frame: An 85.7% consensus was reached (n= 12; N= 14) that negotiations with road and transport authorities on budget allocations for road infrastructure must be finalised within six months after the approval of the action plan to enhance the delivery of integrated abortion care with HIV-FP services (see Table 6.34).

Table 6.34: Time frame for negotiation with governmental bodies on road infrastructure improvement (N=14)

Time frame	n=	f=	Consensus
1. Within 3 months	2	14.3	Yes
2. Within 6 months	12	85.7	
3. Within 9 months	0	0	

Method 4.4 Organise an advocacy meeting on the needs analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services

Time frame: As indicated in Table 6.35, 92.9% consensus (n= 13; N= 14) was reached that an advocacy meeting on needs analyses for ambulance transportation must be organised within three months after approval of the action plan to enhance the provision of integrated abortion care, HIV, and FP services.

Table 6.35: Time frame to conduct advocacy meetings with concerned bodies on road infrastructure (N= 14)

Time frame	n=	f=	Consensus
1. Within 3 months	13	92.9	Yes
2. Within 6 months	1	7.1	
3. Within 9 months	0	0	

Method 4.5 Strengthen the transportation system to public healthcare facilities to enhance the delivery of integrated abortion care, HIV, and FP services.

Strategies: The panellists reached 92.9% consensus (n= 13; N= 14) to negotiate with private transport associations to increase daily trips to public healthcare facilities as a strategy to enhance the delivery of integrated abortion care, HIV, and FP services (see Table 6.36).

Table 6.36: Strategies to improve transportation (N= 14)

Strategies	n=	f=	Consensus
1. Negotiate with private transport associations to increase daily trips to public healthcare facilities	13	92.9	Yes
2. Negotiate with public transport associations to increase daily trips to public healthcare facilities	9	64.3	
3. Increase the number of motorbikes to enhance access to public healthcare facilities	3	21.4	

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) that the transportation system to public healthcare facilities must be strengthened within six months after the approval of the action plan to enhance the delivery of integrated abortion care, HIV, and FP services (see Table 6.37).

Table 6.37: Time frame for strengthening transportation system to public health facilities (N= 14)

Time frame	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 12 months	1	7.1	
3. Within 18 months	0	0	

Method 4.6 Ensure safe and adequate water supplies to public health facilities to enhance the integration of abortion care, HIV, and FP services.

Time frame: As shown in Table 3.38, 85.7% consensus was reached (n= 12; N= 14) that safe and adequate water supplies must be ensured within six months after the approval of the action plan to enhance the integration of abortion care, HIV, and FP services.

Table 6.38: Time frame for establishing safe and adequate water supply to public health facilities (N= 14)

Time frame	n=	f=	Consensus
1. Within 6 months	12	85.7	Yes
2. Within 12 months	2	14.3	
3. Within 18 months	0	0	

Method 4.7 The installation of hydroelectric or other sources of power (generator and solar light) to ensure 24-hour power sources that can enhance the integration of abortion care with HIV-FP services.

Time frame: As indicated in Table 6.39, the panellists did not reach a consensus on the time frame when hydroelectric or other sources of power (generator and solar light) should be installed in the public health facilities to have 24-hour access to power services.

Table 6.39: Time frame on hydroelectric or other sources of power installation to public health facilities (N= 14)

Time frame	n=	f=	Consensus
1. Within 9 months	5	35.7	No
2. Within 12 months	9	64.3	
3. Within 18 months	0	0	

Method 4.8 Construct accommodation for healthcare providers in the public health compounds, particularly in rural areas to enhance the delivery of integrated abortion care with HIV-FP services.

Responsible person/s: The panellists reached 92.9% consensus (n=13; N= 14) that the planning, monitoring, and economic development director of the district health office is responsible for mobilising financial resources for the construction of healthcare provider accommodation in the healthcare facilities to enhance the delivery of integrated abortion care with HIV-FP services (see Table 6.40).

Table 6.40: Responsible person/s for the mobilisation of financial resources for the construction of healthcare provider accommodation at the healthcare facilities (N= 14)

Responsible person	n=	f=	Consensus
1. Planning, monitoring, and economic development director of the zone health department.	11	78.6	Yes
2. Planning, monitoring, and economic development director of the district health office.	13	92.9	
3. The director of the public healthcare facility	5	35.2	
4. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from healthcare providers, from each of the 3 districts appointed by the head of the 3 district health offices.	2	14.9	

Time frame: The panellists reached 85.7% consensus (n= 12; N= 14) that healthcare provider accommodation must be constructed in public healthcare compounds within one year after the approval of the action plan to enhance the delivery of integrated abortion care with HIV-FP services (see Table 6.41).

Table 6.41: Time frame to construct healthcare provider accommodation at the health facility compound (N= 14)

Time frame	n=	f=	Consensus
1. Within 1 year	12	85.7	Yes
2. Within 2 years	2	14.3	
3. Within 3 years	0	0	

Method 5.1 Compile an evidence-based report on the need for free abortion care, HIV, and FP integrated services.

Time frame: A 92.9% consensus (n= 13; N= 14) was reached that an evidence-based report must be compiled within nine months after the approval of the action plan to deliver abortion care, HIV, and FP integrated services free of charge (see Table 6.42).

Table 6.42: Time frame for free delivery of integrated abortion with HIV-FP services freely (N= 14)

Time frame	n=	f=	Consensus
1. Within 9 months	13	92.9	Yes
2. Within 12 months	1	7.1	
3. Within 18 months	0	0	

Method 5.2 Community-based health insurance (CBHI) must be strengthened to avoid out-of-pocket payments and cover the expense of abortion care, HIV, and FP integrated services.

Time frame: The panellists reached 85.7% consensus (n= 12; N= 14) that the CBHI must be strengthened within 12 months after approval of the action plan to avoid out-of-pocket payments and enhance the integration of abortion care, HIV, and FP services (see Table 6.43).

Table 6.43: Time frame to strengthen CBHI and enhance integrated health services (N=14)

Time frame	n=	f=	Consensus
1. Within 12 months	12	85.7	Yes
2. Within 18 months	0	0	
3. Within 24 months	2	14.3	

Method 5.3 The healthcare providers' incentives must be secured to motivate and enhance the integration of abortion care with HIV-FP services.

Strategies: The panellists reached 85.7% consensus (n= 12; N= 14) to pay incentives to healthcare providers working in integrated services based on performance criteria as a strategy to enhance the integration of abortion care with HIV-FP services (see Table 6.44).

Table 6.44: Strategies on healthcare provider motivational packages (N= 14)

Strategies	n=	f=	Consensus
1. Pay incentives to healthcare providers working in integrated services based on performance criteria	12	85.7	Yes
2. Allocate a budget for overtime based on performance	10	71.4	
3. Allow free integrative healthcare services to healthcare providers and their families	7	50	

Time frame: As indicated in Table 6.45, the panellists did not reach a consensus on the time frame within which healthcare providers' incentives must be secured to motivate and enhance the integration of abortion care with HIV-FP services.

Table 6.45: Time frame for healthcare providers' incentive packages to be secured (N=14)

Time frame	n=	f=	Consensus
1. Within 9 months	5	35.7	No
2. Within 12 months	9	64.3	
3. Within 18 months	0	0	

Method 6.1 Regulatory documents must be developed or updated to facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia.

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) that regulatory documents must be developed or updated within 12 months after the approval of the action plan to facilitate the integration of abortion care with HIV-FP services (see Table 4.46).

Table 6.46: Time frame for developing or updating regulatory documents (N= 14)

6.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which regulatory documents should be developed/updated.			
Time frame	n=	f=	consensus
1. Within 12 months	13	92.9	Yes
2. Within 18 months	1	7.1	
3. Within 24 months	0	0	

Method 6.2 All regulatory documents must be uploaded to the regional health bureau telegram group to make them available to all healthcare facilities providing integrated health services

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) that regulatory documents must be uploaded to the regional health bureau telegram group within 12 months after the approval of the action plan to make them available to all healthcare facilities (see Table 6.47).

Table 6.47: Time frame for uploading regulatory documents to public health facilities (N=14)

Time frame	N=	F=	Consensus
1. Within 12 months	13	92.9	Yes
2. Within 18 months	1	7.1	
3. Within 24 months	0	0	

Method 6.3 Professional development training must be provided on the use of regulatory documents within all integrated health services facilities.

Time frame: As illustrated in Table 6.48, the panellists reached 92.9% consensus (n= 13; N= 14) that professional development training must be provided within 12 months after the approval of the action plan to enhance the use of regulatory documents within all integrated health services facilities.

Table 6.48: Time frame for professional development to enhance regulatory document use (N= 14)

Time frame	n=	f=	Consensus
1. Within 12 months	13	92.9	Yes
2. Within 18 months	1	7.1	
3. Within 24 months	0	0	

Method 7.1 Advocacy meetings with political leaders, religious leaders, the elderly, and other communities must be conducted to share information on the advantages of abortion care, FP, and HIV services integration.

Time frame: The panellists reached 85.7% consensus (n=12; N= 14) that advocacy meetings with concerned bodies must be conducted within three months after the approval of the action plan to share information on the advantages of abortion care, FP, and HIV-service integration (see Table 6.49).

Table 6.49: Time frame for advocacy meeting with concerned bodies to be conducted (N= 14)

Time frame	n=	f=	Consensus
1. Within 3 months	12	85.7	Yes
2. Within 6 months	2	14.3	
3. Within 9 months	0	0	

Method 7.2 Develop and avail health education material (leaflets, brochures, pamphlets, and banners) to enhance the integration of abortion care with HIV-FP services in public healthcare facilities.

Strategies: As illustrated in Table 6.50, 85.7% consensus (n= 12; N= 14) was reached among panellists on identifying NGOs to sponsor the development and avail health education materials as a strategy to enhance the integration of abortion with FP-HIV services.

Table 6.50: Strategies to develop and avail health education materials (N= 14)

Strategies	n=	f=	Consensus
1. Compile a budget report based on the quotations for the development and availability of health education materials	4	28.6	Yes
2. The healthcare facility allocates a budget to develop the content of the health education materials relevant to integrated health services	11	78.6	
3. Identify organisations in the private sector to sponsor, develop and avail health education materials	5	35.7	
4. Identify NGOs to sponsor, develop and avail health education materials	12	85.7	
5. Avail the health education materials in the integrated public healthcare facilities	5	35.7	

Time frame: As indicated in Table 6.51, panellists did not reach a consensus on the time frame for developing and availing health education materials in public health facilities.

Table 6.51: Time frame to develop and avail health education materials (N=14)

Time frame	n=	f=	Consensus
1. Within 9 months	4	28.6	No
2. Within 12 months	10	71.4	
3. Within 18 months	0	0	

Method 7.3 Use mass media (radio, social media, and texts) to increase community awareness on the provision of abortion care, FP, and HIV-integrated services.

Time frame: The participants reached 85.7% consensus (n= 12; N= 14) that mass media (Radio, social media, and texts) must be used within six months after the approval of the action plan to increase communities' awareness of the provision of abortion care, FP, and HIV-integrated services (see Table 6.52).

Table 6.52: Time frame for mass media to be used to increase community awareness on integrated health services (N=14)

Time frame	n=	f=	Consensus
1. Within 6 months	12	85.7	Yes
2. Within 9 months	2	14.3	
3. Within 12 months	0	0	

Method 7.4 Organise awareness campaigns in the community on integrated abortion care, FP, and HIV services by community healthcare providers.

Time frame: As indicated in Table 6.53, 92.9% consensus was reached (n= 13; N= 14) that awareness campaigns must be organised by community healthcare providers within six months after the approval of the action plan to integrate abortion care, FP, and HIV services.

Table 6.53: Time frame on awareness campaigns for integrated health services (N= 14)

Time frame	N=	F=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	0	0	

Method 7.5 Electronic communication systems must be used to enhance the integration of abortion care, HIV, and FP services.

Time frame: The panellists reached 92.9% consensus (n= 13; N= 14) that an electronic communication system must be used within six months after the approval of the action plan to enhance the integration of abortion care, HIV, and FP services (see Table 6.54).

Table 6.54: Time frame on the use of electronic communication systems for integrated services (N= 14)

Time frame	n=	f=	Consensus
1. Within 6 months	13	92.9	Yes
2. Within 9 months	1	7.1	
3. Within 12 months	0	0	

6.16 FINDINGS: ROUND 3

Inputs from rounds one and two were discussed above and taken into consideration for round three. All items for which 80% consensus and higher were reached in rounds one and two were indicated as “**CONSENSUS**”. Those items that reached consensus in the first and second round were not provided with options in round three. However, all items where consensus was not reached in the first and second rounds were indicated, and options were again allowed in round three. Only three method timeframes did not attain consensus in the first and second rounds of the e-Delphi (method 4.7, method 5.3 and method 7.2). Therefore, the third draft was then uploaded on “Google Forms” for validation (see Annexure 13). The recruitment letter was sent to 14 e-Delphi panellists through their email addresses (see Annexure 12). Clear instructions were provided on the third draft to ensure the Delphi panellist were aware of what procedure should they follow to validate the third draft action plan. The findings of the third round of the e-Delphi are described as follows:

Method 4.7 The installation of hydroelectric or other sources of power (generator and solar light) to ensure 24-hour power sources that can enhance the integration of abortion care with HIV-FP services.

Time frame: As illustrated in Table 6.55, 92.9% consensus was reached (n= 13; N= 14) on the installation of hydroelectric or other sources of power (generator and solar light) within nine months after approval of the action plan to access 24-hour power services that can enhance the integration of abortion care with HIV-FP services.

Table 6.55: Time frame for the installation of hydroelectric or other sources of power (N=14)

Time frame	n=	f=	Consensus
1. Within 9 months	13	92.9	Yes
2. Within 12 months	1	7.1	
3. Within 18 months	0	0	

Method 5.3 The healthcare providers' incentives must be secured to motivate and enhance the integration of abortion care with HIV-FP services.

Time frame: The panellists reached 85.7% consensus (n= 12; N= 14) on securing incentives within nine months after the approval of the action plan to motivate healthcare providers to enhance the integration of abortion care with HIV-FP services (see Table 6.56).

Table 6.56: Time frame for securing incentives for healthcare providers to enhance the integration of abortion care with HIV-FP services (N= 14)

Time frame	n=	f=	Consensus
1. Within 9 months	12	85.7	Yes
2. Within 12 months	2	14.3	
3. Within 18 months	0	0	

Method 7.2 Develop and avail health education material (leaflets, brochures, pamphlets, and banners) to enhance the integration of abortion care with HIV-FP services in public healthcare facilities.

Time frame: The panellists reached 85.7% consensus (n= 12; N= 14) to develop and avail health education materials within nine months after the approval of the action plan to enhance the use of abortion care with HIV-FP services in public healthcare facilities (see Table 6.57).

Table 6.57: Time frame to develop and avail health education material (N= 14)

Time frame	n=	f=	Consensus
1. Within 9 months	12	85.7	Yes
2. Within 12 months	2	14.3	
3. Within 18 months	0	0	

6.17 SUMMARY

Chapter Six discussed phase three of the study. The draft action plan was developed based on the findings from phase one and two, to be validated in this phase (phase three) by programme officers. “Google Forms” was used to upload the draft action plan with the assessment validation tool. In this study’s context, three rounds of validation took place until all items attained 80% and higher consensus among programme officers. The validated action plan will be used to facilitate the integration of abortion care with HIV-FP services in public health facilities of south Ethiopia.

The next chapter presents the conclusions, recommendations, and limitations of the study.

CHAPTER SEVEN

CONCLUSIONS, RECOMMENDATIONS, AND LIMITATIONS

7.1 INTRODUCTION

This chapter presents the conclusions drawn from three research phases. Recommendations for implementing the validated action plan to integrate abortion care with HIV-FP services in the public health facilities of Ethiopia are discussed. The limitations of the study and the way forwards are also described. The study's progress is depicted in Table 7.1.

Table 7.1: Research progress

Chapter 1	Overview of the study
Chapter 2	Literature review on: <ul style="list-style-type: none"> ➤ Change logic model ➤ Ethiopian healthcare services ➤ Abortion in Ethiopia ➤ Abortion services ➤ FP service ➤ HIV/AIDS service ➤ Integrated healthcare services
Chapter 3	1. The overall methodology of the study 2. Phase 1 <ul style="list-style-type: none"> ➤ Methodology followed ➤ Data analysis ➤ Data interpretation and presentation
Chapter 4	Phase 1: data presentation, analysis, and description of the research findings <ul style="list-style-type: none"> ➤ Abortion care users ➤ Healthcare providers
Chapter 5	Phase 2 <ul style="list-style-type: none"> ➤ Literature review on action plan development ➤ Principles and processes for action plan development ➤ Draft action plan with an embedded assessment validation tool

Chapter 6	Phase 3 <ul style="list-style-type: none"> ➤ Methodology ➤ Validation process and final action plan ➤ interpretation of the findings ➤ Action plan for the implementation of one-stop integrated abortion care, HIV and FP service in public health facilities of Ethiopia (The so-called AFH Service)
Chapter 7	Conclusions, limitations and recommendations

7.2 CONCLUSIONS

The Change Logic Model theoretical framework (Kellogg Foundation 2004:4) was applied to conduct the study. The model comprised inputs, processes or activities, output(s), outcome(s), and impacts (see Figure 2.1). The **inputs** of the change logic model theoretical framework in this study included geographic accessibility, human resources, medical resources, infrastructures, fiscal resources, regulatory documents (policies, strategies, and guidelines), and behavioural change and communication for the integration of abortion, FP, and HIV services (see Section 2.6). Reviewing the literature, developing the data collection instruments, the data collection, analysis of the data, and interpretation of the findings in phase one were the **process** and activities (see Section 2.5). The **output** of the study was the draft action plan developed from evidence obtained in phase one and the literature review (see Chapter Five). The **outcome** is the validated action plan to integrate abortion care with HIV-FP service in public health facilities of Ethiopia (see Chapter Six). The **impact** of the change logic model is not part of this study’s scope, as it required a longitudinal study over years.

An explanatory sequential mixed-method approach was used to undertake the study (the quantitative method was followed by the qualitative one). Accordingly, a series of phases were conducted to address the research objectives. The first phase aimed to assess the uptake of HIV and FP services among women attending abortion care. It also focused on opinions regarding the implementation of a one-stop service for FP, abortion care, and HIV services, the challenges and opportunities women experienced with abortion care and HIV-FP services, as well as the opinions of healthcare providers

regarding the advantages and disadvantages of integrating abortion and HIV-FP services. In phase two, the draft action plan with an embedded assessment validation tool was developed based on the data obtained from abortion care users, healthcare providers and available literature. The draft action plan was validated by abortion care and HIV-FP programme officers using the e-Delphi technique in phase three of the study to be implemented in public healthcare facilities of Ethiopia.

Thus, the objectives of the study were achieved.

7.2.1 Objective 1: Assess the uptake of integrated HIV and FP services among women attending abortion care in public health facilities of SNNPR, Ethiopia

Integrating HIV and FP service provision is cost-effective and maximises service utilisation (MOH Ethiopia 2020:30), and there was a need to assess the phenomenon. One hundred and thirty-nine (33.7%) abortion care users in this study received FP services (see Section 4.3.1.23), 162 (39.2%) received HIV/AIDS-related services (see Section 4.3.1.25), and 113 (27.3%) received both HIV and FP services in the healthcare facilities before they were discharged (see Section 4.3.1.26). Providing FP and HIV services to women who received abortion care is recommended before women are discharged from the treating facility (MOH 2020:30), reflecting the importance of integrating the three services.

7.2.2 Objective 2: Describe the opinion of women who received abortion care regarding the implementation of a one-stop service for FP, abortion care, and HIV services

Health service integration refers to combining different components of healthcare services and providing them in an organised manner (Haregu et al., 2014:9). Integrated abortion, FP, and HIV services reduce the cost of healthcare (Islam et al., 2019:4) and improve women's health status (Warren et al., 2017:91). Abortion care users in this study mentioned improving the facility setup, providing maternal health services free of charge, strengthening the provision of integrated services, improving

the accessibility of healthcare facilities, and improving facilities' internal referral systems enhance the provision of integrated health services (see Section 4.3.1.29).

7.2.3 Objective 3: Identify the challenges women experienced when receiving abortion care from integrated HIV-FP services in public health facilities of SNNPR, Ethiopia

Integrating maternal healthcare has numerous benefits. However, a lack of infrastructure and space to provide integrated service (Mutemwa et al., 2013:18; Newmann et al., 2016:211), a lack of funding, increased cost of drugs and medical supplies (USAID, PEPFAR, and Health Policy Plus 2018:3), and a shortage of trained human resources are frequently faced challenges (Heyeres 2016:2; Mutemwa et al., 2013:18). These can be overcome by providing different healthcare services simultaneously at one facility (Heyeres et al., 2016:2). Integration sometimes resulted in increased waiting times, lack of integrated service availability, lack of quality integrated care, and increased cost of healthcare (see Section 4.3.1.28). Nevertheless, abortion care users mentioned one or more benefits of integrated healthcare services (see Section 4.3.1.30) that enhance the integration of abortion care, FP and HIV services.

7.2.4 Objective 4: Identify the opportunities women noticed when receiving abortion care from integrated HIV-FP services in public health facilities of SNNPR, Ethiopia

Women who enrolled in the study primarily visited the healthcare facilities to receive abortion care. The majority (n= 329; f= 79.7%) of respondents requested only abortion care, 76 (f= 18.4%) requested at least two services (abortion care with FP or HIV/AIDS services), and only 8 (f= 1.9%) requested all three services (abortion care, HIV, and FP services) (see Section 4.3.1.11). Besides their request, abortion care users have the opportunity to use HIV and/or FP-integrated services in the healthcare facilities. Thus, 162 (f= 39.2%) respondents in this study received HIV/AIDS services (see Section 4.3.1.25) and 139 (f= 33.7%) contraceptives services (see Section 4.3.1.23) in addition to abortion care. Using all available health services in the health facilities

reduces frequent travels, saves time and money (Shadea et al., 2013:S91) and can enhance women's health status (Lambdin et al., 2015:1).

7.2.5 Objective 5: Describe service providers' opinions regarding the advantages and disadvantages of an integrated abortion and HIV-FP service

Integrated health service is a combination of different inputs, organisation, and the delivery of health services to improve access, user satisfaction, efficiency, and health system outcomes (Goniewicz, Carlström, Hertelendy, Burkle, Goniewicz, Lasota, Richmond and Khorram-Manesh 2021:3). On the contrary, the disadvantages of integrated health services include a lack of trained manpower, insufficient information and communication on integrated services, and increased workload due to the ever-increasing number of clients attending healthcare facilities (Kurpas, Stefanicka-Wojtas, Shpakou, Halata, Mohos, Skarbaliene, Dumitra, Klimatckaia, Bendova and Tkachenko 2021:8).

The healthcare providers mentioned avoiding missed opportunities, improving teamwork, increasing access to other health services, reducing stigma and discrimination, efficient use of staff time, reducing frequent visits to healthcare services, and reducing healthcare service costs are advantages of integrating abortion, FP and HIV services (see Section 4.3.2.33). Conversely, the lack of operational policies and guidelines, poor infrastructure in healthcare facilities, a shortage of trained manpower, and poor support and monitoring systems affect the delivery of integrated abortion and HIV-FP services (see Section 4.3.2.32).

7.2.6 Objective 6: Develop an action plan to facilitate the integration of abortion care with HIV-FP services in public health facilities of SNNPR, Ethiopia

To achieve objective 6, a draft action plan was developed based on the research findings from abortion care users (see Section 4.3.1), healthcare providers (see Section 4.3.2) and the literature review (see Section 5.8). The e-Delphi technique was the preferred information-sharing mechanism to reach a consensus among a panel of

experts (Avella 2016:309). In this study, three Delphi rounds were needed to achieve 80% consensus. The draft action plan with an assessment validation tool was developed based on findings from phase one and complemented with the literature review in phase two of the study. The Delphi technique was used by programme officers to validate the draft action plan, as described in Chapter Six. Three rounds were conducted to reach a consensus (80%) among the programme officers. Panellists provided their opinions through an information-sharing mechanism (Sekayi and Kennedy 2017:2762; Shariff 2015:1; Guglyuvatyy and Stoianoff 2015:186) for the decision-making process (Guglyuvatyy and Stoianoff 2015:186).

Fourteen programme officers working in abortion and HIV-FP programmatic areas validated the draft action plan using the e-Delphi technique (see Section 6.4). The validated action plan to integrate abortion with HIV-FP services is illustrated in Table 7.2.

Table 7.2: Validated action plan

Theme 1: Geographic accessibility		
Action statement 1: Improve access to healthcare facilities offering integrated abortion care with HIV-FP services		
Action method	Responsible person/s	Time
<p>Method 1.1</p> <p>Compile a report based on evidence to support the need to upgrade existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.</p>	<p>Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices must take responsibility for compiling the evidence-based report to support the upgrade of health posts to health centres or constructing new ones.</p>	<p>An evidence-based report must be compiled within 3 months after the approval of the action plan.</p>
<p>Method 1.2</p> <p>Share the completed evidence-based report with governmental bodies, partners, civic societies, and community leaders to negotiate an upgrade in existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.</p>	<p>Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices must take responsibility for sharing the report and negotiate with governmental bodies, partners, civic societies, and community leaders as indicated.</p>	<p>The evidence-based report must be shared, and negotiations with governmental bodies, partners, civic societies, and community leaders must commence within 6 months after approval of the action plan.</p>

<p>Method 1.3</p> <p>Develop strategies to strengthen the intra-facility referral system (within the healthcare facilities) to integrate abortion care with FP-HIV services.</p>	<p>The director of the public healthcare facility must take responsibility for the implementation of referral slips as a strategy to strengthen the intra-healthcare facility referral system.</p>	<p>The implementation of referral slips to strengthen the intra-healthcare facility referral system must be initiated within 6 months after approval of the action plan.</p>
<p>Method 1.4</p> <p>Strengthen the referral system (from the community to the health centre/hospital) using health centre-health post networking focal persons to integrate maternal health services.</p>	<p>The director of the public healthcare facility is responsible to facilitate the health centre-health post networking focal person to enhance the community to health centre/hospital referral system to integrate maternal health services.</p>	<p>Strengthening the community health facility referral system must be initiated within 6 months after the approval of the action plan.</p>
<p>Method 1.5</p> <p>Establish new or strengthen mobile/outreach programmes that offer abortion care, FP, and HIV-integrated healthcare services.</p>	<p>The director of the public healthcare facility must take responsibility for establishing or strengthening mobile or outreach health service programmes.</p>	<p>Mobile/outreach programmes must be established or strengthened within 3 months after the approval of the action plan.</p>
<p>Method 1.6</p> <p>Rearrange healthcare service provision areas to reduce the waiting time for abortion care, HIV, and FP-integrated services.</p>	<p>The team leader of abortion care providers at the public healthcare facility must take responsibility for ensuring the</p>	<p>Abortion care and HIV-FP service-providing areas must be</p>

	availability of adjacent rooms to reduce waiting times for integrated health services.	adjusted within 3 months after the approval of the action plan.
Theme 2: Human resources		
Action statement 2: Ensure competent human resources for the provision of abortion care, FP, and HIV-integrated services		
Method 2.1 Compile an evidence-based report on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible for providing integrated abortion and HIV-FP services.	Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices must take responsibility for compiling an evidence-based report on the need for healthcare providers who can deliver integrated abortion and HIV-FP services.	An evidence-based report must be compiled within 3 months after the approval of the action plan.
Method 2.2 Enhance public healthcare facility directors' leadership and management skills through in-service training to enhance the integration of abortion care with HIV-FP services.	Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices must take responsibility for facilitating leadership skills development training for public health directors to enhance the integration of abortion care with HIV-FP services.	Leadership skills development training for public healthcare directors must commence within 6 months after the approval of the action plan.

<p>Method 2.3</p> <p>Improve healthcare providers' (doctors, health officers, midwives, and nurses) knowledge and skills on the delivery of integrated abortion and HIV-FP services.</p>	<p>The director of the public healthcare facility must take responsibility for providing in-service training opportunities to capacitate healthcare providers with knowledge and skills.</p>	<p>The in-service training for healthcare providers must commence within 6 months after the approval of the action plan.</p>
<p>Method 2.4</p> <p>Implement motivation plans for healthcare providers to enhance the integration of abortion with HIV-FP services.</p>	<p>The head of the zone health department must take responsibility for negotiating on the allocation of a budget for healthcare providers' overtime.</p>	<p>Overtime payment for healthcare providers must be implemented within 12 months after the approval of the action plan.</p>
<p>Method 2.5</p> <p>Initiate/strengthen a mentorship programme (guidance provided by an individual with more experience and knowledge on integrated service) to support healthcare providers' integration of abortion care with HIV-FP services.</p>	<p>Programme officers (1 abortion care and 1 HIV-FP) from the Regional Health Bureau must take responsibility for one-on-one mentorship services to strengthen integrated abortion, FP, and HIV services.</p>	<p>A one-on-one mentorship service for healthcare providers must be initiated and/or strengthened within 6 months after the approval of the action plan.</p>
<p>Method 2.6</p> <p>Conduct performance review meetings with healthcare providers (abortion care and HIV-FP providers) to improve the integration of abortion care with HIV-FP services.</p>	<p>Maternal, neonatal, and child health directors of the district health office must take responsibility for organising biannual</p>	<p>Biannual review meetings on integrated health services must be conducted within 6 months</p>

	review meetings on integrated health services.	after the approval of the action plan.
Theme 3: Medical resources		
Action statement 3: Improve the availability of medical resources (drugs, equipment, and supplies) in public healthcare facilities to enhance the provision of abortion care, FP, and HIV-integrated services		
Method 3.1 Compile an evidence-based report on the availability of drugs, equipment and supplies essential to offer quality care at integrated healthcare facilities.	SNNPR pharmaceutical supply regional hub managers (all 4 of them) must take responsibility for compiling an evidence-based report on the availability of drugs, equipment, and supplies essential to offer integrated healthcare.	An evidence-based report must be compiled to assess the availability of drugs, equipment and supplies within 6 months after the approval of the action plan.
Method 3.2 Deploy pharmacy professionals to public healthcare facilities to ensure the availability of resources (drugs) for integrated abortion care, FP, and HIV services	The head of the district health office must take responsibility for deploying pharmacy professionals based on need and/or workload to public health facilities.	Pharmacy professionals must be deployed to public healthcare facilities within 6 months after the approval of the action plan.
Method 3.3 Based on the evidence-based report, address the availability of medical resources in public healthcare facilities to integrate abortion care with HIV-FP services.	SNNPR pharmaceutical supply regional hub managers must take responsibility for addressing the availability of medical resources through donations and daily medical resource assessment and	Medical resources must be available to public health facilities within 6 months after the approval of the action plan.

	monitoring systems in public healthcare facilities.	
Method 3.4 Order or maintain medical equipment such as manual vacuum aspirator (MVA), electrical vacuum aspirator (EVA), and speculum that is necessary for the provision of integrated abortion care, FP, and HIV services.	The logistic and medical supply director of the district health office must take responsibility to facilitate for the biomedical officers to identify and/or procure medical equipment for public healthcare facilities.	Medical equipment needed must be identified and procured within 6 months after the approval of the action plan
Method 3.5 Negotiate with the private sector (pharmacies, drug vendors, and stores) to sponsor medical resources necessary for abortion care, FP, and HIV services integrations	SNNPR pharmaceutical supply region hub managers must take responsibility for negotiating sponsorship with the private sector for medical resources necessary to integrate abortion care, HIV, and FP services.	Negotiations for sponsorships with the private sector to obtain medical resources must be completed within 6 months after the approval of the action plan.
Theme 4: Infrastructure		
Action statement 4: Improve public health facilities' infrastructure to enhance the integration of abortion care with HIV-FP services.		
Method 4.1 Compile an evidence-based report to assess the infrastructure of existing healthcare facilities to deliver integrated abortion care with HIV-FP services.	Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices must take	Evidence-based reports on the existing infrastructure of the healthcare facilities must be

	responsibility for compiling evidence-based reports on the existing infrastructure of the healthcare facilities to deliver integrated abortion care and HIV-FP services.	compiled within 6 months after the approval of the action plan.
<p>Method 4.2</p> <p>Share the evidence-based report with concerned governmental bodies, partners, civic societies, and communities to negotiate support to improve existing facilities and enhance the delivery of integrated abortion care with HIV-FP services.</p>	Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices must take responsibility for sharing the evidence-based reports with concerned governmental bodies to negotiate support for improvements of existing facilities to enhance the delivery of integrated abortion care and HIV-FP services	The evidence-based report must be shared with the heads of the region, zone, and district administrators, representatives of UNICEF and WHO working on maternal health services, leaders of civic societies, and communities within 6 months after the approval of the action plan.
<p>Method 4.3</p> <p>Negotiate with the road and transport authority to allocate a budget for improving road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services.</p>	The head of the zone road and transport department must take responsibility for compiling a needs analysis to allocate a budget for the improvement of road infrastructure.	A needs analysis on the status of road infrastructure must be compiled within 6 months after the approval of the action plan.

<p>Method 4.4</p> <p>Organise an advocacy meeting on the needs analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.</p>	<p>The medical service director of the zone health department must take responsibility for organising advocacy meetings on the need for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.</p>	<p>An advocacy meeting on the need analysis for ambulance transportation must be organized within 3 months after the approval of the action plan.</p>
<p>Method 4.5</p> <p>Strengthen the transportation system to public healthcare facilities to enhance the delivery of integrated abortion care, HIV, and FP services.</p>	<p>The medical service director of the zone health department must take responsibility for negotiating with private transport associations to increase daily trips to public healthcare facilities.</p>	<p>Negotiations with private transport associations to strengthen transportation to public healthcare facilities must commence within 6 months after the approval of the action plan.</p>
<p>Method 4.6</p> <p>Ensure safe and adequate water supplies to public health facilities to enhance the integration of abortion care, HIV, and FP services.</p>	<p>The head of water and sewerage/sanitation authority of the zone department must take responsibility (1) for compiling a needs analysis report on the availability of safe and adequate</p>	<p>A needs analysis report to address the availability of safe and adequate water supply and an evidence-based report to motivate a budget allocation</p>

	water supply and (2) an evidence-based report to motivate a budget allocation based on the needs analysis to ensure a safe and adequate water supply to public healthcare facilities.	must be compiled within 6 months after the approval of the action plan.
Method 4.7 The installation of hydroelectric or other sources of power (generator and solar light) to ensure 24-hour power sources that can enhance the integration of abortion care with HIV-FP services.	The planning, monitoring, and economic development director of the zone health department must take responsibility for compiling an evidence-based report to motivate a budget allocation based on the needs analysis for hydroelectric/generator/solar power installation.	Evidence-based reports to motivate a budget allocation must be compiled within 9 months after the approval of the action plan.
Method 4.8 Construct accommodation for healthcare providers in the public health compounds, particularly in rural areas to enhance the delivery of integrated abortion care with HIV-FP services	The planning, monitoring, and economic development director of the district health office must take responsibility for facilitating and identifying governmental and private sector organisations sponsoring the construction of healthcare provider accommodation in the healthcare facility compounds.	Governmental and private sector organisations sponsoring the construction of healthcare providers' accommodation must be identified within 1 year after the approval of the action plan.

Theme 5: Fiscal resources		
Action statement 5: Avoid/reduce out-of-pocket payments for health services to enhance the uptake of abortion, HIV, and FP-integrated health services.		
Method 5.1 Compile an evidence-based report on the need for free abortion care, HIV, and FP integrated services.	Programme officers (1 abortion care and 1 HIV-FP) from each of the selected district health offices must take responsibility for compiling an evidence-based report on the need for the free delivery of abortion care, HIV, and FP-integrated services.	An evidence-based report on the free delivery of integrated health services must be compiled within 9 months after the approval of the action plan.
Method 5.2 Strengthen community-based health insurance (CBHI) to avoid out-of-pocket payments and cover the expense of abortion care, HIV, and FP integrated services.	The medical service (1) director of the district health office and (2) medical service director of the zone health department must take responsibility for educating the community on the importance of CBHI initiatives and assigning a CBHI focal person at the district health office to avoid out-of-pocket	Community education and assigning CBHI focal persons at the district health office must commence within 12 months after the approval of the action plan.

	payments at integrated health service facilities.	
Method 5.3 Secure incentives to motivate healthcare providers to enhance the integration of abortion care with HIV-FP services.	The head of (1) the district health office and (2) the head of the zone health department must take responsibility for implementing incentives for healthcare providers working in the integrated health services.	Incentives for healthcare providers working in the integrated health services must be initiated within 9 months after the approval of the action plan.
Theme 6: Policies, strategies, and guidelines		
Action statement 6: Avail comprehensive regulatory documents to enhance the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.		
Method 6.1 Develop or update regulatory documents that can facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia.	The maternal neonatal and child health director of the regional health bureau must take responsibility for negotiating with directors of the MOH on the development or updating of regulatory documents.	Negotiations with the directors of the MOH on the development or updating of regulatory documents must commence within 12 months after the approval of the action plan.
Method 6.2 Upload all regulatory documents to the regional health bureau telegram group to make them available to all	The director of (1) maternal, neonatal, and child health of the regional health	All regulatory documents must be uploaded on the regional health

healthcare facilities providing integrated health services.	bureau and (2) programme officers (1 abortion care and 1 HIV-FP) from the regional health bureau must take responsibility for uploading regulatory documents to the regional health bureau telegram group.	bureau telegram group within 12 months after the approval of the action plan.
Method 6.3 Provide professional development training on the use of regulatory documents within all integrated health services.	One abortion care and one HIV-FP programme officer from the regional health bureau and two programme officers (1 abortion care and 1 HIV-FP) from zone health departments must take responsibility for how to access the regulatory documents from the websites and/or Google Drive and provide technical support through supportive supervision.	Regulatory documents must be available and accessible from the websites and/or Google Drive, with technical support and supportive supervision available within 12 months after the approval of the action plan.
Theme 7: Behavioural change and communication		
Action statement 7: Provide health-related information to communities to enhance the integration of abortion care with HIV-FP services in the public health facilities of Ethiopia.		
Method 7.1 Conduct advocacy meetings with political leaders, religious leaders, the elderly, and other communities	The head of (1) the zone health department and (2) the head of the district	Advocacy meetings with political leaders, religious leaders, the

<p>to share information on the advantages of abortion care, FP, and HIV services integration.</p>	<p>health office must take responsibility for sharing information with political leaders, religious leaders, the elderly, and communities on the advantages of integrated health services.</p>	<p>elderly, and other communities must be conducted within 3 months after the approval of the action plan</p>
<p>Method 7.2 Develop and avail health education material (leaflets, brochures, pamphlets, and banners) to enhance the integration of abortion care with HIV-FP services in public healthcare facilities.</p>	<p>One abortion care and one HIV-FP programme officer from zone health departments and programme officers (1 abortion care and 1 HIV-FP) from district health offices must take responsibility for identifying non-government organisations to sponsor the development of and avail health education materials.</p>	<p>Health education materials sponsored by non-governmental organizations must be developed and available within 9 months after the approval of the action plan.</p>
<p>Method 7.3 Use mass media (radio, social media, and texts) to increase community awareness of the provision of abortion care, FP, and HIV-integrated services.</p>	<p>The head of (1) the zone health department and (2) the manager of communication and broadcasting of the zone must take responsibility for negotiating with radio journalists on health education slots/time to discuss the advantages of integrated health service.</p>	<p>Health education on the advantages of integrated health service by radio journalists must commence within 6 months after the approval of the action plan.</p>
<p>Method 7.4</p>		

<p>Organise awareness campaigns in the community on integrated abortion care, FP, and HIV services by community healthcare providers.</p>	<p>One abortion care and one HIV-FP programme officer from zone health departments and programme officers (1 abortion care and 1 HIV-FP) from district health offices must take responsibility to facilitate health information to the community by healthcare providers and HEWs as well as by WDA leaders to improve awareness on integrated health services.</p>	<p>Health information to the community by healthcare providers and health extension workers, as well as by the women's health development army, must commence within 6 months after the approval of the action plan.</p>
<p>Method 7.5 Enhance the integration of abortion care, HIV, and FP services using an electronic communication system.</p>	<p>The director of the public healthcare facility must take responsibility for making use of internet technology to enhance integrated health services.</p>	<p>Internet technology must be used within 6 months after the approval of the action plan.</p>

7.3 RECOMMENDATIONS

To improve maternal health services in Ethiopia, it is recommended that the validated action plan be implemented in public healthcare facilities in all regions of the country. The researcher makes the following recommendations for the implementation of the validated action plan and outlines the need for further research.

7.3.1 Sharing the action plan with responsible person/s

The implementation of the validated action plan to integrate abortion care with HIV-FP services will only be effective if it is shared with the responsible stakeholders to facilitate implementation. The Federal Ministry of Health Ethiopia and the regional health bureaus should take responsibility for implementing the validated action plan. The researcher will share the action plan (in colour print and soft copy) with officials from these departments. A summary of the research process and outline of stakeholders' involvement (healthcare providers and programme officers) will be used to illustrate the scientific evidence on which the plan was built. A formal request will be shared with the Ministry of Health Ethiopia and the regional health bureau to have an open question-and-answer session on any platform acceptable to them.

An abstract for the Ethiopian Public Health Annual conference and international conference of African public health will be submitted to present the validated action plan and describe the scientific process followed to enhance possible adaptation to a similar context in Africa.

7.3.2 Advocating the incorporation of the action plan into regulatory documents

The researcher will use maternal health service reviews, conferences, and plenary sessions at all levels (national, regional and zonal) to advocate the benefits of integrating abortion care with HIV-FP services (see Section 4.3.1.30). The researcher will share the action plan with the maternal, neonatal, and child health director of the Federal Ministry of Health Ethiopia and regional health bureaus. Since stakeholders such as healthcare providers, programme officers and gatekeepers of regional, zonal

and district health offices were involved in the development of the action plan, it will likely enhance the acceptance of the action plan. It may thus be incorporated in abortion, FP, and HIV service regulatory documents.

7.3.3 Implementation of the action plan

The implementation of the action plan is believed to increase the uptake of HIV-FP planning services among women receiving abortion care in the public health facilities of Ethiopia, offering them an all-inclusive service at one point of care. The researcher will share the hard and soft copies of the action plan with the maternal neonatal and child health director of the Federal Ministry of Health Ethiopia, regional health bureau, and zonal health departments. The researcher will send an email request to these individuals to arrange a panel discussion or schedule an appropriate and agreed-upon time to present and motivate how the action plan can be implemented to enhance the integration of health services in public healthcare facilities. Partners (NGOs, WHO, and UNICEF) working on maternal health services will also be invited to attend the panel discussion that could be organised at national, regional and zonal levels as these organisations often provide technical support in these instances. The involvement of stakeholders such as healthcare providers, programme offices, and partner organisations (NGOs, WHO, and UNICEF) working on maternal health services is equally important in monitoring and evaluating the action plan's implementation.

7.3.4 Dissemination of research findings

The research findings will be disseminated in reputable peer-reviewed scientific journals such as the Ethiopian Journal of Health Development, Advances in Public Health, Journal of Environmental and Public Health, the African Journal of Primary Health Care and Family Medicine, or the African Journal of Reproductive Health. The researcher will request that the Federal Ministry of Health Ethiopia and regional health bureau disseminate and explain the action plan during annual health conferences when the district, zone and region representatives are presented.

7.3.5 Future research

It is recommended that the following research studies be conducted:

- A follow-up study to identify challenges and opportunities in the implementation of abortion care with HIV-FP services in the public health facilities of Ethiopia to adapt the action plan if needed.
- Identifying challenges and opportunities in the implementation of integrated abortion care with HIV-FP in non-public facilities to test the action plan.
- Assessing the impact of integrated abortion, FP, and HIV services.

7.4 LIMITATIONS

Not all public health facilities in the study areas were included in this study. The researcher, however, used a random sampling method (see Section 3.5.5) to enrol public health facilities to maintain representativeness. In phase three, programme officers were included purposively (see Section 6.4) from the SNNPR region, zones, and districts to validate the draft action plan. Thus, in this phase, representativeness was maintained by participating programme officers from the regional health bureau, zonal health department, and district health offices.

The action plan could not be implemented and tested as this would have been a longitudinal study, and not within the scope of this thesis. Other researchers can adopt the action plan for implementation in Ethiopia or adapt it to a similar context in other countries if needed.

7.5 CONCLUSION

Integration refers to bringing together different health services that are provided separately and/or in different places and/or provided by different healthcare providers (Colombini et al., 2016:2133). Integration increases efficiency, horizontalization of vertical programmes, and effective use of human, medical, and fiscal resources to

provide a one-stop service or multiple services simultaneously at the same place or a continuum of services through a referral system (Rutaremwana and Kabagenyi 2016:2).

The study's objectives were achieved, and the action plan was developed, as indicated in Chapter Six. In the action plan's development, stakeholder involvement was crucial. The implementation of the action plan will now depend on the ownership and involvement of stakeholders to facilitate the process.

“An integrated health service, offering a one-stop service ensures that the principle of client centeredness can be adhered to, that client satisfaction can be improved and ultimately maternal healthcare service delivery”. (Researcher)

Lewin (1890-1947) correctly indicated: “No research without action, no action without research”; thus, only by implementing the action plan can it make a difference in maternal health care in Ethiopia.

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ANNEXURE 1: Participant recruitment and information letter (Abortion care users)

Title: An action plan to integrate abortion care with HIV and Family planning services in Ethiopia.

Researcher: Haile Bekele Adane

Supervisor: Professor Lizeth Roets

Dear participant

Good day. My name is Haile Bekele a Doctoral (DLitt et Phil) student at the University of South Africa. I want to conduct a study with the title “**An action plan to integrate abortion care with HIV and Family planning services in Ethiopia**”. You, as a person who have made use of this service, is the best person to ask to volunteer to take part in the study. By participating in this study you may not be benefited directly, but it will provide information that might improve the provision of integrated health service at public health facility levels.

I invite you to voluntary take part in this study. I appreciate that you will offer us your valuable time. This questionnaire will only take about 30 minutes of your time. You will not be remunerated but the information you will provide can benefit maternal and child health services in the future. The results of this study might be published, but the information that you provide will be treated as confidential and your identity will not be linked to the questionnaire. Your anonymity will be ensured as your name will not be required on the questionnaire. If you feel that by answering the questions you would like to talk to a person to be supported due to any discomfort, please contact the researcher Mr. Haile Bekele at +251911714569 so that counselling free of charge can be arranged for you. You are free to indicate at any stage of the research that you wish to withdraw from the study without any negative effect. You will still receive the services as usual. If you agree to participate, your honest response is appreciated.

If you have any questions regarding this research do not hesitate to contact with the following address:

Researcher: Haile Bekele Adane

Tele: +251-911714569 Email: 64142353@mylife.unisa.ac.za or haileb2006@yahoo.com

If you have any concerns about the research, please contact the Health Research Ethics Committee at HSREC@unisa.ac.za.

Your faithfully

Haile Bekele

Consent form (Abortion care users)

Title: An action plan to integrate abortion care with HIV and Family planning services in Ethiopia

Researcher: Haile Bekele Adane

Supervisor: Professor Lizeth Roets

I, the undersigned, agree to participate in the above mentioned research study. I confirm the information is shared with me:

- My participation in this study can benefit the maternal and child health service in the future
- My participation is voluntary and I may discontinue at any stage of the study without penalty.
- I will not be remunerated for my participation,
- If I feel uncomfortable in any way during the completion of a questionnaire, I have the right to decline to answer any further questions,
- Participation involves completing a questionnaire by the participants,
- All information collected will be private and confidential and the researcher will not use personal identifier in his study reports,
- All the data collected for this study will be stored in a cabinet under lock in a secured place and not be shared with any other persons,
- I am fully aware that the results of this study will be used for scientific purpose and may be published.

I understand what is expected from me and give my consent to take part in this study voluntary without feeling pressurized to do so.

If I have any questions about this research, I will contact the person mentioned below:

Researcher: Haile Bekele Adane

Tel: +251911714569

Email: 64142353@mylife.unisa.ac.za or haileb2006@yahoo.com

Participant's Signature

Date

ANNEXURE 2: Questionnaire for abortion care users

Title: An action plan to integrate abortion care with HIV and Family planning services in Ethiopia

Dear participant,

Thank you for your willingness to participate in this study. I will appreciate it if you answer all the questions as honestly as possible.

The questionnaire consists of the following five sections and will take not more than 30 minutes of your time.

Section A: Demographic information

Section B: Access to healthcare services

Section C: Abortion care and reproductive history

Section D: Family planning and HIV services

Section E: Integrating abortion care with FP-HIV services

INSTRUCTIONS:

- *Please indicate your answer to each question with a tick in the appropriate box.*

Example

Q/No	Questions	Choice	Block	For office use
	What is your sex?	1. Male 2. Female	1 <input checked="" type="checkbox"/> 2. <input type="checkbox"/>	<input type="text"/>

- *Where there is space provided for answers, please write down your answer in the space provided*

IMPORTANT DEFINITION WHEN COMPLETING THE QUESTIONNAIRE:

Safe abortion care in this study is seen as abortion related care provided to clients, on their own request by health workers in public health facilities in accordance with the Ethiopian family health law.

Section A: Demographic information				
Q/No	Questions	Choice	Block	For office use
A01	Please indicate your age in completed years (e.g. 26)	-----years		<input type="text"/>
A02	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 4. Catholic 5. Other specify----- -----	1 <input type="text"/> 2 <input type="text"/> 3 <input type="text"/> 4 <input type="text"/> 5 <input type="text"/>	<input type="text"/>
A03	Where is your place of residence?	1. Urban 2. Rural	1 <input type="text"/> 2 <input type="text"/>	<input type="text"/>
A04	Indicate your highest level of education	1. Cannot read or write 2. Able to read and write 3. Elementary school 4. High school (10th or 12th grade completed) 5. TVET/diploma level 6. Basic degree 7. Master's degree 8. Other specify-----	1 <input type="text"/> 2 <input type="text"/> 3 <input type="text"/> 4 <input type="text"/> 5 <input type="text"/> 6 <input type="text"/> 7 <input type="text"/> 8 <input type="text"/>	<input type="text"/>

A05	What is your ethnicity?	1. Sidama 2. Wolaita 3. Gamo. 4. Goffa 5. Hadiya 6. Amhar 7. Other (specify)-----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>	<input type="checkbox"/>
A06	What is your occupation?	1. Housewife 2. Farmer 3. Self-employed 4. Civil servant 5. Private employee 6. Entrepreneur 7. Other, specify-----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>	<input type="checkbox"/>
A07	What is your marital status?	1. Single 2. Married 3. Divorced 4. Widowed 5. Separated 6. Unmarried but in a relationship	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	<input type="checkbox"/>
A08	How old is your partner in completed years? (e.g. 32)	-----years of age	<input type="checkbox"/>	
A09	What is the occupation of your partner?	1. Farmer 2. Self-employed	1 <input type="checkbox"/>	<input type="checkbox"/>

		3. Civil servant 4. Private employee 5. Entrepreneur 6. Other, specify-----	2 3 4 5 6	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	
A10	How much is the total average monthly income of your family (household)? (e.g. 3,200 ETB)	Average monthly income in ETH birr-----			<input type="checkbox"/>
Section B. Access to healthcare services					
B01	What is the main reason for visiting this health care facility? (Mark all that is/are relevant please)	1. To receive abortion care 2. To receive family planning service 3. To receive HIV/AIDS service 4. Other specify----- -----	1 2 3 4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
B02	How much time did it take you from the time you left home to the time that you arrive at the healthcare facility?	1. 0-15 minutes 2. 16-30 minutes 3. 31-45 minutes 4. 46-60 minutes 5. 61-90 minutes 6. More than 90 minutes	1 2 3 4 5 6.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
B03	What was the main means of transport that you have used to get to the healthcare facility?	1. Walking 2. Public bus 3. Taxi 4. Private vehicle 5. Other, Specify_____	1 2 3	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>

			4 <input type="checkbox"/>	
			5 <input type="checkbox"/>	
B04	For how long did you wait to receive the abortion care after you reached to the healthcare facility?	1. 0-15 minutes 2. 16- 30 minutes 3. 31-45 minutes 4. 46-60 minutes 5. 61-90 minutes 6. More than 90 minutes	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6. <input type="checkbox"/>	<input type="checkbox"/>
B05	How do you perceive the time that you had to wait to receive abortion care in the service providing unit?	1. Appropriate. 2. Moderate 3. Too long 4. Other specify-----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	<input type="checkbox"/>
B06	Would you prefer to wait long and receive more than one service in one facility (For example abortion care and family planning or HIV at one time)	1. Yes 2. No	1. <input type="checkbox"/> 2. <input type="checkbox"/>	<input type="checkbox"/>
B07	Please motivate your answer for question B06	----- ----- ----- -----		<input type="checkbox"/>
B08	How was your service charge settled?	1. Received the service free of charge 2. Paid in cash 3. Covered by health insurance 4. Others, specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	<input type="checkbox"/>

			4	<input type="text"/>	
Section C: Abortion care and reproductive history					
C01	How many times have you been pregnant? This current pregnancy included (e.g. 4)	Number of pregnancies_____			<input type="text"/>
C02	How many times have you given birth to a baby? (e.g. 3)	Number of live births_____			<input type="text"/>
C03	Did you ever have an abortion before the current episode?	1. Yes 2. No	1 2	<input type="text"/> <input type="text"/>	<input type="text"/>
CO4	If the answer to question C03 was yes, how many times have you had an abortion? This current abortion included (e.g. 2 times)	Number of abortions-----			<input type="text"/>
C05	Who made the decision that you have to receive an abortion for the current pregnancy in this healthcare facility?	1. Myself 2. Partner/spouse 3. Parents 3. Other (specify)----- -----	1 2 3	<input type="text"/> <input type="text"/> <input type="text"/>	<input type="text"/>

C06	If the request was by yourself, please indicate the reason (mark all that is/are appropriate please)	1. The Pregnancy endangered my health 2. There was a problem on the growing fetus 3. A close relative made me pregnant 4. Pregnancy results from rape 5. The pregnancy was not planned 6. It is due to contraceptive failure 7. Others specify----- ----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>	<input type="checkbox"/>
C07	Who accompanied you to receive abortion care? (mark all that is/are relevant please)	1. Partner/spouse 2. Friends 3. Relative 4. Parents 5. Neighbors 6. Other (specify) -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	<input type="checkbox"/>
C08	In your community, why do women normally request abortion care? (mark all that is/are relevant please)	1. Don't want more children 2. To space pregnancies 3. Premarital pregnancy 4. Personal health problems 5. Contraceptive failure 6. Financial implications 7. I don't know 8. Other (specify) ----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/>	<input type="checkbox"/>

C09	Are you aware of a law in Ethiopia that allows or disallows abortion care on request?	1. Yes 2. No	1. <input type="checkbox"/> 2. <input type="checkbox"/>	<input type="checkbox"/>
C10	If the answer was yes, under what conditions does the current Ethiopian penal code allow abortion on request (safe abortion care)? (mark all that is/are relevant please)	1. Pregnancy resulted from rape 2. Pregnancy resulted from a close relative 3. Continuation of the pregnancy endangers the health and life of the mother or the fetus 4. The woman has a physical or mental disabilities 5. The fetus has an incurable and serious deformity 6. Other (specify) ----- ----- -----	1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/>	<input type="checkbox"/>
C11	What do you think are the possible harmful effects of having an abortion? (mark all that is/are relevant please)	1. Possible infection 2. Bleeding 3. Mother can be weak 4. May not conceive again 5. Death 6. I don't know 7. Any other specify----- -----	1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/> 4. <input type="checkbox"/> 5. <input type="checkbox"/> 6. <input type="checkbox"/> 7. <input type="checkbox"/>	<input type="checkbox"/>
C12	How do you perceive the skill or competency of the health workers who assisted you with the abortion care?	1. Very skillful 2. Moderate skillful 3. Not skillful 4. Other (specify)----- -----	1. <input type="checkbox"/> 2. <input type="checkbox"/> 3. <input type="checkbox"/>	<input type="checkbox"/>

			4	<input type="checkbox"/>	
Section D: Family planning and HIV services					
D01	Please indicate which of the following family planning method/s do you know of? (mark all that is/are relevant please)	<ol style="list-style-type: none"> 1. Oral contraceptive pills 2. Male condom 3. Female condom 4. Emergency contraceptives 5. Injectable 6. Implants 7. IUCDs 8. Permanent methods 9. Others, specify----- 	<ol style="list-style-type: none"> 1 2 3 4 5 6 7 8 9 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
D02	Did you receive education on family planning from one or more of the following persons? (mark all that is/are relevant please)	<ol style="list-style-type: none"> 1. Nurses 2. Your Partner 3. Your friends 4. Family members 5. Other, specify ----- ----- 	<ol style="list-style-type: none"> 1 2 3 4 5 	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
D03	Have you ever used a family planning service before this abortion care?	<ol style="list-style-type: none"> 1. Yes 2. No 	<ol style="list-style-type: none"> 1 2 	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
D04	Please motivate your answer to question D03	<hr style="border-top: 1px dashed black;"/> <hr style="border-top: 1px dashed black;"/> <hr style="border-top: 1px dashed black;"/>			<input type="checkbox"/>

D05	Have you received contraceptives after the last abortion care?	1. Yes 2. No	1 <input type="checkbox"/> 2 <input type="checkbox"/>	<input type="checkbox"/>
D06	If the answer to question D05 was no, please motivate your answer	----- ----- -----		<input type="checkbox"/>
D07	Please indicate the challenges to use family planning or contraceptive methods (mark all that is/are relevant please)	1. Religion 2. Cultural barriers 3. Beliefs 4. Misconceptions 5. Minimal access to family planning 6. Cost of family planning 7. Lack of knowledge 8. Not any of the above 9. Others, specify----- ----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7. <input type="checkbox"/> 8. <input type="checkbox"/> 9 <input type="checkbox"/>	<input type="checkbox"/>
D08	Have you ever heard about HIV/AIDS?	1. Yes 2. No	1 <input type="checkbox"/> 2 <input type="checkbox"/>	<input type="checkbox"/>
D09	If the answer to question D08 was yes, what was the source of information?	1. Through health education in the healthcare facility 2. Through health extension workers in the communities 3. Radio messages 4. Television message 5. Leaflet 6. Others, specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>

			6	<input type="checkbox"/>	
D10	Have you received HIV/AIDS-related service in this specific healthcare facility?	1. Yes 2. No	1 2	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
D11	If the answer to question D10 was yes, what kind of HIV/AIDS-related service(s) have you received? (mark all that is/are relevant please)	1. Voluntary HIV counselling service 2. Voluntary HIV testing 3. HIV counselling and testing 4. Provider initiated HIV counselling service 5. Provider initiated HIV testing service 6. Antiretroviral therapy 7. Others, specify----- ----- -----	1 2 3 4 5 6 7.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
Section E: Integrating abortion care with FP-HIV services					
E01	Have you received any other services such as family planning and/or HIV services at the time that you have received abortion care in this healthcare facility?	1. Yes 2. No	1 2	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E02	If the answer to question E01 was yes, where did you get the family planning and/or HIV/AIDS service(s)?	1. Abortion care unit 2. Integrated HIV-FP unit 3. Out-patient department 4. HCT unit 5. PMTCT/ANC unit 6. Delivery unit 7. Postnatal unit	1 2 3 4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	

		8. Others, specify -----	5 6 7 8	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E03	If you did receive another service, how were the services provided?	1. In the same room by the same service provider 2. In the same room by different service providers 3. In different rooms by different service providers 4. Others, specify _____ ----- -----	1 2 3 4.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E04	If you did not receive another service, why not? (mark all that is/are relevant please)	1. Did not need another service 2. Health workers are not willing to provide the service 3. Long waiting time 4. I didn't know about that the availability of other healthcare services 5. I did not want this integrated service 6. The integrated service is expensive 7. Others, specify----- ----- -----	1 2 3 4 5 6. 7	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E05	Will you prefer to receive integrated family planning-	1. Yes 2. No	1 2	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>

	HIV and abortion care at the same time?			
E06	Please motivate the answer in question E05			<input type="text"/>

E07	How would you prefer to receive the integrated abortion with FP-HIV service in the future?	<ol style="list-style-type: none"> 1. In the same room by the same service provider 2. In the same room by different service providers 3. In different rooms by different service providers 4. Other specify----- ----- 	<ol style="list-style-type: none"> 1 <input type="text"/> 2 <input type="text"/> 3 <input type="text"/> 4 <input type="text"/> 	<input type="text"/>
E08	<p>What do you think maybe some of the disadvantages of receiving HIV and FP services while receiving abortion care?</p> <p>(mark all that is/are relevant please)</p>	<ol style="list-style-type: none"> 1. Increased waiting time 2. Increased workload for healthcare providers 3. Fear of stigma and discrimination 4. Fear of loss of confidentiality 5. Decreased quality of services 6. Embarrassment to discuss HIV and/or FP with the provider 7. Don't know 8. Others, specify----- ----- ----- 	<ol style="list-style-type: none"> 1. <input type="text"/> 2. <input type="text"/> 3. <input type="text"/> 4. <input type="text"/> 5. <input type="text"/> 6. <input type="text"/> 7. <input type="text"/> 8. <input type="text"/> 	<input type="text"/>
E09	What are the challenges or problems that you have observed with the integrated	<ol style="list-style-type: none"> 1. Increased waiting time 2. The integrated service is expensive 	<ol style="list-style-type: none"> 1 <input type="text"/> 	

	HIV and/or FP with abortion services? (mark all that is/are relevant please)	<p>3. The health workers do not give the required quality care to both HIV as well as family planning services</p> <p>4. The services are not available in the health facility</p> <p>5. Others, specify----- ----- -----</p>	<p>2 <input type="checkbox"/></p> <p>3 <input type="checkbox"/></p> <p>4 <input type="checkbox"/></p> <p>5. <input type="checkbox"/></p>	
E10	Please indicate what you think can help to improve the integration of abortion care with FP and/or HIV services in public healthcare facilities? (mark all that is/are relevant please)	<p>1. The facility set up need to be well equipped and furnished</p> <p>2. The facility needs to have an integrated FP-HIV service</p> <p>3. The facility must be accessible to the community</p> <p>4. Both family planning and HIV services are given free of charge at the health facilities</p> <p>5. Strengthening of internal referral system</p> <p>6. Others, specify----- -----</p>	<p>1 <input type="checkbox"/></p> <p>2 <input type="checkbox"/></p> <p>3 <input type="checkbox"/></p> <p>4 <input type="checkbox"/></p> <p>5. <input type="checkbox"/></p> <p>6. <input type="checkbox"/></p>	<input type="checkbox"/>
E11	What do you think will be the benefits of receiving HIV and family planning services at the same time in the abortion care unit? (mark all that is/are relevant please)	<p>1. Make fewer trips to the facility</p> <p>2. Reduced transportation costs</p> <p>3. Reduced waiting time</p> <p>4. The efficient way to access several services</p> <p>5. Reduces stigma towards accessing HIV services</p> <p>6. Reduce stigma towards accessing FP services</p> <p>7. Don't know</p>	<p>1. <input type="checkbox"/></p> <p>2 <input type="checkbox"/></p> <p>3. <input type="checkbox"/></p> <p>4 <input type="checkbox"/></p> <p>5. <input type="checkbox"/></p> <p>6. <input type="checkbox"/></p> <p><input type="checkbox"/></p>	<input type="checkbox"/>

		8. Others, specify ----- ----- -----	7. <input type="text"/> 8.	
E12	Please list your suggestions on how to improve the integration of abortion care with family planning and HIV services at the healthcare facility level? ----- ----- ----- -----		<input type="text"/>	

This is the end of the questions

Thank you for your willingness and participation in the study!

ANNEXURE 3: Participant recruitment and information letter (Healthcare providers)

Title: An action plan to integrate abortion care with HIV and Family planning services in Ethiopia

Researcher: Haile Bekele Adane

Supervisor: Professor Lizeth Roets

Dear participant,

Good day. My name is Haile Bekelea Doctoral (DLitt et Phil) student at the University of South Africa. I want to conduct a study with the title “**An action plan to integrate abortion care with HIV and Family planning services in Ethiopia**”. You as a health professional, who have been giving a maternal health service, is the best person to ask to volunteer to take part in the study. By participating in this study you may not be benefited directly, but it will provide information that might improve the provision of integrated health service at public health facility levels.

I invite you to voluntary take part in this study. I appreciate that you will offer us your valuable time. This self-administered questionnaire will only take about 30 minutes of your time. You will not be remunerated but the information you will provide can benefit maternal and child health services in the future. The results of this study might be published but the information that you provide will be treated as confidential and your identity will not be linked to the questionnaire. Your anonymity will be ensured as your name will not be required on the questionnaire. If you feel that by answering the questions you would like to talk to a person to be supported due to any discomfort, please contact the researcher Mr. Haile Bekele at +251911714569 so that counseling free of charge can be arranged for you. You are free to indicate at any stage of the research that you wish to withdraw from the study without any negative effect. If you agree to participate, your honest response is appreciated

If you have any questions regarding this research do not hesitate to contact with the following address:

Researcher: Haile Bekele Adane

Tele: +251-911714569 Email: 64142353@mylife.unisa.ac.za or haileb2006@yahoo.com

If you have any concerns about the research, please contact the Health Research Ethics Committee at HSREC@unisa.ac.za.

Yours faithfully

Haile Bekele

Consent form (Service providers)

Title: An action plan to integrate abortion care with HIV and Family planning services in Ethiopia.

Researcher: Haile Bekele Adane

Supervisor: Professor Lizeth Roets

I, the undersigned, agree to participate in the above mentioned research study. I confirm the information is shared with me:

- My participation in this study can benefit the maternal and child health service in the future,
- My participation is voluntary and I may discontinue at any stage of the study without penalty,
- I will not be remunerated for my participation,
- If I feel uncomfortable in any way during the responding of a questionnaire, I have the right to decline to answer any further questions.
- Participation involves completing a self-administered questionnaire by participants.
- All information collected will be private and confidential and the researcher will not use personal identifier in his study reports.
- All the data collected for this study will be stored in a cabinet under lock in a secured place and not be shared with any other persons,
- I am fully aware that the results of this study will be used for scientific purpose and may be published.

I understand what is expected from me and give my consent to take part in this study voluntary without feeling pressurized to do so.

If I have any questions about this research, I will contact the person mentioned below:

Researcher: Haile Bekele Adane

Tel: +251911714569

Email: 64142353@mylife.unisa.ac.za or haileb2006@yahoo.com

Participant's Signature

Date

ANNEXURE 4: Self-administered questionnaire for healthcare providers working in public health facilities

Title: An action plan to integrate abortion care with HIV and Family planning services in Ethiopia

Dear participant,

Thank you for your willingness to participate in this study. I will appreciate it if you answer all the questions as honest as possible. The questionnaire consists of the following five sections and will take not more than 30 minutes of your time.

Section A: Background information

Section B: Information on professional development training (in-service training) opportunities

Section C: Abortion care related services

Section D: HIV and Family planning related services

Section E: Integrated healthcare related services

INSTRUCTIONS :

- ***Please answer all the questions by indicating (X) next to your answer.***

Example

Q/No	Questions	Choice	Block	For office use
	What is your sex?	1. Male 2. Female	1 <input checked="" type="checkbox"/> 2. <input type="checkbox"/>	<input type="text"/>

- ***Please answer the questions according to your own opinion***
- ***Where there is space provided for answers, please write down your answer in the space provided.***

- **IMPORTANT DEFINITION WHEN COMPLETING THE QUESTIONNAIRE:** Safe abortion care is seen as care given to clients, on their own request by health workers in public health facilities in accordance with the Ethiopian family health law.

Section A: Background information				
S/N	Questions	Choice	Block	For office use
QA1	Please indicate in which administrative region/zone you are residing?	1. Sidama 2. Wolaita 3. Gamo 4. Hadiya 5. Hawasa	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>
QA2	What is your sex?	1. Male 2. Female	1. <input type="checkbox"/> 2. <input type="checkbox"/>	<input type="checkbox"/>
AO3	How old are you? Age in completed years (e.g. 22)	_____ Years of age		<input type="checkbox"/>
A04	To which ethnic group do you belong to?	1. Sidama 2. Wolaita 3. Hadiya 4. Gamo 5. Goffa 6. Amhara 7. Other, specify-----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/>	<input type="checkbox"/>
QA5	What is your religion?	1. Orthodox 2. Muslim 3. Protestant 4. Catholic	1 <input type="checkbox"/> 2 <input type="checkbox"/>	<input type="checkbox"/>

		5. Other specify-----	3 <input type="checkbox"/>	
			4 <input type="checkbox"/>	
			5 <input type="checkbox"/>	
QA6	What is your marital status?	1. Single 2. Married 3. Divorced 4. Widowed 5. Separated 6. Unmarried but in a relationship	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	<input type="checkbox"/>
A07	What is your profession?	1. Medical doctor 2. Health officer 3. Midwifery 4. Nursing 5. .Other, specify-----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>
QA8	Please indicate the type of healthcare facility in which you are currently rendering a service	1. Hospital 2. Health center	1. <input type="checkbox"/> 2. <input type="checkbox"/>	<input type="checkbox"/>
A09	For how long have you been working at this healthcare facility?	1. 0-5 months 2. 6-11 months 3. 12--17 months 4. 18-23 months 5. 24-29 months 6. 30-35 months 7. 36 months and above	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6. <input type="checkbox"/>	<input type="checkbox"/>

			7. <input type="text"/>	
Section B: Information on professional development training (in-service training) opportunities				
B01	Have you received in-service training to enable you to offer the service that you are providing?	1. Yes 2. No	1. <input type="text"/> 2. <input type="text"/>	<input type="text"/>
B02	If the answer to question B01 was yes, please indicate the professional development (in-service) training that you have attended (Mark all that is/are relevant please)	1. Comprehensive abortion care 2. Basic emergency obstetrics and newborn care (BEmONC) 3. Short-acting family planning methods 4. Long-acting family planning methods 5. Bilateral tubal ligation 6. Vasectomy 7. HIV counseling and testing 8. Prevention of mother to child transmission of HIV (PMTCT) 9. Anti retroviral treatment (ART) 10. Management of opportunistic infections (OIs) 11. Other, specify----- -----	1 <input type="text"/> 2 <input type="text"/> 3 <input type="text"/> 4 <input type="text"/> 5 <input type="text"/> 6 <input type="text"/> 7 <input type="text"/> 8 <input type="text"/> 9 <input type="text"/> 10 <input type="text"/> 11 <input type="text"/>	<input type="text"/>
B03	Please indicate when last (how long ago) did you receive in-service training	1. 0-5 months 2. 6-11 months 3. 12--17 months 4. 18-23 months 5. 24-29 months	1 <input type="text"/> 2 <input type="text"/> 3 <input type="text"/>	<input type="text"/>

		6. 30-35 months 7. 36 months and above	4 <input type="checkbox"/> 5 <input type="checkbox"/> 6. <input type="checkbox"/> <input type="checkbox"/> 7.	
B04	Please indicate the training organizer/s that offered the specified training/s. (Mark all that is/are relevant please)	1. Federal ministry of health Ethiopia 2. Regional health bureau 3. Zonal health department 4. Partner organization (NGOs) 5. Others, specify ----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>
B05	Did you receive training/s regarding integrated healthcare service delivery (HIV, family planning, and/or abortion care)?	1. Yes 2. No	1. <input type="checkbox"/> 2. <input type="checkbox"/>	<input type="checkbox"/>
B06	If the answer to question B05 was yes, please indicate the integrated health service training that you have received (Mark all that is/are relevant please)	1. HIV-FP integration 2. Abortion-HIV integration 3. Abortion- family planning integration 4. Abortion and HIV-FP integration 5. Others, specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>
B07	Please indicate when last (how long ago) did you receive integrated health service training	1. 0-5 months 2. 6-11 months 3. 12--17 months 4. 18-23 months 5. 24-29 months 6. 30-35 months	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	<input type="checkbox"/>

		7. 36 months and above	5 <input type="checkbox"/>	
			6. <input type="checkbox"/>	
			7. <input type="checkbox"/>	
B08	Who provided the training pertaining to Integrated healthcare services ? (Mark all that is/are relevant please)	1. Federal ministry of health Ethiopia 2. Regional health bureau 3. Zonal health department 4. Partner organization (NGO) 5. Others, specify ----- -----	1 <input type="checkbox"/>	<input type="checkbox"/>
			2 <input type="checkbox"/>	
			3 <input type="checkbox"/>	
			4 <input type="checkbox"/>	
			5 <input type="checkbox"/>	
B09	Please name the policies, strategies, and guidelines relevant to abortion care that you are aware of ----- ----- ----- -----			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
B10	Please name the policies, strategies, and guidelines relevant to family planning services that you are aware of ----- ----- ----- -----			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
B11	Please name the policies, strategies, and guidelines relevant to HIV/AIDS services that you are aware of ----- ----- -----			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
B12	Please name the policies, strategies, and guidelines relevant to integrated healthcare services that you are aware of			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

	----- ----- -----			
B13	Which of the policies, strategies as well as the guidelines on abortion, FP, HIV/AIDS, and integrated healthcare services documents are available in the healthcare facility where you are offering services? please list the available ones. ----- ----- -----			<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
B14	Have you ever used any of the regulatory documents (policies, strategies, guidelines) as a reference in your practice?	1. Yes 2. No	1 <input type="checkbox"/> 2 <input type="checkbox"/>	<input type="checkbox"/>
B15	Please motivate your answer to question B14----- ----- -----			<input type="checkbox"/>
B16	What is your current responsibility in the healthcare facility where you are working?	1. Abortion service provider 2. FP and HIV service provider	1 <input type="checkbox"/> 2 <input type="checkbox"/>	<input type="checkbox"/>
Section C: Abortion care related services (For abortion care service providers)				
C01	What type of abortion care are you providing in the healthcare facility where you are working?	1. Comprehensive abortion care 2. Safe abortion care only 3. Post abortion care only	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	<input type="checkbox"/>

C02	Which of the listed indicators do you think contribute to safe abortion care? (Mark all that is/are relevant please)	1. When the age of the client is less than 18 years 2. If the client is raped 3. If it is from close relatives 4. The pregnancy threat the growing fetus 5. If the client is mentally and physically disabled 6. Other specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	<input type="checkbox"/>
C03	What is/are the opportunities that the community are able to obtain information regarding to abortion care? (Mark all that is/are relevant please)	7. Through health education in the healthcare facility 8. Through health extension workers in the communities 9. Radio messages 10. Television message 11. Leaflet 12. Others, specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/>	<input type="checkbox"/>
C04	Do you think that factors such as availability of abortion services, radio messages, watching television, and health education by health workers and health extension workers contribute for safe abortion service by the community?	1. Yes 2. No	1 <input type="checkbox"/> 2 <input type="checkbox"/>	<input type="checkbox"/>
C05	If the answer to question C04 was no, motivate your answer	----- ----- -----		<input type="checkbox"/>

C06	<p>What are the challenges of providing abortion care services in the healthcare facility where you are working?</p> <p>(Mark all that is/are relevant please)</p>	<ol style="list-style-type: none"> 1. Inadequately trained health professionals 2. Poor abortion care service 3. Lack of equipment to provide an abortion service 4. Lack of medical supplies to provide an abortion care 5. The socio-cultural problems of the community 6. Shortage of budget 7. Others specify----- ----- 	<ol style="list-style-type: none"> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 	<input type="checkbox"/>
C07	<p>In the healthcare facility where you are working, which drugs are available to provide abortion care services in the past 6 months?</p> <p>(Mark all that is/are relevant please)</p>	<ol style="list-style-type: none"> 1. Mifepristone 2. Misoprostol 3. Medabone 4. Other specify----- ----- 5. None of them available 	<ol style="list-style-type: none"> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 	<input type="checkbox"/>
C08	<p>In the healthcare facility where you are working, what medical equipment was available to provide abortion care in the last 6 months?(Mark all that is/are relevant please)</p>	<ol style="list-style-type: none"> 1. Electric vacuum aspirator 2. Manual vacuum aspirator 3. Dilatation and curettage kits 4. Others, specify ----- ----- ----- 	<ol style="list-style-type: none"> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 	<input type="checkbox"/>
C09	<p>In the healthcare facility where you are working, which of the following medical supplies are available to offer abortion care in the last 6</p>	<ol style="list-style-type: none"> 1. Syringe and needles 2. Gloves 3. Antiseptic solutions 4. Gauze sponges or cotton balls 	<ol style="list-style-type: none"> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 	<input type="checkbox"/>

	months (Mark all that is/are relevant please)	5. Others specify----- ----- -----	5	
C10	In the healthcare facility where you are working, who are providing abortion care services? (Mark all that is/are relevant please)	1. Medical doctors 2. Health officers 3. Midwives 4. Nurses 5. Other specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>
C11	In the healthcare facility where you are working, where do you provide abortion care services?	1. In an abortion care room 2. In the delivery room 3. Others specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/>	<input type="checkbox"/>
C12	In the healthcare facility where you are working, how was the abortion care providing room prepared to give abortion services? (Mark all that is/are relevant please)	1. Adequate space with couches 2. Inadequate space 3. Comfortable room temperature 4. Well ventilated room 5. Others, specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5. <input type="checkbox"/>	<input type="checkbox"/>
C13	Do women pay for the abortion care service that they receive in the healthcare facility?	1. Yes 2. No	1 <input type="checkbox"/> 2 <input type="checkbox"/>	<input type="checkbox"/>
C14	If the answer to question QC13 is yes, how much does the client pay in Ethiopian Birr (e.g 150 birrs)	Payment in Ethiopia birr-----		<input type="checkbox"/>

Section D: HIV and Family planning related services
(For HIV-Family planning services providers)

D01	<p>What is/are the available HIV services that you are offering in your healthcare facility?</p> <p>(Mark all that is/are relevant please)</p>	<ol style="list-style-type: none"> 1. Voluntary counseling and testing 2. Provider initiated HIV counseling and testing 3. Prevention of mother to child transmission of HIV (PMTCT) 4. Antiretroviral treatment (ART) 5. Management of opportunistic infections 6. Other, Specify _____ _____ _____ 	<ol style="list-style-type: none"> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 	<input type="checkbox"/>
D02	<p>In the healthcare facility where you are working, which of the following HIV commodities were available in the past 6 months?</p> <p>(Mark all that is/are relevant please)</p>	<ol style="list-style-type: none"> 1. HIV test kits 2. Antiretroviral treatment (ART) drugs 3. Drugs for opportunistic Infections 4. Others, specify _____ _____ _____ 	<ol style="list-style-type: none"> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 	<input type="checkbox"/>
D03	<p>What do you think are the challenges related to HIV/AIDS services in this healthcare facility?</p> <p>(Mark all that is/are relevant please)</p>	<ol style="list-style-type: none"> 1. HIV infected persons do not make use of the services 2. HIV infected clients are afraid of stigma and discrimination 3. Shortage of trained health care workers 4. Shortage of commodities and supplies 5. Poor monitoring system 6. Shortage of standard operating procedures 7. Poor referral systems 	<ol style="list-style-type: none"> 1 <input type="checkbox"/> 2. <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 	<input type="checkbox"/>

		8. Minimal community support for HIV care 9. Others (Specify)----- -----	6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/>	
D04	What are the family planning methods available in the healthcare facility where you are offering the service? (Mark all that is/are relevant please)	1. Contraceptive pills 2. Male condoms 3. Female condoms 4. Injectables 5. Intra uterine device (IUD) 6. Implants 7. Female sterilization 8. Male sterilization 9. Emergency contraception 10. Others, specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/> 6 <input type="checkbox"/> 7 <input type="checkbox"/> 8 <input type="checkbox"/> 9 <input type="checkbox"/> 10 <input type="checkbox"/>	<input type="checkbox"/>
D05	What is/are the challenges that you observed regarding the family planning program in the healthcare facility where you are working? (Mark all that is/are relevant please)	1. Shortage of contraceptive supplies 2. Shortage of trained health care providers 3. Lack of contraceptive options 4. Shortage of budget/fund 5. Partner/husband influence 6. Fear of side effects 7. Poor family planning service provision	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>

		8. Others, specify----- -----	6 <input type="checkbox"/>	
			7 <input type="checkbox"/>	
			8 <input type="checkbox"/>	
D06	In the healthcare facility where you are working, who are providing HIV-Family planning related services? (Mark all that is/are relevant please)	1. Medical doctors 2. Health officers 3. Midwives 4. Nurses 5. Other, specify-----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>
Section E: Integrated healthcare services provision (For both abortion care and HIV-family planning services providers)				
E01	In the healthcare facility where you are working, do you integrate abortion care with other healthcare services?	1. Yes 2. No	1 <input type="checkbox"/> 2 <input type="checkbox"/>	<input type="checkbox"/>
E02	If the answer to question E01 was no, motivate your answer	----- -----		<input type="checkbox"/>
E03	If the answer to question E01 is yes, what is/are the healthcare service/s that is/are integrated with abortion care services?	1. HIV/ADS services 2. Family planning services 3. HIV and Family planning services 4. Others, specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/>	<input type="checkbox"/>
E04	How do you provide the specified integrated healthcare services to women who have received abortion care in the healthcare facility?	1. Single room, same provider 2. Single room, different providers	1 <input type="checkbox"/> 2 <input type="checkbox"/>	

		3. Different rooms, different providers 4. Others (Specify)_____	3 4	<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E05	Where do you integrate the specified healthcare services in this healthcare facility? (Mark all that is/are relevant please)	1. Abortion care unit 2. Delivery service unit 3. Out-patient department 4. Family planning unit 5. HIV counseling and testing (HCT) unit 6. Antiretroviral treatment unit 7. Antenatal care/Prevention of mother to child transmission of HIV unit 8. Others, specify_____	1 2 3 4 5 6 7 8	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E06	What has been done to make the community aware of integrated healthcare services to women who wants to received abortion care?	1. Health education in the health facility 2. Informing clients during service provision 3. Information through health extension workers in the community 4. Did nothing 5. Others, specify-----	1 2 3 4 5	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E07	Do you have teaching aids as part of healthcare education available to explain and motivate the integration	1. Yes 2. No	1	<input type="checkbox"/>	<input type="checkbox"/>

	of abortion care with family planning and HIV services?		2	<input type="checkbox"/>	
E08	If the answer to question E07 was yes, please indicate the available teaching aids (Mark all that is/are relevant please)	1. Leaflet 2. Broachers 3. Posters 4. Others, Specify----- -----	1 2 3 4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E09	What are the challenges of integrating abortion care with other healthcare services in the healthcare facility where you are working? (Mark all that is/are relevant please)	1. Lack of operational policies and guidelines 2. Poor support and monitoring system 3. Shortage of healthcare providers 4. Takes time to integrate the service 5. Inadequate medical supplies 6. Poor infrastructure 7. Inadequate budget allocation 8. Others, specify----- -----	1 2 3 4 5 6 7 8	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>
E10	What are the advantage/s of integrating other health services with abortion care at the healthcare facility level? (Mark all that is/are relevant please)	1. Avoid missed opportunities 2. Increase access for other services 3. Reduces cost 4. Reduce stigma and discrimination 5. More efficient use of staff time 6. Improved team work	1 2 3 4	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/>

		<p>7. Reduce the amount of visits to a health care service</p> <p>8. Others, Specify----- -----</p>	<p>5 <input type="checkbox"/></p> <p>6 <input type="checkbox"/></p> <p>7. <input type="checkbox"/></p> <p>8 <input type="checkbox"/></p>	
E11	<p>Which of the following aspects do you think will encourage the integration of abortion care with other healthcare services?</p> <p>(Mark all that is/are relevant please)</p>	<p>1. Availability of policies, guidelines and strategies</p> <p>2. Consistent availability of abortion, FP and HIV commodities and supplies</p> <p>3. Availability of well-trained health care personnel</p> <p>4. Good infrastructure</p> <p>5. Monitoring and evaluation of abortion care with other health services</p> <p>6. Interactions between units within the facility</p> <p>7. Supportive supervision from higher levels</p> <p>8. A more time efficient way to offer services</p> <p>9. Others, specify-----</p>	<p>1 <input type="checkbox"/></p> <p>2 <input type="checkbox"/></p> <p>3 <input type="checkbox"/></p> <p>4 <input type="checkbox"/></p> <p>5 <input type="checkbox"/></p> <p>6 <input type="checkbox"/></p> <p>7 <input type="checkbox"/></p> <p>8 <input type="checkbox"/></p> <p>9 <input type="checkbox"/></p>	<p><input type="checkbox"/></p>

E12	How do you perceive the importance of integration of abortion care with HIV and family planning services in public health facilities? (Mark all that is/are relevant please)	1. Very important 2. Important 3. Less important 4. Not important 5. Other specify----- -----	1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	<input type="checkbox"/>
E13	Please describe what you think can be done to improve and/ or motivate the integration of abortion care with HIV and FP in one healthcare facility.----- ----- ----- -----			<input type="checkbox"/>

This is the end of the questions

Thank you for your willingness and participation in the study

ANNEXURE 5: Ethical review certificates from UNSA



UNISA HEALTH STUDIES HIGHER DEGREES ETHICS REVIEW COMMITTEE

Date 12 June 2020

Dear Haile Bekele Adane

NHREC Registration # : REC-012714-039
ERC Reference # : HSHDC/923/2019
AMENDED 2020
Name : Haile Bekele Adane
Student # : 64142353
Staff # :

**Decision: Ethics Approval from
12 June 2020 to 12 June 2023**

Researcher(s): Name Haile Bekele Adane

Address
E-mail address 64142353@mylife.unisa.ac.za, telephone #
+251911714569

Supervisor (s): Name Prof L Roets

E-mail address roetsl@unisa.ac.za, telephone #0124292226

Working title of research:

Action plan to integrate abortion care with HIV and family planning services in Ethiopia

Qualification: PhD

Thank you for the application for research ethics clearance by the Unisa Health Studies Higher Degrees Ethics Review Committee for the above mentioned research. Ethics approval is granted for three (3) years.

*The **medium risk application** was **expedited** by a Sub-committee of URERC on 11 June 2020 in compliance with the Unisa Policy on Research Ethics and the Standard Operating Procedure on Research Ethics Risk Assessment. The decision will be tabled at the next Committee meeting on 7 July 2020 for ratification.*

The proposed research may now commence with the provisions that:

1. The researcher will ensure that the research project adheres to the relevant



University of South Africa
Pretter Street, Muckleneuk Ridge, City of Tshwane
PO Box 392, UNISA 0003 South Africa
Telephone: +27 12 429 3111 Facsimile: +27 12 429 4150
www.unisa.ac.za

guidelines set out in the Unisa Covid-19 position statement on research ethics attached.

2. The researcher(s) will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.
3. Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study should be communicated in writing to the Health Studies Research Ethics Committee HSREC@unisa.ac.za.
4. The researcher(s) will conduct the study according to the methods and procedures set out in the approved application.
5. Any changes that can affect the study-related risks for the research participants, particularly in terms of assurances made with regards to the protection of participants' privacy and the confidentiality of the data, should be reported to the Committee in writing, accompanied by a progress report.
6. The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study. Adherence to the following South African legislation is important, if applicable: Protection of Personal Information Act, no 4 of 2013; Children's act no 38 of 2005 and the National Health Act, no 61 of 2003.
7. Only de-identified research data may be used for secondary research purposes in future on condition that the research objectives are similar to those of the original research. Secondary use of identifiable human research data require additional ethics clearance.
8. No field work activities may continue after the expiry date (12 June 2023). Submission of a completed research ethics progress report will constitute an application for renewal of Ethics Research Committee approval.

Note:

The reference number **HSRDC/923/2019** should be clearly indicated on all forms of communication with the intended research participants, as well as with the Committee.

Yours sincerely,

Signatures :



Chair of HSREC : Prof JM Mathibe-Neke

E-mail: mathijm@unisa.ac.za

Tel: (012) 429-6443



Executive Dean : Prof K Masemola

E-mail: masemk@unisa.ac.za

Tel: (012) 429-6825

ANNEXURE 6: Ethical review certificate from SNNPR Health Bureau



የደቡብ ብሔሮች ብሔረሰቦችና ሕዝቦች ክልላዊ መንግሥት ጤና ቢሮ
 South Nations Nationalities and People's Regional State Health Bureau

ቁጥር
 Ref. No. 006/19/394
 ቀን
 Date 11/09/2012

- Sidam zone health department: Hawasa
- Wolaita zone health department: Sodo
- Gamo zone health department: Arbaminch
- Hadiya zone health department: Hossana
- Hawasa health department: Hawasa

Subject: Request to access study facilities to conduct the approved research

This letter is to support Mr. Haile Bekele Adane to conduct research which is entitled as “Action plan to develop the integration of abortion care with FP-HIV services in public health facilities of Ethiopia”.

The study proposal was duly reviewed and approved by University of South Africa review board and subsequently reviewed and approved by SNNPR research ethics committee. The principal investigator is informed with a copy of this letter to report any changes in the study procedures and submit an activity progress report to the ethical committee as required.

The study will be carried out in 58 public health facilities of the above specified zones, regional health bureau, zonal health departments, and district health offices. We, therefore, request your esteemed organization to provide support to the principal investigator on the commencement of the study and wish for the successful completion of the project.

With regards,


 Emebet Mekonnen fara
 Health research and technology transfer support process

CC

- ✓ Health Research and Technology Transfer Support Process
- ✓ RHB, Hawassa
- ✓ Haile Bekele



☎ 149
 Awasa

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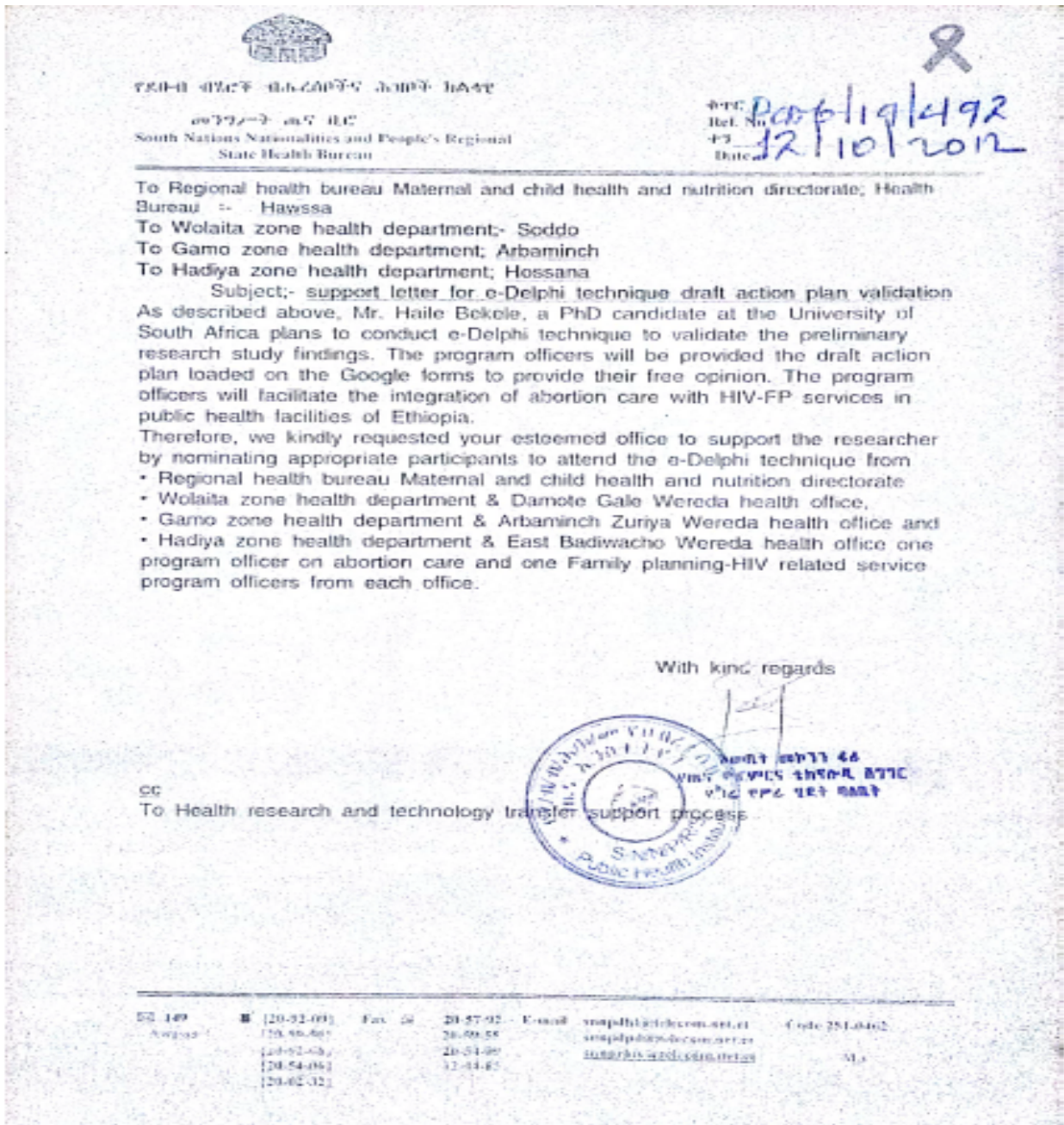
Fax ☎ 20-57-92
 20-59-55
 20-54-09

E-mail snnpdhi@telecom.net.et
snnpdp@telecom.net.et
snnprhiv@telecom.net.et

Code 251-0462

ME

ANNEXURE 7: Support letter from SNNRPR Health Bureau on e-Delphi technique



ANNEXURE 8: Round one recruitment letter

Dear colleague,

My name is Haile Bekele Adane, a Doctoral (DLitt et Phil) student at the University of South Africa in the department of health sciences. I am conducting a study with the title “**An action plan to integrate abortion care with HIV and Family planning services in Ethiopia**”. You as a health professional, involved in maternal, neonatal, and child health services, is the best person to take part in the study. This is the first round of the e-Delphi technique. In the first round, 7 action statements and 37 action methods are included to validate the draft action plan. Based on the findings of the first round, questions for consecutive rounds will be formulated until 80% consensus is reached among study participants. Being participated in this study, you may not be benefited directly but it will provide information that might improve the provision of integrated maternal health services at public healthcare facilities of Ethiopia. This research study received ethical approval from the Health Research Ethics Committee at the University of South Africa (REC-012714-039 on 01/10/2019) as well as from the Health Research and Technology Transfer Support Process of SNNPR Health Bureau (Pፊ6/19/394 on 11/09/2012 E.C).

I invite you voluntarily to take part in this study. I appreciate that you will offer your valuable time. You will find the draft action plan with an embedded assessment validation tool when you click on the link at the end of this letter and will only take about 40 minutes of your time to complete your responses. Participation is voluntary and you may withdraw from the study at any time. Participation in this online survey process is anonymous and clicking the link ensures informed consent. The results of this study might be published but the information that you provide will be treated as confidential and your identity will not be linked to any answers in the questionnaire. Your anonymity will be ensured as the web-based program “Google forms” will only provide me with the bulk of responses from all participants without any link to the identity of any person linked to the data. You are free to decline to participate by not clicking the link. If for some reason you need to contact CREC you can do so via e-mail at HSREC@unisa.ac.za or contact with the researcher via 64142353@mylife.unisa.ac.za You can also contact the research supervisor Prof Lizeth Roets at roetsl@unisa.ac.za Your participation in this research study will be much appreciated. If you agree to participate, click the link <https://forms.gle/wUTtRz2q5mPsFYC8A> to gain access to draft action plan with an embedded assessment validation tool.

Thanks for your voluntary participation in this study

Kind regards

Haile Bekele Adane (PhD candidate)

ANNEXURE 9: Draft action plan with validation assessment tool (round one with corrections after pre-test indicated in blue bold text)

<p>Instructions: Please make a tick in the spaces provided to indicate your choice pertaining to your level of agreement or disagreement with the action statements. Tick the appropriate boxes pertaining to your choice of who the responsible person/s should be as well as the time frame within which actions need to be achieved. Please add any comment/s to improve the draft action plan in the open spaces provided.</p>	
<p>THEME 1: GEOGRAPHIC ACCESSIBILITY</p>	
<p>Action statement 1: Improve access to healthcare facilities offering integrated abortion care with HIV-FP services.</p> <p>Indicate the level of agreement with the inclusion of the action statement</p> <p>1. Agree <input type="radio"/> 2. Disagree <input type="radio"/></p>	
<p>Method 1.1 Compile a report based on evidence to support the need for upgrading existing health posts to health centres or constructing new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 1.1.3 and move the next method 1.2</p>	
<p>1.1.1 Responsible person/s: Please indicate who must take responsibility to compile an evidence-based report to support the upgrading of health posts to health centres or constructing new ones. Please tick next to your choice/s.</p>	
1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from HCWs (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>

4. Others, please specify-----	
1.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the evidence-based reports should be completed.	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Others, please specify-----	
1.1.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 1.2 Share the completed evidence-based report with governmental bodies, partners, civic societies, and community leaders influential to negotiate upgrading the existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 1.2.3 and move the next method 1.3</p>	
1.2.1 Responsible person/s: Please indicate who must take responsibility to share the report and negotiate with concerned bodies. Please tick next to your choice/s.	
1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from HCWs (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the selected 3 district health offices.	<input type="radio"/>
3. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts, appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Others, please specify-----	

<p>1.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the report must be shared and negotiations with concerned bodies must commence.</p>	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Others, please specify-----	
<p>1.2.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----</p>	
<p>Method 1.3 Develop strategies to strengthen the intra facility referral system (within the healthcare facilities) to integrate abortion care with FP-HIV services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 1.3.3 and move the next method 1.4</p>	
<p>Method 1.3 (a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to strengthen the intra-healthcare facility referral system.</p>	
1. Implement referral slips in the healthcare facilities	<input type="radio"/>
2.	<input type="radio"/>
3. Use runners (individuals who are responsible for allocation/distribution of clients' family folders to different service delivery points) in the healthcare facilities	<input type="radio"/>
4. Use liaisons (individuals who are responsible to link referral cases to the next higher levels) in the healthcare facilities	<input type="radio"/>
5. If you have any other idea on how to strengthen the intra-healthcare facility referral system, please indicate it here.-----	
<p>1.3.1 Responsible person/s: Please indicate who must take responsibility to facilitate the strategies to strengthen the intra-healthcare facility referral system. Please make a tick next to your choice/s.</p>	
1. The director of the public healthcare facility	<input type="radio"/>

2. The human resource development coordinator of the public healthcare facility	<input type="radio"/>
3. An ad-hoc committee (1 abortion care and 1 HIV-FP healthcare provider) appointed by the director of the public health facility)	<input type="radio"/>
4. If others, please specify-----	
1.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the intra-healthcare facility referral system should be implemented.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Others, please specify-----	
1.3.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 1.4 Develop strategies to strengthen the referral system (from the community to the health centre/hospital) to improve integrated health services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 1.4.3 and move the next method 1.5</p>	
Method 1.4.(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies that can be implemented to enhance the utilization of integrated healthcare services.	
1. Health education to the community on integrated health services by health centre-health post networking focal persons (Health workers who are responsible to link the healthcare services from the community (health post) to health centre/hospital).	<input type="radio"/>
2. Health education on integrated health services by healthcare providers.	<input type="radio"/>

3. Health education on integrated health services by the community leaders such as kebele leaders and religious leaders.	<input type="radio"/>
4 If you have any other idea on how to strengthen the community to healthcare facilities referral system, please indicate it here -----	
1.4.1 Responsible person/s: Please indicate who must take responsibility to facilitate the strategies to strengthen the community to healthcare facility referral system. Please tick next to your choice/s.	
1. The head of the district health office	<input type="radio"/>
2. The director of the public healthcare facility	<input type="radio"/>
3. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
4. An ad-hoc committee (1 abortion care provider and 1 HIV-FP service provider) appointed by the director of the public health facility	<input type="radio"/>
5. Others, please specify-----	
1.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the community to healthcare facility referral system would be strengthened.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify-----	
1.4.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	

Method 1.5 Establish new or strengthen mobile/outreach programs that offer abortion care, FP, and HIV integrated healthcare services.

Do you agree with the method? 1. Yes 2. No

If your answer is no to this question, please complete 1.5.3 and move the next method 1.6

1.5.1 Responsible person/s: Please indicate who must take responsibility to strengthen mobile or outreach health service programs. Please tick next to your choice/s.

1. The director of the public healthcare facility	<input type="radio"/>
2. Program officers (1 abortion care and HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
3. An ad-hoc committee (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public healthcare facility	<input type="radio"/>
4. The health centre-health post networking focal person (One health worker who is responsible to link the healthcare services from the community (health post) to the health centre/hospital.	<input type="radio"/>
5. Others, please specify-----	

1.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the mobile or outreach programs should be established or strengthened.

1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, please specify-----	

1.5.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----

Method 1.6 Rearrange healthcare service provision areas to reduce the waiting time of abortion care, HIV, and FP integrated services.

Do you agree with the method? 1. Yes 2. No

If your answer is no to this question, please complete 1.6.3 and move the next action statement 2

Method 1.6 (a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to reduce waiting time at integrated health services.

1. Abortion care and HIV-FP services offered in the same room	<input type="radio"/>
2. Abortion care and FP-HIV service offered in the adjacent rooms	<input type="radio"/>
3. Abortion care and HIV-FP service providing areas near to the main gate of healthcare facility compound	<input type="radio"/>
4. Implement a scheduled based client appointment system	<input type="radio"/>
5. If you have any other idea on how to reduce waiting time and enhance the provision of integrated health services, please indicate it here -----	

1.6.1 Responsible person/s: Please indicate who must take responsibility to facilitate the strategies to rearrange healthcare service provision areas. Please tick next to your choice/s.

1. The director of the public healthcare facility	<input type="radio"/>
2. Team leader of abortion care providers of the public healthcare facility	<input type="radio"/>
3. Team leader of HIV-FP service providers of the public healthcare facility	<input type="radio"/>
4. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
5. Others, please specify-----	

1.6.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the healthcare providing areas should be rearranged.

1 Within 3 months	<input type="radio"/>
2 Within 6 months	<input type="radio"/>
3 Within 9 months	<input type="radio"/>
4 Other, please specify-----	
1.6.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
THEME-2: HUMAN RESOURCE	
Action statement 2: Ensure competent human resources for the provision of abortion care, FP, and HIV integrated services.	
Indicate the level of agreement with the inclusion of the action statement	
1. Agree <input type="radio"/>	2. Disagree <input type="radio"/>
Method 2.1 Compile an evidence-based report on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible to provide integrated abortion with HIV-FP services.	
Do you agree with the method? 1. Yes <input type="radio"/>	
2. No <input type="radio"/>	
If your answer is no to this question, please complete 2.1.3 and move the next method 2.2	
2.1.1 Responsible person/s: Please indicate who must take responsibility to compile an evidence-based report on the need for healthcare providers who can deliver integrated abortion with HIV-FP services. Please tick next to your choice/s.	
1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments	<input type="radio"/>
2. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>

3. An ad-hoc committee with representation from HCWs (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices.	<input type="radio"/>
4. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
5. Other, please specify-----	
2.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the evidence-based report should be completed.	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, please specify-----	
2.1.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 2.2 Capacitate the leadership and management skills of public healthcare facility directors through in-service training to enhance the integration of abortion care with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 2.2.3 and move the next method 2.3</p>	
<p>Method 2.2(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to capacitate the leadership and management skills of public healthcare facility directors.</p>	
1. Leadership skill development training offered at least twice a year to address the management of an integrated services	<input type="radio"/>

2. Best leadership experience sharing sessions offered twice a year.	<input type="radio"/>
3. Develop a web-based platform for information sharing about public healthcare facility management.	<input type="radio"/>
4. If you have any other idea on how to capacitate the leadership and management skills of public healthcare facility directors, please indicate it here -----	
2.2.1 Responsible person/s: Please indicate who must take responsibility to capacitate the leadership and management skill of public healthcare facility directors. Please tick next to your choice/s.	
1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments to ensure an accurate attendance of the director of public healthcare facilities.	
2. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices to ensure an accurate attendance of the director of public healthcare facilities.	
3. An ad-hoc committee with one representator from domestic partner organizations and one from international partner organizations from each of the 3 zones appointed by the head of the 3 zone health departments.	
4. Other, please specify-----	
2.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the head of healthcare facilities leadership and management skills should be capacitated.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify-----	
2.2.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
Method 2.3 Capacitate the healthcare providers' (doctors, health officers, midwives, and nurses) knowledge and skills delivering integrated abortion and HIV-FP services.	

Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
If your answer is no to this question, please complete 2.2.3 and move the next method 2.4	
Method 2.3(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to capacitate the knowledge and skills of healthcare providers.	
1. Integrated in-service training opportunities to healthcare providers at least twice a year.	<input type="radio"/>
2. Develop a career structure that promotes the healthcare providers to the next higher level bases on their experiences.	<input type="radio"/>
3. Develop a web-based platform for sharing information on how to provide integrated services	<input type="radio"/>
4. If you have any other idea on how to strengthen the community to healthcare facilities referral system, please indicate it here -----	
2.3.1 Responsible person/s: Please indicate who must take responsibility to capacitate the knowledge and skill of healthcare providers. Please tick next to your choice/s.	
1. The director of the public healthcare facility	<input type="radio"/>
2. An ad-hoc committee with representation from HCWs (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices.	<input type="radio"/>
3. An ad-hoc committee with one representator from domestic and one from international partner organizations from each of the 3 zones appointed by the head of the 3 zone health departments.	<input type="radio"/>
4 Other, please specify-----	
2.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which capacitating the healthcare providers' knowledge and skill through in-service training should be initiated.	

1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify-----	
2.3.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 2.4 Implement motivation plans for HCWs to enhance the integration of abortion with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 2.4.3 and move the next method 2.5</p>	
<p>Method 2.4(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies that health care providers can be motivated.</p>	
1. Negotiate a budget allocation for overtime working with the head of the district health office	<input type="radio"/>
2. Implementation of a career enhancement program to provide opportunities to improve healthcare providers' salary	<input type="radio"/>
3. Implementation of incentives for healthcare providers especially engaging in risky healthcare services (surgery, delivery etc).	<input type="radio"/>
4. Negotiating a budget allocation with the head of the district health office for mobile/outreach services.	<input type="radio"/>
5. If you have any other idea on how to improve the healthcare providers' motivation, please indicate it here -----	

<p>2.4.1 Responsible person/s: Please indicate who must take responsibility for the improvement of healthcare providers' motivational plans. Please tick next to your choice/s.</p>	
1. The head of the regional health bureau.	<input type="radio"/>
2. The head of the zone health department	<input type="radio"/>
3. An ad-hoc committee with representation from HCWs (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
4. A group of public healthcare facility directors who are willing to assist with the negotiations	<input type="radio"/>
5 Any other, please specify-----	
<p>2.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the healthcare provider motivational plan should be started.</p>	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other, please specify-----	
<p>2.4.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----</p>	
<p>Method 2.5 Initiate/strengthen a mentorship program (Guidance provided by an individual with more experience and knowledge on integrated service) to support healthcare providers to enhance the integration of abortion care with HIV-FP services.</p>	
<p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	

<p>If your answer is no to this question, please complete 2.5.3 and move the next method 2.6</p>	
<p>Method 2.5(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to initiate/strengthen mentorship on integrated health services</p>	
1. Offer a formal mentorship program to provide a one-on-one mentorship opportunity to all healthcare providers (A trainer and a trainee conduct skill and knowledge transferring sessions)	<input type="radio"/>
2. Offer an online mentorship program (conducting mentorship service being in different locations using a web-based or other means of communication) to support and guide integrated services.	<input type="radio"/>
3. Offer a group mentorship service (Providing mentorship services to a group of healthcare providers) to support and guide integrated services.	<input type="radio"/>
4. If you have any other idea on how to initiate/strengthen mentorship, please indicate it here ----- -----	
<p>2.5.1 Responsible person/s: Please indicate who must take responsibility to conduct mentorship service to strengthen integrated abortion, FP, and HIV services. Please tick next to your choice/s.</p>	
8. Program officers (1 abortion care and 1 HIV-FP) from the regional health bureau	<input type="radio"/>
9. Maternal, neonatal, and child health directors of the zone health department	<input type="radio"/>
10. An ad-hoc committee representation from senior healthcare providers (1 abortion care an HIV-FP service) from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>
11. Other, please specify-----	
<p>2.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which mentorship on integrated abortion care with HIV-FP services should be started.</p>	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>

3. Within 12 months	<input type="radio"/>
2.5.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 2.6 Conduct performance review meetings with healthcare providers (abortion care and HIV-FP providers) to improve the integration of abortion care with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p><i>If your answer is no to this question, please complete 2.6.3 and move the next action statement</i></p>	
<p>Method 2.6(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to conduct a review meeting on integrated health services</p>	
1. Organize biannual review meetings on integrated health service at the district level	<input type="radio"/>
2. Organize biannual review meeting on integrated health service at zonal level	<input type="radio"/>
3. Organize biannual review meeting on integrated health service at the regional level	<input type="radio"/>
4. If you have any other idea on conducting a review meeting on integrated health services, please indicate it here -----	
<p>2.6.1 Responsible person/s: Please indicate who must take responsibility to organize the biannual performance review meetings on integrated health services. Please tick next to your choice/s.</p>	
1. Maternal, neonatal, and child health directors of the regional health bureau	<input type="radio"/>
2. Maternal, neonatal, and child health directors of the zone health department	<input type="radio"/>
3. Maternal, neonatal, and child health directors of the district health office	<input type="radio"/>
4. The director of the public healthcare facility	<input type="radio"/>

5. Other, please specify-----

2.6.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the biannual performance review meetings should be started.

1. Within 6 months

2. Within 12 months

3. Within 18 months

4. Other, please specify-----

2.6.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----

THEME-3: MEDICAL RESOURCES

Action statement 3: Improve the availability of medical resources (drugs, equipment, and supplies) to public healthcare facilities to enhance the provision of abortion care, FP, and HIV integrated services

Indicate the level of agreement with the inclusion of the action statement

1. Agree

2. Disagree

Method 3.1 Compile an evidence-based report on the availability of drugs, equipment and supplies essential to offer quality care at integrated healthcare facilities.

Do you agree with the method? 1. Yes

2. No

If your answer is no to this question, please complete 3.1.3 and move the next method 3.2

<p>3.1.1 Responsible person/s: Please indicate who must take responsibility for the compilation of an evidence-based report on the availability of drugs, equipment, and supplies essential to offer integrated healthcare. Please tick next to your choice/s.</p>	
1. SNNPR pharmaceutical supply regional hub managers (all 4 of them)	<input type="radio"/>
2. Logistic and medical supply director of the zone health department	<input type="radio"/>
3. Logistic and medical supply director of the district health office	<input type="radio"/>
4. logistic and medical supplies coordinator of the public healthcare facility	<input type="radio"/>
5 Other, please specify-----	
<p>3.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which evidence-based reports should be completed.</p>	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
Other, please specify-----	
<p>3.1.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----</p>	
<p>Method 3.2 Deploy pharmacy professionals to public healthcare facilities to ensure the availability of resources (drugs) to integrated abortion care, FP, and HIV services</p>	
<p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	
<p>If your answer is no to this question, please complete 3.2.3 and move the next method 3.3</p>	

<p>3.2.1 Responsible person/s: Please indicate who must take responsibility for the deployment of pharmacy professionals to public health facilities based on need and/or workload. Please tick next to your choice/s.</p>	
1. The head of the zone health department	<input type="radio"/>
2. The head of the district health office	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. Other, please specify-----	
<p>3.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which pharmacy professionals should be deployed to manage medical resources properly.</p>	
1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify-----	
<p>3.2.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----</p>	
<p>Method 3.3 Based on the evidence-based report, address the availability of medical resources of public healthcare facilities to integrate abortion care with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 3.2.3 and move the next method 3.4</p>	
<p>Method 3.3(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to address the availability of medical resources.</p>	

1. Avail medical resources in public healthcare facilities through a donation from international and domestic non-governmental organizations.	<input type="radio"/>
2. Improve the availability of medical resources in public healthcare facilities through a daily medical resource assessment and monitoring system.	<input type="radio"/>
3. Negotiate with concerned government officials to advocate for budget allocations for procuring the required medical resources periodically.	<input type="radio"/>
4. If you have any other idea on addressing the availability of medical resources, please indicate it here --- -----	
3.3.1 Responsible person/s: Please indicate who must take responsibility to address the availability of medical resources in the public healthcare facilities.	
1. SNNPR pharmaceutical supply regional hub managers (all 4 of them).	<input type="radio"/>
2. The coordinator of the pharmacy department of public healthcare facility	<input type="radio"/>
3. An ad-hoc committee with one representator from domestic, one representator from international organizations, and one representator from health workers, from each of the 3 zones appointed by the head of the 3 zone health departments.	<input type="radio"/>
4. Other, please specify-----	
3.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which medical resource availability in the public health facilities should be addressed.	
1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify-----	

3.3.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----

Method 3.4 Order or maintain medical equipment such as manual vacuum aspirator (MVA), electrical vacuum aspirator (EVA), and speculum that is necessary for the provision of integrated abortion care, FP, and

HIV services.

Do you agree with the method? 1. Yes 2. No

If your answer is no to this question, please complete 3.4.3 and move the next method 3.5

Method 3.4(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to identify/or maintain medical equipment in public healthcare facilities.

1. Biomedical engineers from the regional health bureau to Identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input type="radio"/>
2. Biomedical officers from the zone health department to Identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input type="radio"/>
3. Biomedical officers from the district health office to Identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input type="radio"/>
4. If you have any other idea on how to identify and procure medical equipment to operate, please indicate it here.-----	

3.4.1 Responsible person/s: Please indicate who must take responsibility to facilitate strategies for identifying and/or maintaining medical equipment in the public healthcare facilities. Please tick next to your choice/s.

1. Logistic and medical supply director of the regional health bureau	<input type="radio"/>
2. Logistic and medical supply director of the zone health department	<input type="radio"/>

3. Logistic and medical supply director of the district health office	<input type="radio"/>
4. The director of the public healthcare facility	<input type="radio"/>
5. Procurement officer in every integrated healthcare facility	<input type="radio"/>
6. Other, please specify-----	
3.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which medical equipment should be operated and/or maintained to utilize it properly.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify-----	
3.5.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 3.5 Negotiate with the private sector (pharmacies, drug vendors, and stores) for sponsoring of medical resources necessary for abortion care, FP, and HIV services integrations</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 3.5.3 and move the next action statement 4</p>	
<p>Method 3.5(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies for sponsoring medical resources necessary for the integration of abortion care with HIV-FP services.</p>	
1. Identify organizations in the private sectors for sponsoring identified medical resources.	<input type="radio"/>

2. Identifying organization in the government sectors for sponsoring identified medical resources	<input type="radio"/>
3. Appointment of a team to take responsibility for obtaining sponsorships and memorandums of agreements/understanding (MOU)	<input type="radio"/>
4. If you have any other idea on how to encourage private sectors to avail medical resources, please indicate it here.-----	
3.5.1 Responsible person/s: Please indicate who must take responsibility to negotiate sponsorship with private sectors in availing medical resources necessary for integrated abortion care, HIV, and FP services. Please tick next to your choice/s.	
1. SNNPR pharmaceutical supply region hub managers (all 4 of them)	<input type="radio"/>
2. The head of the zone health department	<input type="radio"/>
3. The head of the district health office	<input type="radio"/>
4. An ad-hoc committee with one representator from private companies, one representor from health workers, and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 zone health departments.	<input type="radio"/>
5. Other, please specify-----	
3.5.2 Timeframe: Please indicate the time frame, after approval of the action plan, within which sponsorship on MOU is signed with private sectors.	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, specify-----	

3.5.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----

Theme-4: Infrastructure

Action statement 4: Improve the infrastructures of public health facilities for enhancement of the integration of abortion care with HIV-FP services.

Indicate the level of agreement with the inclusion of the action statement

1. Agree 2. Disagree

Method 4.1 Compile an evidence-based report to assess the infrastructure of the existing healthcare facilities to deliver integrated abortion care with HIV-FP services.

Do you agree with the method? 1. Yes 2. No

If your answer is no to this question, please complete 4.1.3 and move the next method 4.2

4.1.1 Responsible person/s: Please indicate who must take responsibility to compile the evidence-based reports on the status of the existing healthcare facilities. Please tick next to your choice/s.

1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from HCWs (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>

4. Other, please specify-----

4.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an evidence-based report is to be completed.

1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify-----	
4.1.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 4.2. Share the evidence-based report with concerned governmental bodies, partners, civic societies, and community influential to negotiate support for the improvement of existing facilities to enhance the delivery of integrated abortion care with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 4.2.3 and move the next method 4.3</p>	
<p>4.2.1 Responsible person/s: Please indicate who must take responsibility to share the evidence-based reports with concerned bodies to improve the infrastructure of the existing healthcare facilities. Please tick next to your choice/s.</p>	
1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from HCWs (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Others, please specify-----	

<p>4.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the report is shared and negotiations with concerned bodies will commence.</p>	
1. Within 6 month	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify-----	
<p>4.2.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----</p>	
<p>Method 4.3 Negotiate with the road and transport authority to allocate a budget for the improvement of road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 4.3.3 and move the next method 4.4</p>	
<p>Method 4.3(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to allocate a budget to improve road infrastructure</p>	
1. Compile a needs analysis to assess the status of road infrastructure to health facilities	<input type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input type="radio"/>
3. Share the report and the budget request to the government higher officials for discussion and obtaining financial support.	<input type="radio"/>
4. If you have any other idea on improving the awareness of the government officials on the need for improved road infrastructure, please indicate it here.-----	

<p>4.3.1 Responsible person/s: Please indicate who must take responsibility to negotiate with the government higher officials to allocate a budget for the improvement of road infrastructure.</p>	
1. The head of the zone road and transport department	<input type="radio"/>
2. The head of the zone health department	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
5. Other, please specify-----	
<p>4.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which negotiation with government higher official was finalized.</p>	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, please specify-----	
<p>4.3.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----</p>	
<p>Method 4.4 Organize an advocacy meeting on the need analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.</p>	
<p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p>	

If your answer is no to this question, please complete 4.4.3 and move the next method 4.5

4.4.1 **Responsible person/s:** Please indicate who must take responsibility to organize advocacy meetings on the need for ambulance transportation. Please tick next to your choice/s.

- | | |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| 1. Medical service director of the regional health bureau | <input type="radio"/> |
| 2. Medical service director of the zone health department | <input type="radio"/> |
| 3. An ad-hoc committee with one representator from civic society, one representator from the community leaders, and one representator from health workers from each of the 3 districts appointed by the head of the 3 district health offices. | <input type="radio"/> |
| 4. Other, please specify----- | |

4.4.2 **Time frame:** Please indicate the time frame, after approval of the action plan, within which an advocacy meeting on the need analysis of ambulance transportation must be conducted.

- | | |
|-------------------------------|-----------------------|
| 1. Within 3 months | <input type="radio"/> |
| 2. Within 6 months | <input type="radio"/> |
| 3. Within 9 months | <input type="radio"/> |
| 4. Other, please specify----- | |

4.4.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----

Method 4.5 Strengthen the transportation system to public healthcare facilities to enhance the delivery of integrated abortion care, HIV, and FP services.

Do you agree with the method? 1. Yes 2. No

If your answer is no to this question, please complete 4.5.3 and move the next method 4.6

Method 4.5(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to strengthen the transportation system to public healthcare facilities.	
1. Negotiate with private transport associations to increase the daily trips to public healthcare facilities	<input type="radio"/>
2. Negotiate with public transport associations to increase the daily trips to public healthcare facilities	<input type="radio"/>
3. Increase the number of motorbikes to enhance access to public healthcare facilities	<input type="radio"/>
4. If you have any other ideas on how to strengthen public transport to enhance the integration of health services, please indicate it here.-----	
4.5.1 Responsible person/s: Please indicate who must take responsibility to facilitate the above-mentioned strategies to strengthen transport accessibility to public healthcare facilities. Please tick next to your choice/s.	
1. Medical service director of the zone health department	<input type="radio"/>
2. Medical service director of the district health office	<input type="radio"/>
3. An ad-hoc committee with one representator from road and transport workers, one representator from the community leaders, and one representator from health workers, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Other, please specify-----	
4.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the facilitation of the transport system should be initiated.	
1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>

4. Other, please specify-----	
4.5.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 4.6 Ensure safe and adequate water supplies to public health facilities to enhance the integration of abortion care, HIV, and FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> No <input type="radio"/></p> <p>If your answer is no to this question, please complete 4.6.3 and move the next method 4.7</p>	
<p>Method 4.6(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to ensure a safe and adequate water supply system to public health facilities.</p>	
1. Compile a needs analysis of the availability of safe and adequate water supplies to public healthcare facilities	<input type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input type="radio"/>
3. Compile a report to motivate a budget allocation for water and sanitation based on the needs analysis	<input type="radio"/>
4. If you have any other idea on how to ensure a safe and adequate water supply system to public healthcare facilities, please indicate it here.-----	
<p>4.6.1 Responsible person/s: Please indicate who must take responsibility to implement the mentioned strategies to ensure a safe and adequate water supply to public healthcare facilities. Please tick next to your choice/s.</p>	
1. The head of water and sewerage/sanitation authority of the zone department	<input type="radio"/>
2. The head of water and sewerage/sanitation authority of the district office	<input type="radio"/>

3. An ad-hoc committee with one representator from water and sewerage workers, one representator from the community leaders, and one representator from health workers, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Other, please specify-----	
4.6.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the strategies to ensure safe and adequate water supply to public healthcare facilities should be established.	
1. Within 6 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify-----	
4.6.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 4.7 The installation of hydroelectric or other sources of power (generator and solar light) to access a 24 hours light power services that can enhance the integration of abortion care with HIV-FP services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 4.7.3 and move the next method 4.8</p>	
<p>Method 4.7(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to allocate budget for hydroelectric/generator/solar power installation.</p>	
1. Compile a needs analysis of the availability of hydroelectric or other sources of power to public healthcare facilities	<input type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input type="radio"/>

3. Compile a report to motivate a budget allocation for hydroelectric or other sources of power based on the needs analysis	<input type="radio"/>
4. If you have any other idea on how to allocate a budget for the installation of light power sources, please indicate it here.-----	
4.7.1 Responsible person/s: Please indicate who must take responsibility to facilitate strategies for the allocation of budget for the source of light power. Please tick next to your choice/s.	
1. Planning, monitoring, and economic development director of the zone health department.	<input type="radio"/>
2. Planning, monitoring, and economic development director of the district health office.	<input type="radio"/>
3. An ad-hoc committee with one representator from health workers, one representator from hydroelectric and power workers, and one representator from a non-governmental organization, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Other, please specify-----	
4.7.2 Time frame: Please indicate the time frame, after approval of the action plan, within which a light power source should be installed in public healthcare facilities.	
1. Within 9 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify-----	
4.7.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
Method 4.8 Construct healthcare providers houses in the public healthcare compounds particularly in rural areas to enhance the delivery of integrated abortion care with HIV-FP services.	

Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
If your answer is no to this question, please complete 4.7.3 and move the next action method 5	
Method 4.8(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to construct living rooms for healthcare providers in public healthcare facilities.	
1. Compile a needs analysis of the availability of healthcare provider houses in public healthcare facilities	<input type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input type="radio"/>
3. Identify organizations of the government and private sectors sponsoring the construction of healthcare providers' houses	<input type="radio"/>
4. Compile a report to motivate a budget allocation for the construction of healthcare provider houses based on the needs analysis	<input type="radio"/>
5. If you have any other idea on how to allocate a budget for the construction of living rooms in public healthcare facilities, please indicate it here.-----	
4.8.1 Responsible person/s: Please indicate who must take responsibility to facilitate strategies to mobilize financial resources for the construction of living rooms. Please tick next to your choice/s.	
1. Planning, monitoring, and economic development director of the zone health department.	<input type="radio"/>
2. Planning, monitoring, and economic development director of the district health office.	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. An ad-hoc committee with one representator from civic society, one representator from the community leaders, and one representor from health workers, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
5. Other, please specify-----	

4.8.2 Time frame: Please indicate the time frame, after approval of the action plan, within which healthcare providers will start living in the constructed houses.

1. Within 1 year	<input type="radio"/>
2. Within 2 years	<input type="radio"/>
3. Within 3 years	<input type="radio"/>
4. Other, please specify-----	

4.8.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----

THEME-5: FISCAL RESOURCES

Action statement 5: Avoid/reduce the out-of-pocket payment for health services to enhance the uptake of abortion, HIV, and FP integrated health services.

Indicate the level of agreement with the inclusion of the action statement

1. Agree 2. Disagree

Method 5.1 Compile an evidence-based report on the need for the free delivery of abortion care, HIV, and FP integrated services.

Do you agree with the method? 1. Yes 2. No

If your answer is no to this question, please complete 5.1.3 and move the next method 5.2

5.1.1 Responsible person/s: Please indicate who must take responsibility to compile an evidence-based report to negotiate with higher government officials on the allocation of budget for integrated abortion, FP, and HIV services to allow for free service delivery. Please tick next to your choice/s.

1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
2. An ad-hoc committee with representation from HCWs (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input type="radio"/>
3. An ad-hoc committee with one representator from civic society, one representator from the community leaders, and one representator from finance and economic development workers, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
4. Other specify-----	
5.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which a free delivery of abortion, FP, and HIV integrated services will be initiated.	
1. Within 9 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify-----	
5.1.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 5.2 Strengthen community-based health insurance (CBHI) to avoid out of pocket payment and cover the expense of abortion care, HIV, and FP integrated services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 5.2.3 and move the next method 5.3</p>	
<p>Method 5.2 (a) Please make a tick in the circle next to the applicable strategies of your choice/s that indicate/s how to strengthen community-based health insurance.</p>	
1. Educate the community on the importance of CBHI initiatives	<input type="radio"/>
2. Assign CBHI focal person at the district health office	<input type="radio"/>

3. Educate and work with the community leaders on CBHI initiatives	<input type="radio"/>
4. Obtain support on CBHI initiative from concerned government officials	<input type="radio"/>
5. If you have any other idea on how to strengthen community-based health insurance, please indicate it here -----	
5.2.1 Responsible person/s: Please indicate who must take responsibility to facilitate the mentioned strategies to strengthen community-based health insurance. Please tick next to your choice/s.	
1. SNNPR health insurance agency branch managers (all 4 of them)	<input type="radio"/>
2. Medical service director of the zone health department	<input type="radio"/>
3. Medical service director of the district health office	<input type="radio"/>
4. An ad-hoc committee with one representator from civic society, one from the community leaders, and one representor from health workers from each of the 3 zones appointed by the head of the 3 zone health departments.	<input type="radio"/>
5. Other, please specify-----	
5.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which CBHI initiatives should be started to enhance the integration of abortion care, HIV, and FP services.	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other, please specify-----	
5.1.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	

Method 5.3 Securing incentives to motivate healthcare workers to enhance the integration of abortion care with HIV-FP services.

Do you agree with the method? 1. Yes 2. No

If your answer is no to this question, please complete 5.3.3 and move the next action statement 6

Method 5.3(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to motivate the healthcare providers.

- | | |
|--------------------------------------------------------------------------------------------------------|-----------------------|
| 1. Pay incentives to healthcare providers working in integrated services based on performance criteria | <input type="radio"/> |
| 2. Allocate a budget for overtime based on performance | <input type="radio"/> |
| 3. Allow free integrative healthcare service to healthcare providers and their families | <input type="radio"/> |

4. If you have any other idea on how to increase the motivation of healthcare providers, please indicate it here -----

5.3.1 Responsible person/s: Please indicate who must take responsibility to facilitate the implementation of the strategies related to incentives to healthcare providers'. Please tick next to your choice/

- | | |
|---------------------------------------------------|-----------------------|
| 1. The head of the zone health department | <input type="radio"/> |
| 2. The head of the district health office | <input type="radio"/> |
| 3. The director of the public healthcare facility | <input type="radio"/> |

4. Other specify-----

5.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which healthcare providers' incentives are addressed

- | | |
|--------------------|-----------------------|
| 1. Within 9 months | <input type="radio"/> |
|--------------------|-----------------------|

2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify-----	
5.3.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
THEME-6: POLICIES, STRATEGIES AND GUIDELINES	
<p>Action statement 6: Avail comprehensive regulatory documents for utilization to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.</p> <p>Indicate the level of agreement with the inclusion of the action statement</p> <p>Agree <input type="radio"/> 2. Disagree <input type="radio"/></p>	
<p>Method 6.1 Develop or update regulatory documents that can facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 6.1.3 and move the next method 6.2</p>	
<p>Method 6.1(a) Please make a tick in the circle next to the applicable strategies of your choice/s that will ensure availing regulatory documents.</p>	
1. Negotiate with policymakers to appoint experienced professionals to assess the relevancy of the applicable regulatory documents	<input type="radio"/>
2. Negotiate with the directors of the ministry of health to assign experts to develop or adapt regulatory documents to be available at all public healthcare facilities.	<input type="radio"/>
3. Healthcare providers working in the integrated healthcare service to provide inputs on the draft regulatory documents to ensure the theoretical as well as the practical aspects of integrated services	<input type="radio"/>

4. If you have any other idea on how to develop or update regulatory documents, please indicate it here -----	
6.1.1 Responsible person/s: Please indicate who must take responsibility for the development/updating of regulatory documents. Please tick next to your choice/s.	
1. The federal MOH Ethiopia maternal, neonatal, and child health director	<input type="radio"/>
2. Maternal neonatal and child health director of the regional health bureau	<input type="radio"/>
3. An ad-hoc committee with one representator from the abortion case team, one representor from the HIV-FP case team, and one representator from the Ethiopian midwife association appointed by the FMOH Ethiopia maternal, neonatal, and child health director.	<input type="radio"/>
4. Other, please specify-----	
6.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which regulatory documents should be developed/updated.	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other, please specify-----	
6.1.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 6.2 Upload all regulatory documents at regional health bureau telegram group to make them available to all healthcare facilities providing integrated health services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 6.2.3 and move the next method 6.3</p>	

<p>6.2.1 Responsible person/s: Please indicate who must take responsibility to facilitate uploading of regulatory documents at regional health bureau telegram group. Please tick next to your choice/s.</p>	
1. The director of maternal, neonatal, and child health of the regional health bureau	<input type="radio"/>
2. Program officers (1 abortion care and 1 HIV-FP) from the regional health bureau	<input type="radio"/>
3. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments	<input type="radio"/>
4. Other, please specify-----	
<p>6.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which regulatory documents should be ready and available at regional health bureau telegram group</p>	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other, please specify-----	
<p>6.2.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----</p>	
<p>Method 6.3 Provide professional development training on the utilization of regulatory documents within all integrated health services.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 6.3.3 and move the next action statement 7</p>	
<p>Method 6.3(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to provide technical support.</p>	

1. Provide training on how to access the regulatory documents from the websites and/or Google drive on the available computer/s in the healthcare facilities.	<input type="radio"/>
2. Provide technical support through supportive supervision	<input type="radio"/>
3. Provide technical support by conducting review meetings	<input type="radio"/>
4. If you have any other idea on how to provide technical support on regulatory document utilization, please indicate it here -----	
6.3.1 Responsible person/s: Please indicate who must take responsibility to facilitate professional development training on the utilization of regulatory documents. Please tick next to your choice/s.	
1. Program officers (1 abortion care and 1 HIV-FP) from the regional health bureau	<input type="radio"/>
2. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	<input type="radio"/>
3. Program officers (1 abortion care and 1 HIV-FP service) from each of the selected 3 district health offices	<input type="radio"/>
4. An ad-hoc committee representing senior healthcare providers (1 abortion care and 1 HIV-FP service) appointed by the director of the public healthcare facility.	
5. Other, please specify-----	
6.3.2. Time frame: Please indicate the time frame, after approval of the action plan, within which technical support on regulatory documents utilization should be started.	
1. Within 12 months	<input type="radio"/>
2. Within 18 months	<input type="radio"/>
3. Within 24 months	<input type="radio"/>
4. Other specify-----	

6.3.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----

THEME-7. BEHAVIOURAL CHANGE AND COMMUNICATION

Action statement 7: Provide health-related information to the communities to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.

Indicate the level of agreement with the inclusion of the action statement

1. Agree 2. Disagree

Method 7.1 Advocacy meetings with political leaders, religious leaders, the elderly, and other communities to share information on the advantages of abortion care, FP, and HIV services integration.

Do you agree with the method? 1. Yes 2. No

If your answer is no to this question, please complete 7.1.3 and move the next method 7.2

7.1.1 Responsible person/s: Please indicate who must take responsibility to share information with political leaders, religious leaders, the elderly, and communities on the advantages of abortion care, FP, and HIV services integration.

1. The head of the zone health department	<input type="radio"/>
2. The head of the district health office.	<input type="radio"/>
3. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
4. An ad-hoc committee representation from healthcare workers (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public health facility	<input type="radio"/>
5. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices	<input type="radio"/>

6. Other, please specify-----	
7.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an advocacy meeting should be initiated with political leaders, religious leaders, the elderly, and other community influential.	
1. Within 3 months	<input type="radio"/>
2. Within 6 months	<input type="radio"/>
3. Within 9 months	<input type="radio"/>
4. Other, please specify -----	
7.1.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 7.2 Develop and avail health education material (leaflets, brushers, pamphlets, and banners) to enhance the utilization integration of abortion care with HIV-FP services in public healthcare facilities.</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 7.2.3 and move the next method 7.3</p>	
<p>Method 7.2(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to produce and distribute job aids.</p>	
1. Compile a budget report based on the quotations for the development and availability of health education materials	<input type="radio"/>
2. A healthcare facility allocates a budget to develop the content of the health education materials relevant to integrated health services	<input type="radio"/>
3. Identify organizations in the private sector for sponsoring to develop and avail health education materials.	<input type="radio"/>
4. Identify non-government organizations for sponsoring to develop and avail health education materials.	<input type="radio"/>

5. Avail the health education materials in the integrated public healthcare facilities	<input type="radio"/>
6. If you have any other ideas on how to avail financial resources for the production and distribution of job aids, please indicate it here.-----	
7.2.1 Responsible person/s: Please indicate who must take responsibility to facilitate the production and availability of health education materials in the healthcare facilities. Please tick next to your choice/s.	
1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	<input type="radio"/>
2. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. An ad-hoc committee with one representative from civic society, one from the community leaders, and one representative from health workers, from each of the 3 zones appointed by the head of the 3 zone health departments.	<input type="radio"/>
5. Other, please specify-----	
7.2.1 Time frame: Please indicate the time frame, after approval of the action plan, within which job aids should be produced and distributed.	
1. Within 9 months	<input type="radio"/>
2. Within 12 months	<input type="radio"/>
3. Within 18 months	<input type="radio"/>
4. Other, please specify-----	
7.2. Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
Method 7.3 Utilize mass media (Radio, social media, and texts) to increase the awareness of the community on the provision of abortion care, FP, and HIV integrated services.	

Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
If your answer is no to this question, please complete 7.3.3 and move the next method 7.4	
Method 7.3(a). Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to utilize mass media.	
1. Negotiate with radio journalists on health education slots/time available to discuss the advantages of integrated health service information	<input type="radio"/>
2. Convey messages through social media (Facebook, telegram, Instagram etc) on the advantages of providing integrated health services in public health facilities	<input type="radio"/>
3. Negotiate with the Ethiopian telecom sponsoring to send a text message on the advantages of integrated health services	<input type="radio"/>
4. If you have any other ideas on how to utilize mass media, please indicate it here.----- -----	
7.3.1 Responsible person/s: Please indicate who must take responsibility to utilize mass media on integrated abortion care with HIV-FP services. Please tick next to your choice/s.	
1. The manager of communication and broadcasting of the zone	<input type="radio"/>
2. The head of the zone health department	<input type="radio"/>
3. The head of the district health office	<input type="radio"/>
4. An ad-hoc committee with one representative from civic society, one representative from the community leaders, and one representative from the journalists, from each of the 3 districts appointed by the head of the 3 district health offices.	<input type="radio"/>
5. Other, please specify-----	
7.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which mass media will be utilized to integrate abortion care with HIV-FP services.	

1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify-----	
7.3.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
<p>Method 7.4 Organize awareness campaigns in the community on integrated abortion care, FP, and HIV services by community health workers</p> <p>Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/></p> <p>If your answer is no to this question, please complete 7.4.3 and move the next method 7.5</p>	
<p>Method 7.4(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to improve the community awareness of integrated health services.</p>	
1. Provide health information to the community (using developed materials) by health workers and health extension workers	<input type="radio"/>
2. Provide health information to the community (using developed materials) by women health development army leaders	<input type="radio"/>
3. Provide health information to the community (using developed materials) by health post to health centre focal person.	<input type="radio"/>
4. If you have any other ideas on how to improve community awareness on integrated services, please indicate it here.-----	
<p>7.4.1 Responsible person/s: Please indicate who must take responsibility to organize the awareness creation campaign on integrated abortion care with HIV-FP services. Please tick next to your choice/s.</p>	

1. Program officer (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health department	<input type="radio"/>
2. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
3. The director of the public healthcare facility	<input type="radio"/>
4. An ad-hoc committee (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public healthcare facility	<input type="radio"/>
5. Other, please specify-----	
7.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which information on integrated abortion care with HIV-FP services to the community should be addressed.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify-----	
7.4.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	
Method 7.5 Enhance the integration of abortion care, HIV, and FP services by utilizing an electronic communication system. Do you agree with the method? 1. Yes <input type="radio"/> 2. No <input type="radio"/>	
If your answer is no to this question, please complete 7.1.3	
Method 7.5(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to enhance integrated health services using electronics technology.	
1. Enhance the provision of integrated health services in the healthcare facilities by utilizing internet technology	<input type="radio"/>

2. Enhance the provision of integrated health services in the healthcare facilities by utilizing telephone communication	<input type="radio"/>
3. Enhance the provision of integrated health services in the healthcare facilities by utilizing fax technology	<input type="radio"/>
4. If you have any other ideas on how to enhance the integrated healthcare services using an electronic technology system, please indicate it here.-----	
.5.1 Responsible person/s: Please indicate who must take responsibility to make use of an electronic system to enhance the integration of abortion care with HIV-FP services. Please tick next to your choice/s.	
1. The director of the public healthcare facility	<input type="radio"/>
2. The head of Information and technology of the zone health department	<input type="radio"/>
3. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input type="radio"/>
4. Other, please specify-----	
7.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an electronic communication system should be utilized.	
1. Within 6 months	<input type="radio"/>
2. Within 9 months	<input type="radio"/>
3. Within 12 months	<input type="radio"/>
4. Other, please specify-----	
7.5.3 Please add if you have any new ideas pertaining to improvement of the action statement, the method, responsible person/s, and the timeframe -----	

ANNEXURE 10: Round two recruitment letter

Dear colleague,

My name is Haile Bekele Adane, a Doctoral (DLitt et Phil) student at the University of South Africa and I hereby invite you to participate in the second round validation of the action plan to integrate abortion care with HIV and family planning services in Ethiopia. You as a health professional, involved in maternal, neonatal, and child health services, identified as the best stakeholder to volunteer to participate in this second round e-Delphi technique.

I appreciate your participation in the first round of the e-Delphi technique and want to sincerely thank you for your contributions and inputs thus far.

The data from all the panelists received in round 1 were analysed and the recommendations were incorporated in this second round. Where consensus was reached, the items are included in the action plan, but you need not respond to them. For items where consensus was not reached, or where you suggested some changes in the first round, please provide your opinion again.

I appreciate that you will offer your valuable time. You will find the second draft action plan with the embedded assessment validation tool when you click on the link at the end of this letter. It will only take about 20 minutes of your time to complete. Participation is voluntary and you may withdraw from the study at any time. Participation in this online survey process is anonymous and clicking the link assumes informed consent.

Just a reminder that ethics approval for this research was obtained from the Health Research Ethics Committee at the University of South Africa (REC-012714-039 on 01/10/2019) as well as from the Health Research and Technology Transfer Support Process of SNNPR Health Bureau (RD6/19/394 on 11/09/2012 E.C). If for some reason you need to contact CREC you can do so via e-mail at HSREC@unisa.ac.za or contact with the researcher via 64142353@mylife.unisa.ac.za You can also contact the research supervisor Prof Lizeth Roets at roetsl@unisa.ac.za. Your participation in this second round will be much appreciated. If you agree to participate, click the link <https://forms.gle/jLksfXz6MEDCjzpY7> to gain access to the second round draft action plan with an embedded assessment validation tool.

Thanks for your valuable input. I appreciate your support.

Haile Bekele Adane (PhD candidate)

ANNEXURE 11: Round two draft action plan with assessment validation tool

Instructions:

1. This is the second round of the e-Delphi technique. In the first round, a consensus has been reached on all of the action statements and the action methods. However, a consensus has not yet been reached on some of the strategies to implement the action methods, the person/s responsible to implement the action methods, and the time frame within which the action methods should be implemented. Therefore, please carefully follow the following instructions:
2. Action statements, action methods, strategies, responsible person/s, and time frames for which consensus were reached will not allow you options to choose from. It will be indicated as: “consensus reached”
3. Where consensus was not reached, you again are allowed options to choose from. Please tick in the circle next to your choice of strategies, responsible person/s, and the time frame you suggest.

THEME 1: GEOGRAPHIC ACCESSIBILITY

Action statement 1: Access to health facilities must be improved to offer integrated abortion care with HIV-FP services

Consensus

Method 1.1 An evidence based report must be compiled to support the need for upgrading existing health posts to health centres or constructing new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.

“CONSENSUS REACHED”





1.1.1 Responsible person: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must take responsibility to compile an evidence-based report to support the upgrading of health posts to health centres or constructing new ones.

“CONSENSUS REACHED”

<p>1.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the evidence-based reports should be completed.</p>	
1. Within 3 months	<input checked="" type="radio"/>
2. Within 6 months	<input checked="" type="radio"/>
3. Within 9 months	<input checked="" type="radio"/>
<p>Method 1.2 The completed evidence-based report must be shared with governmental bodies, partners, civic societies, and community leaders influential to negotiate upgrading the existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.</p> <p>“CONSENSUS REACHED”</p>	
<p>1.2.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must take responsibility to share the report and negotiate with concerned bodies on upgrading the existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.</p> <p>“CONSENSUS REACHED”</p>	
<p>1.2.2 Time frame: The completed evidence-based report must be shared and negotiations with concerned bodies must commence within 6 months after approval of the action plan.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 1.3 Strategies must be developed to strengthen the intra-facility referral system (within the healthcare facilities) to integrate abortion care with FP-HIV services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 1.3 (a) Implementing referral slips in the healthcare facilities must be the applicable strategy to strengthen the intra-healthcare facility referral system.</p>	

“CONSENSUS REACHED”	
1.3.1 Responsible person: Please indicate who must take responsibility to facilitate the strategies to strengthen the intra-healthcare facility referral system. Please make a tick next to your choice/s.	
1. The director of the public healthcare facility	<input checked="" type="radio"/>
2. The human resource development coordinator of the public healthcare facility	<input checked="" type="radio"/>
3. An ad-hoc committee (1 abortion care and 1 HIV-FP healthcare provider) appointed by the director of the public health facility)	<input checked="" type="radio"/>
1.3.2 Time frame: The intra-facility referral system must be implemented within 6 months after approval of the action plan.	
“CONSENSUS REACHED”	
Method 1.4 Strategies must be developed to strengthen the referral system (from the community to the health centre/hospital) to improve integrated health services.	
“CONSENSUS REACHED”	
Method 1.4(a) Health education to the community on integrated health services by health centre-health post networking focal persons must be the applicable strategy to enhance the utilization of integrated healthcare services.	
“CONSENSUS REACHED”	
1.4.1 Responsible person/s: The director of the public healthcare facility must be responsible to facilitate the strategy to strengthen the community to healthcare facility referral system.	
“CONSENSUS REACHED”	
1.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the community to healthcare facility referral system would be strengthened.	
1. Within 6 months	<input checked="" type="radio"/>

2. Within 9 months	<input checked="" type="radio"/>
3. Within 12 months	<input checked="" type="radio"/>
<p>Method 1.5 Mobile/outreach programs must be established or strengthened to offer abortion care, FP, and HIV integrated healthcare services.</p> <p>“CONSENSUS REACHED”</p>	
<p>1.5.1 Responsible person/s: Please indicate who must take responsibility to strengthen mobile or outreach health service programs. Please tick next to your choice/s.</p>	
1. The director of the public healthcare facility	<input checked="" type="radio"/>
2. Program officers (1 abortion care and HIV-FP) from each of the selected 3 district health offices	<input checked="" type="radio"/>
3. An ad-hoc committee (1 abortion care and 1 HIV-FP service provider) appointed by the director of the public healthcare facility	<input checked="" type="radio"/>
<p>1.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the mobile or outreach programs should be established or strengthened.</p>	
1. Within 3 months	<input checked="" type="radio"/>
2. Within 6 months	<input checked="" type="radio"/>
3. Within 9 months	<input checked="" type="radio"/>
<p>Method 1.6 The healthcare service provision areas must be rearranged to reduce the waiting time for abortion care, HIV, and FP integrated services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 1.6 (a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to reduce waiting time at integrated health services.</p>	

1. Abortion care and HIV-FP services are offered in the same room	
2. Abortion care and FP-HIV service offered in the adjacent rooms	
3. Abortion care and HIV-FP service providing areas near the main gate of the healthcare facility compound	
4. Implement a scheduled based client appointment system	

1.6.1 Responsible person/s: The team leader of abortion care providers of the public healthcare facility must be responsible to facilitate the strategies to rearrange healthcare service provision areas.

“CONSENSUS REACHED”

1.6.2 Time frame: The healthcare providing areas must be rearranged within 3 months after approval of the action plan.

“CONSENSUS REACHED”

THEME-2: HUMAN RESOURCE

Action statement 2: Competent human resources must be ensured for the provision of abortion care, FP, and HIV integrated services

“CONSENSUS REACHED”

Method 2.1 An evidence-based report must be compiled on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible to provide integrated abortion with HIV-FP services.

“CONSENSUS REACHED”

2.1.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must be responsible to compile an evidence-based report on the need for healthcare providers who can deliver integrated abortion with HIV-FP services.





“CONSENSUS REACHED”





<p>2.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the evidence-based report should be completed.</p>	
1. Within 3 months	<input checked="" type="radio"/>
2. Within 6 months	<input checked="" type="radio"/>
3. Within 9 months	<input checked="" type="radio"/>
<p>Method 2.2 The leadership and management skills of public healthcare facility directors must be capacitated through in-service training to enhance the integration of abortion care with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 2.2(a) Leadership skill development training must be the applicable strategy to be offered to public healthcare facility directors at least twice a year to enhance the integration of abortion care with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>2.2.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must be responsible to ensure an accurate attendance of the director of public healthcare facilities in the leadership skill development training.</p> <p>“CONSENSUS REACHED”</p>	
<p>2.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the head of healthcare facilities' leadership and management skills should be capacitated.</p>	
1. Within 6 months	<input checked="" type="radio"/>
2. Within 9 months	<input checked="" type="radio"/>
3. Within 12 months	<input checked="" type="radio"/>

<p>Method 2.3 The healthcare providers (doctors, health officers, midwives, and nurses) knowledge and skills must be capacitated to deliver integrated abortion and HIV-FP services</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 2.3(a) Integrated in-service training opportunities to healthcare providers at least twice a year must be the applicable strategies to capacitate the knowledge and skills of healthcare providers.</p> <p>“CONSENSUS REACHED”</p>	
<p>2.3.1 Responsible person/s: Please indicate who must take responsibility to capacitate the knowledge and skill of healthcare providers. Please tick next to your choice/s.</p>	
1. The director of the public healthcare facility	<input checked="" type="radio"/>
2. An ad-hoc committee with representation from HCWs (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices.	<input checked="" type="radio"/>
3. An ad-hoc committee with one representator from domestic and one from international partner organizations from each of the 3 zones appointed by the head of the 3 zone health departments.	<input checked="" type="radio"/>
<p>2.3.2 Time frame: The healthcare providers' knowledge and skill capacitation must be started within 6 months after approval of the action plan through in-service training.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 2.4 Motivation plans for HCWs must be implemented to enhance the integration of abortion with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 2.4(a) Negotiating a budget allocation for overtime working with the head of the district health office must be the applicable strategy that can motivate the healthcare providers.</p> <p>“CONSENSUS REACHED”</p>	

<p>2.4.1 Responsible person/s: Please indicate who must take responsibility for the improvement of healthcare providers' motivational plans. Please tick next to your choice/s.</p>	
1. The head of the regional health bureau.	<input checked="" type="radio"/>
2. The head of the zone health department	<input checked="" type="radio"/>
3. An ad-hoc committee with representation from HCWs (1 doctor, 1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input checked="" type="radio"/>
4. A group of public healthcare facility directors who are willing to assist with the negotiations	<input checked="" type="radio"/>
<p>2.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the healthcare provider motivational plan should be started.</p>	
1. Within 12 months	<input checked="" type="radio"/>
2. Within 18 months	<input checked="" type="radio"/>
3. Within 24 months	<input checked="" type="radio"/>
<p>Method 2.5 A mentorship program (Guidance provided by an individual with more experience and knowledge on integrated service) must be initiated and/or strengthened to support healthcare providers to enhance the integration of abortion care with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 2.5 (a) Offering a formal mentorship program to provide a one-on-one mentorship opportunity to all healthcare providers must be the applicable strategy to initiate/strengthen mentorship on integrated health services.</p> <p>“CONSENSUS REACHED”</p>	

<p>2.5.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from the regional health bureau must be responsible to conduct mentorship services to strengthen integrated abortion, FP, and HIV services.</p> <p>“CONSENSUS REACHED”</p>	
<p>2.5.2 Time frame: Please indicate the time frame after approval of the action plan, within which mentorship on integrated abortion care with HIV-FP services should be started.</p>	
1. Within 6 months	<input checked="" type="radio"/>
2. Within 9 months	<input checked="" type="radio"/>
3. Within 12 months	<input checked="" type="radio"/>
<p>Method 2.6 Biannual performance review meetings must be conducted to improve the integration of abortion care with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 2.6(a) Organizing biannual review meetings on integrated health service at the district level must be the applicable strategy to conduct a review meeting on integrated health services</p> <p>“CONSENSUS REACHED”</p>	
<p>2.6.1 Responsible person/s: Maternal, neonatal, and child health directors of the district health office must be responsible to organize the biannual performance review meetings on integrated health services.</p> <p>“CONSENSUS REACHED”</p>	
<p>2.6.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the biannual performance review meetings should be started.</p>	
1. Within 6 months	<input checked="" type="radio"/>
2. Within 12 months	<input checked="" type="radio"/>

3. Within 18 months	
THEME-3: MEDICAL RESOURCES	
<p>Action statement 3: The availability of medical resources (drugs, equipment, and supplies) must be improved to enhance the provision of abortion care, FP, and HIV integrated services</p> <p><i>“CONSENSUS REACHED”</i></p>	
<p>Method 3.1 An evidence-based report must be compiled on the availability of drugs, equipment and supplies essential to offer quality care at integrated healthcare facilities.</p> <p><i>“CONSENSUS REACHED”</i></p>	
<p>3.1.1 Responsible person/s: SNNPR pharmaceutical supply regional hub managers (all 4 of them) must be responsible for the compilation of an evidence-based report on the availability of drugs, equipment, and supplies essential to offer integrated healthcare.</p> <p><i>“CONSENSUS REACHED”</i></p>	
<p>3.1.2 Time frame: Please indicate the time frame after approval of the action plan, within which evidence-based reports should be completed.</p>	
1. Within 6 months	
2. Within 9 months	
3. Within 12 months	
<p>Method 3.2 Pharmacy professionals must be deployed to public healthcare facilities to ensure the availability of resources (drugs) to integrated abortion care, FP, and HIV services.</p> <p><i>“CONSENSUS REACHED”</i></p>	

<p>3.2.1 Responsible person/s: The head of the district health office must be responsible for the deployment of pharmacy professionals to public health facilities based on need and/or workload.</p> <p>“CONSENSUS REACHED”</p>	
<p>3.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which pharmacy professionals should be deployed to manage medical resources properly.</p>	
1. Within 6 months	
2. Within 12 months	
3. Within 18 months	
<p>Method 3.3 Medical resources to public health facilities must be addressed based on the evidence-based reports to integrate abortion care with HIV-FP services</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 3.3 (a) Availing medical resources through a donation from international and domestic non-governmental organizations and improving the availability of medical resources through a daily medical resource assessment and monitoring system must be the applicable strategies to address the need for medical resources in public health facilities.</p> <p>“CONSENSUS REACHED”</p>	
<p>3.3.1 Responsible person/s: SNNPR pharmaceutical supply regional hub managers (all 4 of them) must be responsible to address the availability of medical resources in the public healthcare facilities.</p> <p>“CONSENSUS REACHED”</p>	
<p>3.3.2 Time frame: Please indicate the time frame after approval of the action plan, within which medical resource availability in the public health facilities should be addressed.</p>	
1. Within 6 months	

2. Within 12 months	<input checked="" type="radio"/>
3. Within 18 months	<input checked="" type="radio"/>
<p>Method 3.4 Medical equipment such as manual vacuum aspirator (MVA), electrical vacuum aspirator (EVA), and speculum must be ordered or maintained to provide integrated abortion care, FP, and HIV services</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 3.4(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to identify/or maintain medical equipment in public healthcare facilities.</p>	
1. Biomedical engineers from the regional health bureau to Identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input checked="" type="radio"/>
2. Biomedical officers from the zone health department to Identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input checked="" type="radio"/>
3. Biomedical officers from the district health office to Identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services	<input checked="" type="radio"/>
<p>3.4.1 Responsible person/s: Logistic and medical supply director of the district health office must be responsible to facilitate strategies for identifying and/or maintaining medical equipment in the public healthcare facilities.</p> <p>“CONSENSUS REACHED”</p>	
<p>3.4.2 Time frame: Please indicate the time frame after approval of the action plan, within which medical equipment should be operated and/or maintained to utilize it properly.</p>	
1. Within 6 months	<input checked="" type="radio"/>
2. Within 9 months	<input checked="" type="radio"/>

3. Within 12 months	<input checked="" type="radio"/>
<p>Method 3.5 Negotiation with the private sectors (pharmacies, drug vendors, and stores) must be done for sponsoring medical resources necessary for abortion care, FP, and HIV services integrations.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 3.5(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies for sponsoring medical resources necessary for the integration of abortion care with HIV-FP services.</p>	
1. Identify organizations in the private sector for sponsoring identified medical resources.	<input checked="" type="radio"/>
2. Identifying organizations in the government sectors for sponsoring identified medical resources	<input checked="" type="radio"/>
3. Appointment of a team to take responsibility for obtaining sponsorships and memorandums of agreements/understanding (MOU)	<input checked="" type="radio"/>
<p>3.5.1 Responsible person/s: SNNPR pharmaceutical supply region hub managers (all 4 of them) must be responsible to negotiate sponsorship with private sectors in availing medical resources necessary for integrated abortion care, HIV, and FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>THEME-4: INFRASTRUCTURE</p>	
<p>Action statement 4: The infrastructures of public health facilities must be improved for the enhancement of integration of abortion care with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 4.1 An evidence-based report must be compiled to assess the infrastructure of the existing healthcare facilities to deliver integrated abortion care with HIV-FP services.</p>	

“CONSENSUS REACHED”	
4.1.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must be responsible to compile evidence-based reports on the status of the existing healthcare facilities.	
“CONSENSUS REACHED”	
4.1.2 Time frame: Please indicate the time frame after the approval of the action plan, within which an evidence-based report is to be completed.	
1. Within 6 months	<input checked="" type="radio"/>
2. Within 12 months	<input checked="" type="radio"/>
3. Within 18 months	<input checked="" type="radio"/>
Method 4.2. The evidence-based report must be shared with concerned governmental bodies, partners, civic societies, and community influential to negotiate support for the improvement of existing facilities to enhance the delivery of integrated abortion care with HIV-FP services.	
“CONSENSUS REACHED”	
4.2.1 Responsible person/s: Please indicate who must take responsibility to share the evidence-based reports with concerned bodies to improve the infrastructure of the existing healthcare facilities. Please tick next to your choice/s.	
1. Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices	<input checked="" type="radio"/>
2. An ad-hoc committee with representation from HCWs (1 midwife, 1 nurse, and 1 health officer) appointed by the head of the 3 district health offices	<input checked="" type="radio"/>
3. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices.	<input checked="" type="radio"/>

<p>4.2.2 Time frame: Please indicate the time frame after approval of the action plan, within which the report is shared and negotiations with concerned bodies will commence.</p>	
1. Within 6 month	<input checked="" type="radio"/>
2. Within 9 months	<input checked="" type="radio"/>
3. Within 12 months	<input checked="" type="radio"/>
<p>Method 4.3 Road and transport authority must be negotiated to allocate a budget for the improvement of road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 4.3(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to allocate a budget to improve road infrastructure</p>	
1. Compile a needs analysis to assess the status of road infrastructure to health facilities	<input checked="" type="radio"/>
2. Compile an evidence-based report to motivate a budget allocation based on the needs analysis	<input checked="" type="radio"/>
3. Share the report and the budget request to the government higher officials for discussion and obtaining financial support.	<input checked="" type="radio"/>
<p>4.3.1 Responsible person/s: Please indicate who must take responsibility to negotiate with the government higher officials to allocate a budget for the improvement of road infrastructure.</p>	
1. The head of the zone road and transport department	<input checked="" type="radio"/>
2. The head of the zone health department	<input checked="" type="radio"/>
3. The director of the public healthcare facility	<input checked="" type="radio"/>

4. An ad-hoc committee with one representator from civic society and one representator from the community leaders, from each of the 3 districts appointed by the head of the 3 district health offices.	<input checked="" type="radio"/>
4.3.2 Time frame: Please indicate the time frame after approval of the action plan, within which negotiation with government higher officials was finalized.	
1. Within 3 months	<input checked="" type="radio"/>
2. Within 6 months	<input checked="" type="radio"/>
3. Within 9 months	<input checked="" type="radio"/>
<p>Method 4.4 An advocacy meeting must be organized on the need analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>4.4.1 Responsible person/s: Medical service director of the zone health department must be responsible to organize advocacy meetings on the need for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.</p> <p>“CONSENSUS REACHED”</p>	
4.4.2 Time frame: Please indicate the time frame after approval of the action plan, within which an advocacy meeting on the need analysis of ambulance transportation must be conducted.	
1. Within 3 months	<input checked="" type="radio"/>
2. Within 6 months	<input checked="" type="radio"/>
3. Within 9 months	<input checked="" type="radio"/>

<p>Method 4.5 Transportation system to public healthcare facilities must be strengthened to enhance the delivery of integrated abortion care, HIV, and FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 4.5(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to strengthen the transportation system to public healthcare facilities</p>	
1. Negotiate with private transport associations to increase the daily trips to public healthcare facilities	<input checked="" type="radio"/>
2. Negotiate with public transport associations to increase the daily trips to public healthcare facilities	<input checked="" type="radio"/>
3. Increase the number of motorbikes to enhance access to public healthcare facilities	<input checked="" type="radio"/>
<p>4.5.1 Responsible person/s: Please indicate who must take responsibility to facilitate the above-mentioned strategies to strengthen transport accessibility to public healthcare facilities. Please tick next to your choice/s.</p>	
1. Medical service director of the zone health department	<input checked="" type="radio"/>
2. Medical service director of the district health office	<input checked="" type="radio"/>
3. An ad-hoc committee with one representator from road and transport workers, one representator from the community leaders, and one representator from health workers, from each of the 3 districts appointed by the head of the 3 district health offices.	<input checked="" type="radio"/>
<p>4.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the facilitation of the transport system should be initiated</p>	
Within 6 months	<input checked="" type="radio"/>
Within 12 months	<input checked="" type="radio"/>
Within 18 months	<input checked="" type="radio"/>

Method 4.6 Safe and adequate water supplies must be ensured in public health facilities to enhance the integration of abortion care, HIV, and FP services.

“CONSENSUS REACHED”




Method 4.6(a) Compiling a needs analysis of the availability of safe and adequate water supplies to public healthcare facilities and compiling an evidence-based report to motivate a budget allocation based on the needs analysis must be the applicable strategies to ensure a safe and adequate water supply system to public health facilities.

“CONSENSUS REACHED”

4.6.1 Responsible person/s: The head of water and sewerage/sanitation authority of the zone department must be responsible to ensure a safe and adequate water supply to public healthcare facilities.

“CONSENSUS REACHED”

4.6.2 Time frame: Please indicate the time frame, after approval of the action plan, within which the strategies to ensure safe and adequate water supply to public healthcare facilities should be established.

1. Within 6 months	
2. Within 12 months	
3. Within 18 months	





Method 4.7 Hydroelectric or other sources of power (generator and solar light) must be installed to have a 24 hours access to light power services that can enhance the integration of abortion care with HIV-FP services.







“CONSENSUS REACHED”

Method 4.7(a) Compiling an evidence-based report to motivate a budget allocation based on the needs analysis must be the applicable strategy to allocate budget for hydroelectric/generator/solar power installation.

“CONSENSUS REACHED”

<p>4.7.1 Responsible person/s: The planning, monitoring, and economic development director of the zone health department must be responsible to facilitate strategies for the allocation of budget for the source of light power.</p> <p>“CONSENSUS REACHED”</p>	
<p>4.7.2 Time frame Please indicate the time frame, after approval of the action plan, within which a light power source should be installed in public healthcare facilities.</p>	
1. Within 9 months	<input checked="" type="radio"/>
2. Within 12 months	<input checked="" type="radio"/>
3. Within 18 months	<input checked="" type="radio"/>
<p>Method 4.8 Healthcare providers' houses must be constructed in public healthcare compounds particularly in rural areas to enhance the delivery of integrated abortion care with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 4.8(a) Identifying governmental and private sector organizations sponsoring the construction of healthcare providers' houses must be the applicable strategy to construct living rooms for healthcare providers.</p> <p>“CONSENSUS REACHED”</p>	
<p>4.8.1 Responsible person/s: Please indicate who must take responsibility to facilitate strategies to mobilize financial resources for the construction of living rooms. Please tick next to your choice/s.</p>	
1. Planning, monitoring, and economic development director of the zone health department.	<input checked="" type="radio"/>
2. Planning, monitoring, and economic development director of the district health office.	<input checked="" type="radio"/>
3. The director of the public healthcare facility	<input checked="" type="radio"/>

<p>4. An ad-hoc committee with one representator from civic society, one representator from the community leaders, and one representor from health workers, from each of the 3 districts appointed by the head of the 3 district health offices.</p>	
<p>4.8.2 Time frame: Please indicate the time frame, after approval of the action plan, within which healthcare providers will start living in the constructed houses</p>	
<p>4. Within 1 year</p>	
<p>5. Within 2 years</p>	
<p>6. Within 3 years</p>	
<p>THEME-5: FISCAL RESOURCES</p>	
<p>Action statement 5: Out-of-pocket payment must be avoided and/or reduced for health services to enhance the uptake of abortion, HIV, and FP integrated health services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 5.1 An evidence-based report must be compiled on the need for the free delivery of abortion care, HIV, and FP integrated services.</p> <p>“CONSENSUS REACHED”</p>	
<p>5.1.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must be responsible to compile an evidence-based report to negotiate with higher government officials on the allocation of budget for integrated abortion, FP, and HIV services.</p> <p>“CONSENSUS REACHED”</p>	
<p>5.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which a free delivery of abortion, FP, and HIV integrated services, will be initiated.</p>	

1. Within 9 months	
2. Within 12 months	
3. Within 18 months	
<p>Method 5.2 Community-based health insurance (CBHI) must be strengthened to avoid out-of-pocket payment and cover the expense of abortion care, HIV, and FP integrated services.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 5.2 (a) Educating the community on the importance of CBHI initiatives and assigning a CBHI focal person at the district health office must be the applicable strategies to avoid out-of-pocket payment and cover the expense of abortion care, HIV, and FP integrated services.</p> <p>“CONSENSUS REACHED”</p>	
<p>5.2.1 Responsible person/s: Medical service director of the district health office and zone health department must be responsible to facilitate strategies to strengthen community-based health insurance.</p> <p>“CONSENSUS REACHED”</p>	
<p>5.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which CBHI initiatives should be started to enhance the integration of abortion care, HIV, and FP services.</p>	
1. Within 12 months	
2. Within 18 months	
3. Within 24 months	
<p>Method 5.3 The healthcare providers’ incentives must be secured to motivate and enhance the integration of abortion care with HIV-FP services.</p> <p>“CONSENSUS REACHED”</p>	

Method 5.3(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to motivate the healthcare providers.	
1. Pay incentives to healthcare providers working in integrated services based on performance criteria	<input checked="" type="radio"/>
2. Allocate a budget for overtime based on performance	<input checked="" type="radio"/>
3. Allow free integrative healthcare services to healthcare providers and their families	<input checked="" type="radio"/>
<p>5.3.1 Responsible person/s: The head of the district health office and the head of the zone health department must take responsibility to facilitate the implementation of the strategies related to incentives to healthcare providers.</p> <p>“CONSENSUS REACHED”</p>	
<p>5.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which healthcare providers' incentives are addressed</p>	
4. Within 9 months	<input checked="" type="radio"/>
5. Within 12 months	<input checked="" type="radio"/>
6. Within 18 months	<input checked="" type="radio"/>
THEME-6: POLICIES, STRATEGIES, AND GUIDELINES	
<p>Action statement 6: Comprehensive regulatory documents must be available to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.</p> <p>“CONSENSUS REACHED”</p>	

<p>Method 6.1 Regulatory documents must be developed or updated that can facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 6.1(a) Negotiating with the directors of the ministry of health to assign experts to develop or adapt regulatory documents must be the applicable strategy to develop or update regulatory documents.</p> <p>“CONSENSUS REACHED”</p>	
<p>6.1.1 Responsible person/s: Maternal neonatal and child health director of the regional health bureau must take responsibility for the development/updating of regulatory documents.</p> <p>“CONSENSUS REACHED”</p>	
<p>6.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which regulatory documents should be developed/updated.</p>	
1. Within 12 months	<input checked="" type="radio"/>
2. Within 18 months	<input checked="" type="radio"/>
3. Within 24 months	<input checked="" type="radio"/>
<p>Method 6.2 All regulatory documents must be uploaded to the regional health bureau telegram group to make them available to all healthcare facilities providing integrated health services.</p> <p>“CONSENSUS REACHED”</p>	
<p>6.2.1 Responsible person/s: The director of maternal, neonatal, and child health of the regional health bureau and program officers (1 abortion care and 1 HIV-FP) from the regional health bureau must take the responsibility to facilitate the uploading of regulatory documents at the regional health bureau telegram group.</p> <p>“CONSENSUS REACHED”</p>	

6.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which regulatory documents should be ready and available at the regional health bureau telegram group	
1. Within 12 months 2.	<input checked="" type="radio"/>
3. Within 18 months	<input checked="" type="radio"/>
4. Within 24 months	<input checked="" type="radio"/>
<p>Method 6.3 Professional development training must be provided on the utilization of regulatory documents within all integrated health services facilities.</p> <p>“CONSENSUS REACHED”</p>	
<p>Method 6.3(a) Providing training on how to access the regulatory documents from the websites and/or Google drive and providing technical support through supportive supervision must be the applicable strategies for professional development.</p> <p>“CONSENSUS REACHED”</p>	
<p>6.3.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from the regional health bureau and each of the selected 3 zone health departments must be responsible to facilitate professional development training.</p> <p>“CONSENSUS REACHED”</p>	
6.3.2. Time frame: Please indicate the time frame, after approval of the action plan, within which technical support on regulatory documents utilization should be started.	
4. Within 12 months	<input checked="" type="radio"/>
5. Within 18 months	<input checked="" type="radio"/>
6. Within 24 months	<input checked="" type="radio"/>

THEME-7. BEHAVIOURAL CHANGE AND COMMUNICATION

Action statement 7: Health-related information to the communities must be provided to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.

“CONSENSUS REACHED”

Method 7.1 Advocacy meetings with political leaders, religious leaders, the elderly, and other communities must be conducted to share information on the advantages of abortion care, FP, and HIV services integration.

“CONSENSUS REACHED”

7.1.1 Responsible person/s: The head of the zone health department and the head of the district health office must be responsible to share information with political leaders, religious leaders, the elderly, and communities on the advantages of abortion care, FP, and HIV services integration.

“CONSENSUS REACHED”

7.1.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an advocacy meeting should be initiated with political leaders, religious leaders, the elderly, and other community influential.

1. Within 3 months



2. Within 6 months



3. Within 9 months



Method 7.2 Health education materials (leaflets, brushes, pamphlets, and banners) must be developed and avail in public healthcare facilities to enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

<p>Method 7.2(a) Please make a tick in the circle next to your choice/s that indicate/s the applicable strategies to produce and distribute job aids.</p>	
1. Compile a budget report based on the quotations for the development and availability of health education materials	<input checked="" type="radio"/>
2. A healthcare facility allocates a budget to develop the content of the health education materials relevant to integrated health services	<input checked="" type="radio"/>
3. Identify organizations in the private sector for sponsoring to develop and avail health education materials.	<input checked="" type="radio"/>
4. Identify non-government organizations for sponsoring to develop and avail health education materials.	<input checked="" type="radio"/>
5. Avail the health education materials in the integrated public healthcare facilities	<input checked="" type="radio"/>
<p>7.2.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments and each of the selected 3 district health offices must be responsible to facilitate the production and availability of health education materials in the healthcare facilities.</p> <p>“CONSENSUS REACHED”</p>	
<p>7.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which job aids should be produced and distributed</p>	
1. Within 9 months	<input checked="" type="radio"/>
2. Within 12 months	<input checked="" type="radio"/>
3. Within 18 months	<input checked="" type="radio"/>
<p>Method 7.3 Mass media (Radio, social media, and texts) must be utilized to increase the awareness of the community on the provision of abortion care, FP, and HIV integrated services.</p> <p>“CONSENSUS REACHED”</p>	

Method 7.3(a). Negotiate with radio journalists on health education slots/time available to discuss the advantages of integrated health service information must be the applicable strategies to increase the awareness of the community on the provision of abortion care, FP, and HIV integrated services.

“CONSENSUS REACHED”

7.3.1 Responsible person/s: The head of the zone health department and the manager of communication and broadcasting of the zone must be responsible to utilize mass media on integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

7.3.2 Time frame: Please indicate the time frame, after approval of the action plan, within which mass media will be utilized to integrate abortion care with HIV-FP services.

1. Within 6 months



2. Within 9 months



3. Within 12 months



Method 7.4 Awareness campaigns must be organized in the community on integrated abortion care, FP, and HIV services by community health workers.

“CONSENSUS REACHED”

Method 7.4(a) Provide health information to the community (using developed materials) by health workers and health extension workers and provide health information to the community (using developed materials) by women health development army leaders must be the applicable strategies to improve the community awareness of integrated health services.

“CONSENSUS REACHED”

7.4.1 Responsible person/s: Program officer (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments and each of the selected 3 district health offices must be responsible to organize the awareness creation campaign on integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”	
<p>7.4.2 Time frame: Please indicate the time frame, after approval of the action plan, within which information on integrated abortion care with HIV-FP services to the community should be addressed.</p>	
“CONSENSUS REACHED”	
1. Within 6 months	<input checked="" type="radio"/>
2. Within 9 months	<input checked="" type="radio"/>
3. Within 12 months	<input checked="" type="radio"/>
<p>Method 7.5 Electronic communication system must be utilized to enhance the integration of abortion care, HIV, and FP services</p>	
“CONSENSUS REACHED”	
<p>Method 7.5(a) Enhancing the provision of integrated health services in healthcare facilities by utilizing internet technology must be the application strategy.</p>	
“CONSENSUS REACHED”	
<p>7.5.1 Responsible person/s: The director of the public healthcare facility must be responsible to make use of an electronic system to enhance the integration of abortion care with HIV-FP services.</p>	
“CONSENSUS REACHED”	
<p>7.5.2 Time frame: Please indicate the time frame, after approval of the action plan, within which an electronic communication system should be utilized.</p>	
1. Within 6 months 2.	<input checked="" type="radio"/>
3. Within 9 months	<input checked="" type="radio"/>
4. Within 12 months	<input checked="" type="radio"/>

ANNEXURE 12: Round three recruitment letter

Dear colleague,

My name is Haile Bekele Adane, a Doctoral (DLitt et Phil) student at the University of South Africa and I hereby invite you to participate in the second round validation of the action plan to integrate abortion care with HIV and family planning services in Ethiopia. You as a health professional, involved in maternal, neonatal, and child health services, identified as the best stakeholder to volunteer to participate in this third-round e-Delphi technique.

I appreciate your participation in the first and second rounds of the e-Delphi technique and want to sincerely thank you for your contributions and inputs thus far.

The data from all the panelists received in round one and round two were analysed and the recommendations were incorporated in this third round. ***Where consensus was reached, the items are included in the action plan, but you need not respond to them.*** For items where consensus was not reached, or where you suggested some changes in the first round, please provide your opinion again.

You will find the third draft action plan with the embedded assessment validation tool when you click on the link at the end of this letter. It will only take about 5-10 minutes of your time to complete as for most items consensus was reached. Participation is voluntary and you may withdraw from the study at any time. Participation in this online survey process is anonymous and clicking the link assumes informed consent.

Just a reminder that ethics approval for this research was obtained from the Health Research Ethics Committee at the University of South Africa (REC-012714-039 on 01/10/2019) as well as from the Health Research and Technology Transfer Support Process of SNNPR Health Bureau (P06/19/394 on 11/09/2012 E.C). If for some reason you need to contact CREC you can do so via e-mail at HSREC@unisa.ac.za or contact with the researcher via 64142353@mylife.unisa.ac.za. You can also contact the research supervisor Prof Lizeth Roets at roetsl@unisa.ac.za.

Your participation in this third round will be much appreciated. If you agree to participate, click the link <https://forms.gle/z9DZT1FHZ61E5oSQA> to gain access to the third-round draft action plan with an embedded assessment validation tool.

Thanks for your valuable input. I appreciate your support.

Haile Bekele Adane (PhD candidate)

ANNEXURE 13: Round three draft action plan with validation assessment tool

Instructions:

1. This is the third round of the e-Delphi technique. In the first and second rounds, a consensus has been reached on all of the action statements the action methods, strategies and responsible person/s. Yet, consensus has not been reached on three items of the time frame within which the action methods should be implemented. Therefore, please carefully follow the following instructions:
2. Action statements, action methods, strategies, responsible person/s, and time frames for which consensus were reached will not allow you options to choose from. It will be indicated as: "consensus reached"
3. Where consensus was not reached, you again are allowed options to choose from. Please tick in the circle next to your choice of the time frame you suggest.

THEME 1: GEOGRAPHIC ACCESSIBILITY
Action statement 1: Access to health facilities must be improved to offer integrated abortion care with HIV-FP services
<i>"CONSENSUS REACHED"</i>
<i>Method 1.1</i> An evidence based report must be compiled to support the need for upgrading existing health posts to health centres or constructing new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.
<i>"CONSENSUS REACHED"</i>
1.1.1 Responsible person: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must take responsibility to compile an evidence-based report to support the upgrading of health posts to health centres or constructing new ones.
<i>"CONSENSUS REACHED"</i>

1.1.2 Time frame: An evidence based report must be compiled within 3 months after the approval of the action plan to support the need for upgrading existing health posts to health centres or constructing new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.

“CONSENSUS REACHED”

Method 1.2 The completed evidence-based report must be shared with governmental bodies, partners, civic societies, and community leaders influential to negotiate upgrading the existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.

“CONSENSUS REACHED”

1.2.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must take responsibility to share the report and negotiate with concerned bodies on upgrading the existing health posts to health centres or construct new ones to comply with the 5 km radius to integrate abortion care with FP-HIV services.

“CONSENSUS REACHED”

1.2.2 Time frame: The completed evidence-based report must be shared and negotiations with concerned bodies must commence within 6 months after approval of the action plan.

“CONSENSUS REACHED”

Method 1.3 Strategies must be developed to strengthen the intra-facility referral system (within the healthcare facilities) to integrate abortion care with FP-HIV services.

“CONSENSUS REACHED”

Method 1.3 (a) Implementing referral slips in the healthcare facilities must be the applicable strategy to strengthen the intra-healthcare facility referral system.

“CONSENSUS REACHED”

1.3.1 Responsible person: The director of the public healthcare facility must take responsibility to facilitate the strategies to strengthen the intra-healthcare facility referral system.

“CONSENSUS REACHED”

1.3.2 Time frame: The intra-facility referral system must be implemented within 6 months after approval of the action plan.

“CONSENSUS REACHED”

Method 1.4 Strategies must be developed to strengthen the referral system (from the community to the health centre/hospital) to improve integrated health services.

“CONSENSUS REACHED”

Method 1.4(a) Health education to the community on integrated health services by health centre-health post networking focal persons must be the applicable strategy to enhance the utilization of integrated healthcare services.

“CONSENSUS REACHED”

1.4.1 Responsible person/s: The director of the public healthcare facility must be responsible to facilitate the strategy to strengthen the community to healthcare facility referral system.

“CONSENSUS REACHED”

1.4.2 Time frame: Strategies must be developed to strengthen the referral system (from the community to the health centre/hospital) within 6 months after approval of the action plan to improve integrated health services.

“CONSENSUS REACHED”

Method 1.5 Mobile/outreach programs must be established or strengthened to offer abortion care, FP, and HIV integrated healthcare services.

“CONSENSUS REACHED”

1.5.1 Responsible person/s: The director of the public healthcare facility must take the responsibility to strengthen mobile or outreach health service programs.

“CONSENSUS REACHED”

1.5.2 Time frame: Mobile/outreach programs must be established or strengthened within 3 months after the approval of the action plan to offer abortion care, FP, and HIV integrated healthcare services.

“CONSENSUS REACHED”

Method 1.6 The healthcare service provision areas must be rearranged to reduce the waiting time for abortion care, HIV, and FP integrated services.

“CONSENSUS REACHED”

Method 1.6 (a) Offering abortion care and FP-HIV services in the adjacent rooms is the applicable strategy to reduce waiting time at integrated health services.

“CONSENSUS REACHED”

1.6.1 Responsible person/s: The team leader of abortion care providers of the public healthcare facility must be responsible to facilitate the strategies to rearrange healthcare service provision areas.

“CONSENSUS REACHED”

1.6.2 Time frame: The healthcare providing areas must be rearranged within 3 months after approval of the action plan.

“CONSENSUS REACHED”

THEME-2: HUMAN RESOURCE

Action statement 2: Competent human resources must be ensured for the provision of abortion care, FP, and HIV integrated services

“CONSENSUS REACHED”

Method 2.1 An evidence-based report must be compiled on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible to provide integrated abortion with HIV-FP services.

“CONSENSUS REACHED”

2.1.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must be responsible to compile an evidence-based report on the need for healthcare providers who can deliver integrated abortion with HIV-FP services.

“CONSENSUS REACHED”

2.1.2 Time frame: An evidence-based report must be compiled within 3 months after the approval of the action plan on the need for healthcare providers (doctors, midwives, health officers, and nurses) who are responsible to provide integrated abortion with HIV-FP services.

“CONSENSUS REACHED”

Method 2.2 The leadership and management skills of public healthcare facility directors must be capacitated through in-service training to enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 2.2(a) Leadership skill development training must be the applicable strategy to be offered to public healthcare facility directors at least twice a year to enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

2.2.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must be responsible to ensure an accurate attendance of the director of public healthcare facilities in the leadership skill development training.

“CONSENSUS REACHED”

2.2.2 Time frame: The leadership and management skills of public healthcare facility directors must be capacitated through in-service training within 6 months after the approval of the action plan to enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 2.3 The healthcare providers (doctors, health officers, midwives, and nurses) knowledge and skills must be capacitated to deliver integrated abortion and HIV-FP services

“CONSENSUS REACHED”

Method 2.3(a) Integrated in-service training opportunities to healthcare providers at least twice a year must be the applicable strategies to capacitate the knowledge and skills of healthcare providers.

“CONSENSUS REACHED”

2.3.1 Responsible person/s: The director of the public healthcare facility must take responsibility to capacitate the knowledge and skill of healthcare providers.

“CONSENSUS REACHED”

2.3.2 Time frame: The healthcare providers' knowledge and skill capacitation must be started within 6 months after approval of the action plan through in-service training.

“CONSENSUS REACHED”

Method 2.4 Motivation plans for HCWs must be implemented to enhance the integration of abortion with HIV-FP services.

“CONSENSUS REACHED”

Method 2.4(a) Negotiating a budget allocation for overtime working with the head of the district health office must be the applicable strategy that can motivate the healthcare providers.

“CONSENSUS REACHED”

2.4.1 **Responsible person/s:** The head of the zone health department must take responsibility for the improvement of healthcare providers' motivational plans.

“CONSENSUS REACHED”

2.4.2 **Time frame:** Motivation plans for HCWs must be implemented within 12 months after the approval of the action plan to enhance the integration of abortion with HIV-FP services.

“CONSENSUS REACHED”

Method 2.5 A mentorship program (Guidance provided by an individual with more experience and knowledge on integrated service) must be initiated and/or strengthened to support healthcare providers to enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 2.5(a) Offering a formal mentorship program to provide a one-on-one mentorship opportunity to all healthcare providers must be the applicable strategy to initiate/strengthen mentorship on integrated health services.

“CONSENSUS REACHED”

2.5.1 **Responsible person/s:** Program officers (1 abortion care and 1 HIV-FP) from the regional health bureau must be responsible to conduct mentorship services to strengthen integrated abortion, FP, and HIV services.

“CONSENSUS REACHED”

2.5.2 **Time frame:** A mentorship program (Guidance provided by an individual with more experience and knowledge of integrated service) must be initiated and/or strengthened within 6 months after the approval of the action plan to support healthcare providers and enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 2.6 Biannual performance review meetings must be conducted to improve the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 2.6(a) Organizing biannual review meetings on integrated health services at the district level must be the applicable strategy to conduct a review meeting on integrated health services

“CONSENSUS REACHED”

2.6.1 Responsible person/s: Maternal, neonatal, and child health directors of the district health office must be responsible to organize the biannual performance review meetings on integrated health services.

“CONSENSUS REACHED”

THEME-3: MEDICAL RESOURCES

Action statement 3: The availability of medical resources (drugs, equipment, and supplies) must be improved to enhance the provision of abortion care, FP, and HIV integrated services

“CONSENSUS REACHED”

Method 3.1 An evidence-based report must be compiled on the availability of drugs, equipment and supplies essential to offer quality care at integrated healthcare facilities.

“CONSENSUS REACHED”

3.1.1 Responsible person/s: SNNPR pharmaceutical supply regional hub managers (all 4 of them) must be responsible for the compilation of an evidence-based report on the availability of drugs, equipment, and supplies essential to offer integrated healthcare.

“CONSENSUS REACHED”

3.1.2 **Time frame:** An evidence-based report must be compiled within 6 months after the approval of the action plan on the availability of drugs, equipment and supplies essential to offer quality care at integrated healthcare facilities.

“CONSENSUS REACHED”

Method 3.2 Pharmacy professionals must be deployed to public healthcare facilities to ensure the availability of resources (drugs) to integrated abortion care, FP, and HIV services.

“CONSENSUS REACHED”

3.2.1 **Responsible person/s:** The head of the district health office must be responsible for the deployment of pharmacy professionals to public health facilities based on need and/or workload.

“CONSENSUS REACHED”

3.2.2 **Time frame:** Pharmacy professionals must be deployed to public healthcare facilities within 6 months after the approval of the action plan to manage medical resources properly and ensure the availability of resources (drugs) to integrated abortion care, FP, and HIV services.

“CONSENSUS REACHED”

Method 3.3 Medical resources to public health facilities must be addressed based on the evidence-based reports to integrate abortion care with HIV-FP services

“CONSENSUS REACHED”

Method 3.3 (a) Availing medical resources through a donation from international and domestic non-governmental organizations and improving the availability of medical resources through a daily medical resource assessment and monitoring system must be the applicable strategies to address the need for medical resources in public health facilities.

“CONSENSUS REACHED”

3.3.1 **Responsible person/s:** SNNPR pharmaceutical supply regional hub managers (all 4 of them) must be responsible to address the availability of medical resources in the public healthcare facilities.

“CONSENSUS REACHED”

3.3.2 **Time frame:** Medical resources to public health facilities must be addressed based on the evidence-based reports within 6 months after the approval of the action plan to integrate abortion care with HIV-FP services

“CONSENSUS REACHED”

Method 3.4 Medical equipment such as manual vacuum aspirator (MVA), electrical vacuum aspirator (EVA), and speculum must be ordered or maintained to provide integrated abortion care, FP, and HIV services

“CONSENSUS REACHED”

Method 3.4(a) Biomedical officers from the district health office and zone health department to Identify and procure medical equipment needed for the delivery of integrated abortion care with HIV-FP services are the applicable strategies to identify/or maintain medical equipment in public healthcare facilities.

“CONSENSUS REACHED”

3.4.1 **Responsible person/s:** Logistic and medical supply director of the district health office must be responsible to facilitate strategies for identifying and/or maintaining medical equipment in the public healthcare facilities.

“CONSENSUS REACHED”

3.4.2 **Time frame:** Medical equipment such as manual vacuum aspirator (MVA), electrical vacuum aspirator (EVA), and speculum must be ordered or maintained within 6 months after the approval of the action plan to provide integrated abortion care, FP, and HIV services

“CONSENSUS REACHED”

Method 3.5 Negotiation with the private sectors (pharmacies, drug vendors, and stores) must be done for sponsoring medical resources necessary for abortion care, FP, and HIV services integrations.

“CONSENSUS REACHED”

Method 3.5(a) Appointment of a team to take responsibility for obtaining sponsorships and memorandums of agreements/understanding (MOU) is the applicable strategies for sponsoring medical resources necessary for the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

3.5.1 Responsible person/s: SNNPR pharmaceutical supply region hub managers (all 4 of them) must be responsible to negotiate sponsorship with private sectors in availing medical resources necessary for integrated abortion care, HIV, and FP services.

“CONSENSUS REACHED”

3.5.2 Timeframe: Negotiation with the private sectors (pharmacies, drug vendors, and stores) must be done within 6 months after the approval of the action plan for sponsoring medical resources necessary for abortion care, FP, and HIV services integrations.

“CONSENSUS REACHED”

THEME-4: INFRASTRUCTURE

Action statement 4: The infrastructures of public health facilities must be improved for the enhancement of integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 4.1 An evidence-based report must be compiled to assess the infrastructure of the existing healthcare facilities to deliver integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

4.1.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must be responsible to compile evidence-based reports on the status of the existing healthcare facilities.

“CONSENSUS REACHED”

4.1.2 Time frame: An evidence-based report must be compiled within 6 months after the approval of the action plan to assess the infrastructure of the existing healthcare facilities to deliver integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 4.2. The evidence-based report must be shared with concerned governmental bodies, partners, civic societies, and community influential to negotiate support for the improvement of existing facilities to enhance the delivery of integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

4.2.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must take responsibility to share the evidence-based reports with concerned bodies to improve the infrastructure of the existing healthcare facilities.

“CONSENSUS REACHED”

4.2.2 Time frame: The evidence-based report must be shared with concerned governmental bodies, partners, civic societies, and community influential within 6 months after the approval of the action plan to negotiate support for the improvement of existing facilities to enhance the delivery of integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 4.3 Road and transport authority must be negotiated to allocate a budget for the improvement of road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 4.3(a) Compile a needs analysis to assess the status of road infrastructure to health facilities as applicable strategies to allocate a budget to improve road infrastructure.

“CONSENSUS REACHED”

4.3.1 Responsible person/s: The head of the zone road and transport department must take responsibility to negotiate with the government higher officials to allocate a budget for the improvement of road infrastructure.

“CONSENSUS REACHED”

4.3.2 Time frame: Road and transport authority must be negotiated within 6 months after the approval of the action plan to allocate a budget for the improvement of road infrastructure to enhance the delivery of integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 4.4 An advocacy meeting must be organized on the need analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.

“CONSENSUS REACHED”

4.4.1 Responsible person/s: Medical service director of the zone health department must be responsible to organize advocacy meetings on the need for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.

“CONSENSUS REACHED”

4.4.2 Time frame: An advocacy meeting must be organized within 3 months after the approval of the action plan on the need analysis for ambulance transportation to enhance the provision of integrated abortion care, HIV, and FP services.

“CONSENSUS REACHED”

Method 4.5 Transportation system to public healthcare facilities must be strengthened to enhance the delivery of integrated abortion care, HIV, and FP services.

“CONSENSUS REACHED”

Method 4.5(a) Negotiating with private transport associations to increase the daily trips to public healthcare facilities is the applicable strategy to strengthen the transportation system to public healthcare facilities.

“CONSENSUS REACHED”

4.5.1 Responsible person/s: Medical service director of the zone health department must take the responsibility to facilitate the above-mentioned strategies to strengthen transport accessibility to public healthcare facilities.

“CONSENSUS REACHED”

4.5.2 Time frame: The transportation system to public healthcare facilities must be strengthened within 6 months after the approval of the action plan to enhance the delivery of integrated abortion care, HIV, and FP services.

“CONSENSUS REACHED”

Method 4.6 Safe and adequate water supplies must be ensured in public health facilities to enhance the integration of abortion care, HIV, and FP services.

“CONSENSUS REACHED”

Method 4.6(a) Compiling a needs analysis of the availability of safe and adequate water supplies to public healthcare facilities and compiling an evidence-based report to motivate a budget allocation based on the needs analysis must be the applicable strategies to ensure a safe and adequate water supply system to public health facilities.

“CONSENSUS REACHED”

4.6.1 Responsible person/s: The head of water and sewerage/sanitation authority of the zone department must be responsible to ensure a safe and adequate water supply to public healthcare facilities.

“CONSENSUS REACHED”

4.6.2 **Time frame:** Safe and adequate water supplies must be ensured in public health facilities within 6 months after the approval of the action plan to enhance the integration of abortion care, HIV, and FP services.

“CONSENSUS REACHED”

Method 4.7 Hydroelectric or other sources of power (generator and solar light) must be installed to have a 24 hours access to light power services that can enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”




Method 4.7(a) Compiling an evidence-based report to motivate a budget allocation based on the needs analysis must be the applicable strategy to allocate budget for hydroelectric/generator/solar power installation.

“CONSENSUS REACHED”

4.7.1 Responsible person/s: The planning, monitoring, and economic development director of the zone health department must be responsible to facilitate strategies for the allocation of budget for the source of light power.

“CONSENSUS REACHED”

4.7.2 **Time frame** Please indicate the time frame, after approval of the action plan, within which a light power source should be installed in public healthcare facilities.

1. Within 9 months	
2. Within 12 months	
3. Within 18 months	

Method 4.8 Healthcare providers' houses must be constructed in public healthcare compounds particularly in rural areas to enhance the delivery of integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 4.8(a) Identifying governmental and private sector organizations sponsoring the construction of healthcare providers' houses must be the applicable strategy to construct living rooms for healthcare providers.

“CONSENSUS REACHED”

4.8.1 Responsible person/s: The planning, monitoring, and economic development director of the district health office must take responsibility to facilitate strategies to mobilize financial resources for the construction of living rooms.

“CONSENSUS REACHED”

THEME-5: FISCAL RESOURCES

Action statement 5: Out-of-pocket payment must be avoided and/or reduced for health services to enhance the uptake of abortion, HIV, and FP integrated health services.

“CONSENSUS REACHED”

Method 5.1 An evidence-based report must be compiled on the need for the free delivery of abortion care, HIV, and FP integrated services.

“CONSENSUS REACHED”

5.1.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 district health offices must be responsible to compile an evidence-based report to negotiate with higher government officials on the allocation of budget for integrated abortion, FP, and HIV services.

“CONSENSUS REACHED”

5.1.2 Time frame: An evidence-based report must be compiled within 9 months after the approval of the action plan on the need for the free delivery of abortion care, HIV, and FP integrated services.

“CONSENSUS REACHED”

Method 5.2 Community-based health insurance (CBHI) must be strengthened to avoid out-of-pocket payment and cover the expense of abortion care, HIV, and FP integrated services.

“CONSENSUS REACHED”

Method 5.2 (a) Educating the community on the importance of CBHI initiatives and assigning a CBHI focal person at the district health office must be the applicable strategies to avoid out-of-pocket payment and cover the expense of abortion care, HIV, and FP integrated services.

“CONSENSUS REACHED”

5.2.1 Responsible person/s: Medical service director of the district health office and zone health department must be responsible to facilitate strategies to strengthen community-based health insurance.

“CONSENSUS REACHED”

5.2.2 Time frame: Community-based health insurance (CBHI) must be strengthened within 12 months after the approval of the action plan to avoid out-of-pocket payment and cover the expense of abortion care, HIV, and FP integrated services.

“CONSENSUS REACHED”

Method 5.3 The healthcare providers' incentives must be secured to motivate and enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

Method 5.3(a) Paying incentives to healthcare providers working in integrated services based on performance criteria /s the applicable strategy to motivate the healthcare providers.

“CONSENSUS REACHED”

5.3.1 **Responsible person/s:** The head of the district health office and the head of the zone health department must take responsibility to facilitate the implementation of the strategies related to incentives to healthcare providers.

“CONSENSUS REACHED”

5.3.2 **Time frame:** Please indicate the time frame, after approval of the action plan, within which healthcare providers' incentives are addressed

1. Within 9 months



2. Within 12 months



3. Within 18 months



THEME-6: POLICIES, STRATEGIES, AND GUIDELINES

Action statement 6: Comprehensive regulatory documents must be available to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.

“CONSENSUS REACHED”

Method 6.1 Regulatory documents must be developed or updated that can facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia.

“CONSENSUS REACHED”

Method 6.1(a) Negotiating with the directors of the ministry of health to assign experts to develop or adapt regulatory documents must be the applicable strategy to develop or update regulatory documents.

“CONSENSUS REACHED”

6.1.1 **Responsible person/s:** Maternal neonatal and child health director of the regional health bureau must take responsibility for the development/updating of regulatory documents.

“CONSENSUS REACHED”

6.1.2 **Time frame:** Regulatory documents must be developed or updated within 12 months after the approval of the action plan to facilitate the integration of abortion care with HIV-FP services in public healthcare facilities of Ethiopia.

“CONSENSUS REACHED”

Method 6.2 All regulatory documents must be uploaded to the regional health bureau telegram group to make them available to all healthcare facilities providing integrated health services.

“CONSENSUS REACHED”

6.2.1 **Responsible person/s:** The director of maternal, neonatal, and child health of the regional health bureau and program officers (1 abortion care and 1 HIV-FP) from the regional health bureau must take the responsibility to facilitate the uploading of regulatory documents at the regional health bureau telegram group.

“CONSENSUS REACHED”

6.2.2 **Time frame:** All regulatory documents must be uploaded to the regional health bureau telegram group within 12 months after the approval of the action plan to make them available to all healthcare facilities providing integrated health services.

“CONSENSUS REACHED”

Method 6.3 Professional development training must be provided on the utilization of regulatory documents within all integrated health services facilities.

“CONSENSUS REACHED”

Method 6.3(a) Providing training on how to access the regulatory documents from the websites and/or Google Drive and providing technical support through supportive supervision must be the applicable strategies for professional development.

6.3.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from the regional health bureau and each of the selected 3 zone health departments must be responsible to facilitate professional development training.

“CONSENSUS REACHED”

6.3.2. Time frame: Professional development training must be provided within 12 months after the approval of the action plan on the utilization of regulatory documents within all integrated health services facilities.

“CONSENSUS REACHED”

THEME-7. BEHAVIOURAL CHANGE AND COMMUNICATION

Action statement 7: Health-related information to the communities must be provided to enhance the integration of abortion care with HIV-FP services in public health facilities of Ethiopia.

“CONSENSUS REACHED”

Method 7.1 Advocacy meetings with political leaders, religious leaders, the elderly, and other communities must be conducted to share information on the advantages of abortion care, FP, and HIV services integration.

“CONSENSUS REACHED”

7.1.1 Responsible person/s: The head of the zone health department and the head of the district health office must be responsible to share information with political leaders, religious leaders, the elderly, and communities on the advantages of abortion care, FP, and HIV services integration.

“CONSENSUS REACHED”

7.1.2 Time frame: Advocacy meetings with political leaders, religious leaders, the elderly, and other communities must be conducted within 3 months after the approval of the action plan to share information on the advantages of abortion care, FP, and HIV services integration.

“CONSENSUS REACHED”	
Method 7.2 Health education materials (leaflets, brushes, pamphlets, and banners) must be developed and avail in public healthcare facilities to enhance the integration of abortion care with HIV-FP services.	
“CONSENSUS REACHED”	
Method 7.2(a) Identifying non-government organizations for sponsoring to develop and avail health education materials is the applicable strategy to produce and distribute communication materials.	
“CONSENSUS REACHED”	
7.2.1 Responsible person/s: Program officers (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments and each of the selected 3 district health offices must be responsible to facilitate the production and availability of health education materials in the healthcare facilities.	
“CONSENSUS REACHED”	
7.2.2 Time frame: Please indicate the time frame, after approval of the action plan, within which job aids should be produced and distributed	
1. Within 9 months	<input checked="" type="radio"/>
2. Within 12 months	<input checked="" type="radio"/>
3. Within 18 months	<input checked="" type="radio"/>
Method 7.3 Mass media (Radio, social media, and texts) must be utilized to increase the awareness of the community on the provision of abortion care, FP, and HIV integrated services.	
“CONSENSUS REACHED”	
Method 7.3(a). Negotiate with radio journalists on health education slots/time available to discuss the advantages of integrated health service information must be the applicable strategies to increase the awareness of the community on the provision of abortion care, FP, and HIV integrated services.	

“CONSENSUS REACHED”

7.3.1 Responsible person/s: The head of the zone health department and the manager of communication and broadcasting of the zone must be responsible to utilize mass media on integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

7.3.2 Time frame: Mass media (Radio, social media, and texts) must be utilized within 6 months after the approval of the action plan to increase the awareness of the community on the provision of abortion care, FP, and HIV integrated services.

“CONSENSUS REACHED”

Method 7.4 Awareness campaigns must be organized in the community on integrated abortion care, FP, and HIV services by community health workers.

“CONSENSUS REACHED”

Method 7.4(a) Provide health information to the community (using developed materials) by health workers and health extension workers and provide health information to the community (using developed materials) by women health development army leaders must be the applicable strategies to improve the community awareness of integrated health services.

“CONSENSUS REACHED”

7.4.1 Responsible person/s: Program officer (1 abortion care and 1 HIV-FP) from each of the selected 3 zone health departments and each of the selected 3 district health offices must be responsible to organize the awareness creation campaign on integrated abortion care with HIV-FP services.

“CONSENSUS REACHED”

7.4.2 Time frame: Awareness campaigns must be organized in the community within 6 months after the approval of the action plan to integrate abortion care, FP, and HIV services by community health workers.

“CONSENSUS REACHED”

Method 7.5 Electronic communication system must be utilized to enhance the integration of abortion care, HIV, and FP services

“CONSENSUS REACHED”

Method 7.5(a) Enhancing the provision of integrated health services in healthcare facilities by utilizing internet technology must be the application strategy.

“CONSENSUS REACHED”

7.5.1 Responsible person/s: The director of the public healthcare facility must be responsible to make use of an electronic system to enhance the integration of abortion care with HIV-FP services.

“CONSENSUS REACHED”

7.5.2 Time frame: Electronic communication system must be utilized within 6 months after the approval of the action plan to enhance the integration of abortion care, HIV, and FP services,

“CONSENSUS REACHED”

ANNEXURE 14: CV of statistician

- Name: Shimelash Bitew Workie
- E-mail: sbitew0@gmail.com
- Mobile: +251-937776656/+251-912701549
- Marital status: Married
- Date of Birth: July. 30th /1988
- Nationality: Ethiopian

Education

- Master of Public Health (MPH): Epidemiology 2012-2014 Addis Ababa University- Addis Ababa, Ethiopia
- Bachelor of Science in Public Health: Public Health, 2006-2010, Hawassa University – Hawassa, Ethiopia
- PhD student at Addis Ababa University in General Public Health since 2021

Training

- ◆ Training on Advanced statistical methods in Epidemiology using STATA at the Institute of Tropical Medicine and International Health (ITMIH), Charité – Universitätsmedizin Berlin from April 9-27, 2018
- ◆ Meta-analysis and Meta synthesis held at Wolaita Sodo University, 2019.
- ◆ Advanced statistics using STATA software and advanced research training skill held at Wolaita Sodo University.

Work experience

1. Lecturer/Assistant Professor of Epidemiology, Wolaita Sodo University, Ethiopia, September 09/2010 to March/09/2022
2. Head, Department of epidemiology and Biostatistics (May, 2017 to September, 2019)
3. Coordinator of Wolaita Sodo University Health and demographic surveillance site (WSU_HDSS) (September, 2019 to to March/09/20221).

List of Publications

1. Woltamo, D.D., Meskele, M., **Workie, S.B.** *et al.* Determinants of fetal macrosomia among live births in southern Ethiopia: a matched case–control study. *BMC Pregnancy Childbirth* **22**, 465 (2022). <https://doi.org/10.1186/s12884-022-04734-8>
2. Lendado, T.A., **Bitew, S.**, Elias, F. *et al.* Effect of hospital attributes on patient preference among outpatient attendants in Wolaita Zone, Southern Ethiopia: discrete choice experiment study. *BMC Health Serv Res* **22**, 661 (2022). <https://doi.org/10.1186/s12913-022-07874-x>
3. Assele DD, Lendado TA, Awato MA, **Workie SB**, Faltamo WF. Incidence and predictors of mortality among patients with head injury admitted to Hawassa University Comprehensive Specialized Hospital, Southern Ethiopia: A retrospective follow-up study. *PLoS One*. 2021 Aug 19;16(8):e0254245. doi: 10.1371/journal.pone.0254245. PMID: 34411116; PMCID: PMC8376017.
4. **Workie,SB.** Mekonen N,et al. Modern Health Service Utilization and Associated Factors among Adults in Southern Ethiopia. *Journal of Environmental and Public Health*. 2021 Jan 11;2021. <https://doi.org/10.1155/2021/8835780>
5. **Workie, SB.**, Mekonen, T., Mekonen, T.C. *et al.* Child development and nutritional status in 12–59 months of age in resource limited setting of Ethiopia. *J Health Popul Nutr* 39, 6 (2020) <https://doi.org/10.1186/s41043-020-00214>.
6. Alambo MM, Lake EA, Workie, SB, Wassie AY. Prevalence of Active Trachoma and Associated Factors in Areka Town, South Ethiopia, 2018. *Interdisciplinary Perspectives on Infectious Diseases*. 2020;2020:8635191. <https://doi.org/10.1155/2020/8635191>
7. Obsa MS, Olana Fite R, Tura TS, Adema BG, Kinf AA, Shanka GM, Lencha AA, Asnake Azeze G, Hanfore LK, Adulo NA, Dessu BK and **Workie, SB.** Effect of Laryngeal Mask Airway Insertion on Intraocular Pressure Response: Systematic Review and Meta-Analysis. *Anesthesiology Research and Practice*. 2020 Jul 9;2020. <https://doi.org/10.1155/2020/7858434>
8. **Workie SB**, Mekonen T, Fekadu W, Chane Mekonen T. Level of Undernutrition and Its Determinants Among Children Aged 12–59 Months in Wolaita District, Ethiopia. *Pediatric Health, Medicine and Therapeutics*. 2020 Mar 1;11:109-17. <https://doi.org/10.2147/PHMT.s240906> (Indexing: Embase, PubMed, PubMed Central)

9. Bancha B, Kinfe AA, Chanko KP, **Workie SB**, Tadese T (2020) Prevalence of hepatitis B viruses and associated factors among pregnant women attending antenatal clinics in public hospitals of Wolaita Zone, South Ethiopia. **PLoS ONE** 15(5): e0232653. <https://doi.org/10.1371/journal.pone.0232653>.
10. Fekadu W, Mekonen T, **Bitew S**, Mekonnen TC, Menberu M, Shewangizaw S. Community's Perception and Attitude towards People with Epilepsy in Ethiopia. **Behavioural Neurology**. 2019;2019 . DOI: [10.1155/2019/4681958](https://doi.org/10.1155/2019/4681958)
11. Goa A, Dana T, **Bitew S**, Arba A. Seroprevalence and associated factors of hepatitis B virus infection among HIV-positive adults attending an antiretroviral treatment clinic at Wolaita Sodo University Referral Hospital. **Hepatic Medicine: Evidence and Research**. 2019;11:137. <https://doi.org/10.2147/HMER.s206870>

References

Reference #1: Professor Takele Tadesse (PhD), Email: takeletadesse1627@gmail.com P.O. Box 138 Mobile No. +251 930279109, **President of Wolaita Sodo University.** Professor of public health and Epidemiology and President of Wolaita Sodo University, Ethiopia.

Reference #2: Mr Yohannes Mehretie (PhD candidate at The University of Adelaide) Email: yohannes.adinew@adelaide.edu.au Mobile No. +251 912020605, former Assistant Professor of public health, Wolaita Sodo University, Sodo, Ethiopia

Reference #3: Dr. Amha Admassie (Assistant professor at Bahirdar University) Email: amhad2002@yahoo.com, Mobile No. +251 911364739, Amhara, Ethiopia.

ANNEXURE 15: Editing certificate

Between lines editing

Leatitia Romero
Professional Copy Editor and Proofreader
(BA HONS)

Cell: 083 236 4536
leatitiaromero@gmail.com
www.betweenlinesediting.co.za

23 December 2022

To whom it may concern:

I hereby confirm that I edited the thesis entitled: “AN ACTION PLAN TO INTEGRATE ABORTION CARE WITH HIV AND FAMILY PLANNING SERVICES IN ETHIOPIA”. Any amendments introduced by the author hereafter are not covered by this confirmation. Participants’ verbatim quotes were not edited. The author ultimately decided whether to accept or decline any recommendations I made, and it remains the author’s responsibility at all times to confirm the accuracy and originality of the completed work. The author is responsible for ensuring the accuracy of the references and its consistency based on the department’s style guidelines.



Leatitia Romero

Affiliations

PEG: Professional Editors Group (ROM001) – Accredited Text Editor
SATI: South African Translators’ Institute (1003002)
REASA: Research Ethics Committee Association of Southern Africa (104)

ANNEXURE 16: Turnitin Receipt



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AN ACTION PLAN TO INTEGRATE ABORTION CARE WITH
HIV AND FAMILY PLANNING SERVICES IN ETHIOPIA

By

HAILE BEKELE ADANE

Submitted in accordance with the requirements
for the degree of

Doctor of philosophy

In the subject

PUBLIC HEALTH

at the

UNIVERSITY OF SOUTH AFRICA

SUPERVISOR: PROFESSOR L ROETS

NOVEMBER 2022