

**MIDWIVES PRACTICES IN ADOLESCENT GIRLS' SEXUALITY AND
REPRODUCTIVE HEALTH SERVICES IN ADDIS ABABA, ETHIOPIA**

by

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Student number: 58544003

DECLARATION

I declare that the thesis titled **MIDWIVES PRACTICES IN ADOLESCENT GIRLS' SEXUALITY AND REPRODUCTIVE HEALTH SERVICES IN ADDIS ABABA, ETHIOPIA** is my own work and that all the sources that I have used or quoted have been indicated and acknowledged by means of complete references.

I further declare that I submitted the dissertation to originality checking software and that it falls within the accepted requirements for originality.

I further declare that I have not previously submitted this work, or part of it, for examination at Unisa for another qualification or at any other education institution.



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MIDWIVES PRACTICES IN ADOLESCENT GIRLS' SEXUALITY AND REPRODUCTIVE HEALTH SERVICES IN ADDIS ABABA, ETHIOPIA

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ABSTRACT

Adolescence is a critical stage of life marked by rapid biological, emotional, and social development, during which everyone can develop the skills necessary for a productive, healthy, and fulfilled life. Because they are generally regarded as healthy, adolescents are frequently overlooked by the health care system. Unmet needs among adolescent girls include sexual and reproductive health care services, continuity of care, and competent care providers. Midwives are experienced front-line sexual and reproductive health care providers for adolescent girls and women. Despite midwives' competency, their potential contribution to adolescent girls' sexual reproductive health care services is largely not realised.

The aim of the study was to develop guidelines for midwives to improve adolescent girls' sexual and reproductive health outcomes in public health facilities of Addis Ababa, Ethiopia. The study was conducted at two state hospitals and 48 state health centres in Addis Ababa, the capital city of Ethiopia.

The researchers used a mixed methods research design to collect, analyse, and integrate quantitative and qualitative data. The study was divided into three stages. Phase 1: A facility-based cross-sectional study was conducted using a self-administered questionnaire. Phase 2: Semi-structured interviews with experienced midwives were conducted. Based on the findings of Phases 1 and 2, guidelines for midwifery practices to improve adolescent girls' sexual and reproductive health outcomes were developed in Phase 3.

The study found that majority of midwives provides Intrapartum, postpartum and antenatal care to adolescent girls. There were fewer midwives available to provide contraception, abortion care, and the diagnosis and treatment of STI/HIV. According to

the study, guidelines on family planning, comprehensive abortion care, and midwifery care practice standards are available but do not always reach providers as expected. Guidelines are valuable resources that should always be easily accessible and available. The developed technical and procedural guidelines for midwives' practices cover seven major topics in order to implement an integrated approach and contribute to improving the sexual and reproductive health outcomes of adolescent girls.

Keywords

Adolescent girls; midwives; midwives' practices; public health service; sexual and reproductive health

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mothers, Geta Gudeta and Zenash Teshom who did not live to see me
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and
my loving husband, Agegnhu Bekele, and our lovely children,
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LIST OF ABBREVIATIONS

AA-HA	Accelerated action for the health of adolescents
AGSRH	Adolescent girls sexual and reproductive health
AIDS	Acquired Immune-deficiency Syndrome
AMDD	Averting maternal death and disability
AMIYCN	Adolescent, maternal, infant, and young child nutrition
ANC	Antenatal Care
ARVs	Anti-retroviral
ASRH	Adolescent sexual and reproductive health
AYH	Adolescent and youth health
AYP	Adolescent youth programme
AYSRH	Adolescents and youth sexual and reproductive health
BMR	Body mass index
BEmONC	Basic emergency obstetric and newborn care
CAC	Comprehensive abortion care
CEmONC	Comprehensive emergency obstetric and newborn care
CHTC	Consideration in HIV testing and counselling
CPR	Contraceptive prevalence rate
CSA	Central Statistical Agency
DHS	Demographic and health surveys
EDHS	Ethiopian demographic and health survey
EmONC	Emergency obstetric and newborn care
EPHI	Ethiopian Public Health Institute
FP	Family planning
FMHACA	Food, medicine and health care administration
FMoH	Federal Ministry of Health
FTE	Full-time equivalent
GBV	Gender based violence
HEP	Health extension programme
HGC	Human chorionic gonadotrophin
HIV	Human Immunodeficiency Virus
HPV	Human papillomavirus
HSP	Health services provider
ICM	International Confederation Midwives' Association
ICF	ICF International Calverton
LAM	Lactational amenorrhea methods

LARC	Long-acting reversible contraceptive
MNH	Maternal and newborn health
MoH	Ministry of Health
NNP	National nutrition programme
PAC	Post-abortion care
PEP	Post-exposure prophylaxis
PHC	Primary health care
PMTCT	Prevention of mother-to-child transmission
PNC	Post-natal care
PPIUD	Postpartum intrauterine device
RH	Reproductive health
RHB	Regional Health Bureau
RMNH	Reproductive, maternal and neonatal health
SAC	Safe abortion care
SDG	Sustainable development goal
SDM	Standard days method
SRH	Sexual and reproductive health
SRHR	Sexual reproductive health and right
SRMNAH	Sexual reproductive, maternal, neonatal, child, adolescent health
STD	Sexual transmitted diseases
STIs	Sexually transmitted infections
UHC	Universal health coverage
VCT	Voluntary counselling and testing
WHO	World Health Organization
YFS	Youth friendly service
YSRH	Youth sexual and reproductive health

CHAPTER 1

ORIENTATION TO THE STUDY

1.1 INTRODUCTION

Health education and counselling services; contraception services; abortion care; STI/HIV prevention; maternal and newborn care; preventing, detecting, and counselling about gender-based violence (GBV); preventing, detecting, and treating cervical cancer and infertility; and providing services for female genital mutilation are all factors to consider when providing essential SRH services (Engel, Paul, Chalasani, Gonsalves, Ross, Chandra-Mouli, Cole, Carvalho Eriksson, Hayes, Philipose & Beadle 2019:S44).

According to the World Health Organization (WHO), adolescents frequently receive little attention from the health sector, because they are mistakenly thought to be healthy (WHO 2015a: 14). According to WHO (2017a: 1), Global Accelerated Action for Adolescent Health (AA-HA), there is a growing sense of urgency that something different must be done to better meet the needs of adolescents. The rapid physical, cognitive, and psychosocial development that occurs between the ages of 10 and 19 years has an impact on an individual for the rest of his or her life. Many adolescent health problems are preventable or treatable, but they have been neglected to date and require more sustained attention and investment (WHO 2017a: 1). Investment in adolescent health is required to meet the 17 SDGs and their 169 targets, each of which is related to adolescent development, health, or well-being in some way (WHO 2017a: 2). Adolescent sexual and reproductive health interventions include counselling and services; contraception services; abortion care; prevention and treatment of sexually transmitted infections, including HIV; response to female genital mutilation, pre-pregnancy, pregnancy, birth, and postpartum care, according to WHO (2017a: 33).

The majority of adolescents are concerned that their health care providers will inform their family about their contraceptive use. The main barriers to adolescent girls using contraception were privacy and confidentiality concerns, as well as apprehension about side effects (Bain, Zweekhorst, Amoakoh-Coleman, Muftugil-Yalcin, Omolade, Becquet & De Cock Buning 2019:10). In addition, adolescents' decision to seek services was

influenced by some health care providers' negative attitude toward sexual and reproductive health issues, and they were hesitant to share their sexual and reproductive health issues, according to Pandey, Seale and Raze (2019:7). According to Ethiopian researchers, the main causes of adolescent girls' ill health are sexual and reproductive health issues such as risks from unwanted and early pregnancy and childbirth, as well as unsafe abortion (Gebreyesus, Teweldemedhin & Mamo 2019:5).

Adolescents have been identified as a vulnerable population that requires sexual and reproductive health services (United Nations 2015:16). Contraception counselling and services, safe abortion care, maternity care, STI and HIV prevention and treatment, and enhancement of life and personal relationships are all examples of SRH services for adolescent girls and women (Germain, Sen, Garcia-Moreno & Shankar 2015:138). According to Lejibo, Assegid, Beshir and Handiso (2017:71), the majority of adolescent girls used VCT, information and counselling, contraceptive services, abortion care, and STI treatment. The primary responsibility of midwives is to provide sexual and reproductive health care. Midwives are critical to providing adolescent girls with effective sexual reproductive health care (Lopes, Nove, Ten Hoop-Bender, De Bernis, Bokosi, Moyo & Homer 2016:2).

According to Jonas, Crutzen, Krumeich, Roman, Van den Borne and Reddy (2018:7), some nurses believed they lacked sufficient SRH skills, limiting their ability to provide adequate SRH services. Nurses face challenges when providing SRH services to adolescents. Value clarification training programmes may help nurses differentiate between personal beliefs and norms and workplace practice. The clinic's hours of operation must be established. Women had high expectations for continuity of care and care that was centred on them. According to Galle, Van Parys, Roelens and Keygnaer (2015:116), a small investment can have a big impact on women's health services. Midwives can be extremely helpful when it comes to providing quality care. They can also provide a window of opportunity to simultaneously address risk factors such as intimate partner violence.

The overarching target of Universal Health Coverage (UHC) should facilitate the achievement of all other health targets in SDG 3. UHC also prioritises meeting the needs of society's most vulnerable groups, especially women. One of the initiatives aimed at improving the health of girls and women is as the number of qualified midwives

evolves (Bakyaita & Mweemba 2018:9). Midwives are driven by a strong professional conscience, and their ability to care for women is based on their belief that their work is a calling. To overcome an unsupportive organisational system and poor working conditions that limit midwives' ability to provide high quality care (Bogren, Grahn, Kaboru, & Berg 2020:9).

Adolescent girls are disproportionately likely to seek abortion at or after 13 weeks (Ipas 2021:98). According to Ipas (2021:47), clinical updates in reproductive health, recommendation for adolescent safety and effectiveness: Vacuum aspiration and medical abortion are both safe and effective methods of induced abortion and should be made available to adolescent girls. For adolescents, cervical preparation prior to vacuum aspiration should be considered. Adolescents should have immediate access to safe abortion services. Expanding the abortion provider base to include midlevel providers such as midwives in order to increase access to safe abortion and post-abortion care. Vacuum aspiration and medical abortions can be taught to midwives. Before 13 weeks of pregnancy, midwives can perform vacuum aspiration and medical abortions just as safely and effectively as doctors (Ipas 2021:51).

Fear of side effects and subsequent infertility was cited as a major reason why women refused IUDs. Increased pelvic inflammatory disease (PID) was the leading cause of provider non-acceptance (Elkhateeb, Kishk, Sanad, Bahaa, Hagazy, Shaheen, Moustafa, Fares, Gomaa & Mahran 2020:3). IUDs are effective and safe contraception options for nulliparous women, according to Lohr, Lyus, and Prager (2017:534). With competency-based training, PPIUD service delivery could be expanded to all midwifery providers. This has the potential to improve the quality of both counselling and insertion services. Midwives are nearly five times more likely than doctors to follow through on all PPIUD counselling requirements (Zafar, Habib, Kols, Assad, Lu & Schuster 2019:6).

A global strategic direction for nursing and midwifery (SDNM) 2021-2025 SDNM has four policy focus areas: education, jobs, leadership, and service delivery. Each area has a strategic direction that articulates a five-year goal that can assist countries in ensuring that midwives and nurses optimally contribute to achieving universal health coverage and other population health goals. Professional regulations and regulatory systems frequently do not reflect the expanding roles of midwives and nurses in service settings. Midwives provide a large proportion of primary health care, but are frequently prevented

from working to the full extent of their education and training due to these regulations (WHO 2021:6).

The International Confederation of Midwives (ICMs) core strategic priorities for 2021-2023 are: driving innovation and sustainability for the future of midwifery; developing, strengthening, and supporting the rollout of a new professional framework for midwifery; and fostering a movement for midwifery, enabling and strengthening partnerships, advocacy, and communications for midwifery, with women's voices at the centre. Sexual, reproductive, maternal, newborn, child, and adolescent health (SRMNCAH), gender equality, and equitable access to high-quality health care for girls and women are all being promoted and prioritising it in all aspects of the strategic plan. Foster and develop the next generation of midwives while drawing on the knowledge and wisdom of previous generations, fostering cross-generational learning (ICM 2021:6).

Health care workers in SRH services were not given any special training or incentives to provide services to adolescents. Their education consisted of the standard general curriculum, with no adolescent health and behaviour specialisation courses. Although training and refresher courses on SRH services, including family planning, are available throughout the year, none of them are tailored to adolescent health (Jonas et al 2018:3).

The state of the midwifery profession in Democratic Republic of Congo: Education in midwifery issues include insufficient academic level and length of midwifery education programmes, a scarcity of qualified midwifery educators and clinical preceptors, and a scarcity of resources to provide a high-quality midwifery education programme. There is no regulatory structure and no deployment or remuneration systems in place for midwives. The midwifery association is a well-established, well-connected, and well-accepted midwifery association that lacks the resources it requires to function optimally (Bogren, Ndela, Toko & Berg 2020:1717411).

The Pathway for Midwives 2030 aims to meet the workforce's demand for SRH care services at every stage (Ten Hoop-Bender, Lopes, Nove, Michel-Schuldt, Moyo, Bokosi, Codjia, Sharma & Homer 2016:2). The number of workers required to provide SRMNAH services varies depending on the country. Demography and epidemiology must be considered in addition to universal benchmarks for workforce planning. Allocating tasks based on health workers' competencies is an efficient way of allocating

resources. Midwives with global education standards can meet 90% or more of the demand, including adolescent girls and women who are not pregnant (Ten Hoop-Bender, Nove, Sochas, Matthews, Homer & Pozo-Martin 2017:50).

The most common SRH care models are midwife-led and obstetric shared care (Saleem, Jan, McInyre, Rattani & Sikandar 2015:200). Cervical cancer screening, HPV vaccination, and contraception, including post-abortion contraception, infertility, and other SRH services, are among the competencies and roles of midwives in SRH care services (Butler, Fullerton & Aman 2018:174). Adolescent SRH services are provided in youth-friendly clinics in Sweden. Midwives play an important role in youth clinics because they can counsel on contraception and provide IUDs and implants (Goicolea, Christianson, Hurtig, Marchal, Sebastian & Wiklund 2016:323). Participatory debate between the government, management, and midwives is critical to progress and planning, particularly in workforce planning and allocation (McDougall 2016:309).

Shortages of qualified midwives, as well as a shortage of practice sites, were identified as issues. Some participants advocated for a global standardised midwifery curriculum. Participants discussed the disparity in the scope of practice of midwives educated through newer (higher) degrees and combined nursing and midwifery programme designs. Other participants were unsure how the role of a midwife differed depending on whether the midwife was educated at the technical/vocational or university level (Barger, Hackley, Bharj, Luyben & Thompson 2019:102534).

There is a clear need to improve midwifery education and care skills. Midwives face challenges in systems that do not allow them to function independently, denying them a voice in decision-making. Those in public places were concerned about the limited allocation of resources. Policies that prohibited use within the scope of practice were deemed unsatisfactory (Hastings-Tolsma, Temane, Tagutanazvo, Lukhele & Nolte 2021:11). The emergency response strategies of positive deviant midwives allowed them to navigate difficult situations. Midwives were upbeat about the midwifery-led manual vacuum aspiration and the legalisation of abortion. The findings provided critical insight into Kinshasa's integration of post-abortion care (Bourret, Larocque, Hien, Hogue, Muray, Lukusa & Ngabo 2020:7).

Midwives' self-efficacy in providing contraceptive services was linked to a stronger encouragement to provide FP services to adolescents, which would lead to increased service utilisation. Health care workers struggled with competing personal beliefs and professional responsibilities toward adolescent clients (Jonas, Reddy, Van den Borne, Nyembezi, Naidoo & Crutzen 2016:5). In Uganda, health care providers echoed societal norms regarding sexual behaviour and contraception services for adolescent girls (Paul, Nässtrom, Klingberg-Allvin, Kiggundu & Larsson 2016:176). In Argentina, the majority of abortions were performed under unsafe conditions. Health care providers should be aware of current abortion laws, facilitate access to contraception and encourage safe abortion practices (Provenzano-Castro, Oizerovich & Stray-Pedersen 2016:99).

A workforce that is fit for purpose is required to achieve universal health coverage (UHC) for girls, women, and newborns (Homer, Lopes, Nove, Michel-Schuldt, McConville, Moyo, Bokosi & Ten Hoope-Bender 2018:5). A 36-country study discovered impediments to expanding SRMNAH service providers. The provision of appropriate care and the development of a strategy to improve midwifery education could improve quality (Homer et al 2018:6). The ICM promotes pre-service midwifery education programmes' standards, guidelines, and content as competencies for midwives' practices. The essential competencies for midwives' practices define the minimum knowledge, skills, and professional behaviours required for certification as a midwife (Butler et al 2018:169).

Midwives' primary areas of focus are pregnancy care, family planning services, and abortion care (ICM 2016:4, 18). Midwives had higher mean scores for knowledge, attitude, and performance than other health care providers. As a result, midwives performed better than others in sexual and reproductive health care services (Javadnoori, Zangeneh, Tadayon & Akhoond 2016:609). The ability of midwives to meet the majority of SRMNAH needs is emphasised. The proportion of workload devoted to various stages of the care continuum is expected to shift, with a greater demand for FTEs to provide pre-pregnancy services (Ten Hoope-Bender et al 2017:52).

Standards of practice and the enabling environment for midwives vary greatly across low- and middle-income countries (Michel-Schuldt, McFadden, Renfrew & Homer 2020:102668). The professional domain of midwives lacked clear guidelines and descriptions. An energising work environment with coworker support was essential for

creating a reflective and learning environment. Senior midwives played an important role in establishing the environment by passing on their midwifery skills (Hansson, Lundgren, Hensing, Dencker, Eriksson & Carlsson 2021:5). Jonas, Crutzen, Van den Borne and Reddy (2017) investigated the factors influencing the provision of adequate, high-quality sexual and reproductive health care (SRH). Among the factors considered were their basic SRH knowledge and skills. It is feasible and potentially successful to provide a continuous education programme for health care workers in quality SRH services (Jonas et al 2017:102).

Health professionals' responsibilities; conflicting views on the necessity and effectiveness of reproductive autonomy; and professional poor coordination of care were identified as barriers to adequate preconception care and service uptake (M'hamdi, Van Voorst, Pinxten, Hilhorst & Steegers 2017:25). Midwives should counsel adolescent girls about postponing marriage, finishing secondary school, and protecting themselves against HIV, according to the ICM (2021:70) report on the State of the World's Midwifery, midwifery 2030, women's health pathway during planning and preparation. The majority of midwives cited a lack of protocols and guidelines governing woman-centered care services provision (Fontein-Kuipers, Boele & Stuij 2016:24).

According to ICM (2019:13), one of the competencies of midwives is to identify and assist in the removal of barriers to accessing and using sexual and reproductive health services. This competency category refers to pre-pregnancy care. Carry out STI and HIV prevention and screening procedures. They provide contraception counselling and services. Care for adolescent girls who have an unintended or mistimed pregnancy and promote health and well-being for girls and women (ICM 2019:13).

Midwives can contribute SRMNAH interventions, the Lancet Global Health a review of the evidence on midwife-delivered interventions is required for health systems to strengthen the evidence base and encourage appropriate investment. If health systems can achieve increased coverage of midwife-delivered interventions, they will be better able to provide effective coverage of essential SRMNAH interventions. Midwife-delivered family planning interventions have the greatest impact, but per conceptual, antenatal, childbirth, and postnatal midwife-delivered interventions also have a significant impact. Midwives must have sufficient skills and competencies to realise this potential, as well as be part of a large enough team, be part of a team of sufficient size

and skill, and work in an enabling environment (Nove, Friberg, De Bernis, McConville, Moran, Najjemba, Ten Hoope-Bender, Tracy & Homer 2021:e31).

1.2 BACKGROUND TO THE PROBLEM

Adolescent sexual and reproductive health was clearly identified as a priority health intervention that must be made available in Ethiopian essential health service packages (EHSP) (MoH 2019b: 27). The expansion of coverage of adolescent girls' friendly health services in public health facilities has been slow (FMoH 2017a: 121; FMoH 2017b: 16). The study looked into the quality of youth-friendly sexual and reproductive health services in Ethiopia. The service quality ranges from poor to fair, with adolescent-related elements performing poorly. Minor renovations to health facilities and client handling training may improve quality (Munea, Alene & Debelew 2020:254).

According to Ethiopia's Health Sector Transformation Strategies Plan (HSTP1) (2016-2020), adolescents had the greatest unmet need for SRH services. To address this the FMoH (2017) created a national adolescent and youth health strategy, implementation guidelines, standards, and a minimum service delivery package, as well as training manuals, to address the need for expanding and integrating adolescent and youth reproductive health services. Furthermore, FMoH (2016a) prioritised the health of adolescent girls, with the goal of reducing adolescent pregnancy rates from 12% to 3% (FMoH 2016a: 100) and increasing contraceptive prevalence (CPR). One of the implementation strategies was to increase the number of midwives (FMoH 2016a: 100). According to National Guideline for Family Planning Services in Ethiopia, 2019 midwives are provider of Counsel on All methods of FP, and other RH issues and provider of all FP methods including and implant insertion Removal, IUCD insertion and removal in all health care level (MoH 2019c: 35). According to (FMoH 2017a: 1), technical and procedural guidelines on providing sexual reproductive health care services to adolescent girls throughout their lives are required for the continuum of care to be effective.

Ethiopian health system offers the most comprehensive platform for delivering health services to adolescents, with a primary emphasis on SRH care. In addition, adolescent sexual and reproductive health services are one of a major component of Ethiopia's essential health services package (MoH 2019b: 27). Human resources are one of the six building blocks of the Ethiopian health system that require special attention in 2020

in order to provide the sector with an adequate and high-quality professional skill mix of health workforce (MoH 2020:118). However, a lack of strong leadership and a failure to integrate adolescent sexual and reproductive health services necessitates improvement at all levels of the health system (MoH 2020:16).

Ethiopia health services delivery arrangement, according to the FMoH (2016a: 142), Ethiopia's health care delivery arrangement is divided into three levels: primary, secondary, and tertiary midwives working into three levels. According to the MoH Annual Performance Report 2012 EFY 2019/2020, there are about 17,975 health posts, 3,735 health centres and 353 hospitals operating in the public health care system (MoH 2020:110). All three levels (health posts, health centres and hospitals) are expected to provide adolescent sexual reproductive health care services (FMoH 2016a: 142) Despite the optimal health service, the expansion of coverage of adolescent girls' friendly health services in public health facilities has been slow. Less than half (45%) of all facilities provided services for adolescent (FMoH 2017a: 121).

According to a study conducted in Nekemte, Ethiopia, despite policies and strategies aimed at increasing adolescent SRH service uptake and utilisation, adolescent SRH service uptake and utilisation remained very low. Many young people seek SRH services as a result of STI symptoms, sexual activity, and information from teachers (Binu, Marama, Gerbaba & Sinaga 2018:64). Another study in Ethiopia discovered that 32% of high school students used SRH services; with the main barriers being inconvenient hours and apprehension about being seen by their parents or people they knew (Abebe & Awoke 2014:71).

The study on analysed the 2000 to 2016 Ethiopia Demographic and Health Survey (DHS) data, found the prevalence of adolescents who started childbearing, slightly reduced from 16.3% in 2000 EDHS to 12.5% in 2016 EDHS (Central Statistical Agency (CSA) Addis Ababa, Ethiopia and ICF International [CSA & ICF] 2016). The percentage of teenage childbearing was high despite a reduction in the recent years. The study concluded more than one in ten adolescent girls aged 15 to 19 in Ethiopia have already begun childbearing (Kassa, Arowojolu, Odukogbe & Yalew 2019:158, 163). Teenage pregnancy and motherhood, study identified individual and community level factors that determine teenage pregnancy in Ethiopia. About, 79.6% of women aged 20-24 years experienced pregnancy during adolescent stage. Teenage pregnancy (13% in 2016) is higher in Ethiopia compared with Sub-Saharan African countries as a whole and its

world average size (Birhanu, Kebede, Kahsay & Belachew 2019:604, 608).

Risky sexual practices, child marriage, early childbearing, unintended pregnancy, unsafe abortion, and STIs/HIV are identified as major SRH problems of adolescent girls in the National Adolescent and Youth Strategy, 2016-2020 (FMoH 2016b: 7). Adolescent girls, on the other hand, have less access to SRH services (Ethiopian Public Health Institute [EPHI], Federal Ministry of Health [FMoH] and Averting Maternal Death and Disability [AMDD] 2017:122). Despite the development of national standards for adolescent and youth-friendly health services in health care facilities, they have not been implemented adequately or uniformly. The expansion of Adolescent and Youth Health (AYH) services in public health facilities has been limited, health providers' competence has been questioned, and guidelines are lacking (FMoH 2017a).

According to CSA and ICF (2016:67), the median age at first sexual intercourse for girls was 16.6 years. One in four (24%) women have first sexual intercourse before age 15 and 62% before age 18. By age 20, 76% of women have had sexual intercourse and the median age at marriage was 17.1 years; 13% of adolescent girls aged 15-19 had begun childbearing; the age-specific fertility rate in the 15-19 age group is 80 births per 1,000 women and 32% of adolescent girls used contraceptive services (CSA & ICF 2016:77, 113). Adolescents are at a higher risk of contracting STIs and HIV due to early sexual intercourse and higher-risk sexual behaviour, according to the CSA and ICF (2016:226). Less than one-third of all women (32%) who had STI or STI symptoms sought medical advice or treatment, 67% of women, on the other hand, did not seek advice or treatment (CSA & ICF 2016:226). Between 2005 and 2016, the proportion of young women with comprehensive HIV knowledge increased slightly, from 21% to 24%. In total, 27% of young women had been HIV tested and had received the results of their most recent test (CSA & ICF 2016:226).

According to Haile, Shegaze, Feleke, Glagn and Andarge (2020:5), adolescent girls' reasons for not using SRH services in Ethiopia. Due to a lack of privacy in health facilities, inconvenient opening hours, and unfavourable attitudes of health professionals, the most common service adolescent girls in Ethiopia used family planning, STI care, abortion care, and VCT services (Gebreyesus et al 2019:10; Wachamo, Tegene, Tibeso & Washo 2020:3). In addition, adolescents found it difficult to access SRH services due to their health care providers' experiences. Poor provider

competency, breaches of confidentiality, adolescent disrespect and discrimination, and a lack of provider follow-up are just a few examples. Deficits in health care providers' knowledge, attitude, communication, and technical skills may prevent adolescents from using sexual and reproductive health services (Habtu, Kaba & Mekonnen 2021:6).

In Ethiopia, contraceptive use among sexually active female adolescents has increased from 6.9% in 2000 to 39.6% in 2016. The use of long-acting reversible contraception methods such as Norplant/implants increased from 1.9% in 2011 to 6.3% in 2016. When compared to implants, the use of intrauterine devices (IUDs) did not increase. In 2016, the use of implants increased by 6.3%, while the use of IUDs increased by only 1.1% (Olika, Kitila, Terfa & Olika 2021:4). For young women, there are frequently barriers and it can be difficult to obtain sexual and reproductive health services (CSA & ICF 2016:226). In Ethiopia, EmONC services are provided by 96% of public/government-owned facilities, 91% of which are health centres. Regarding recent sexual reproductive health services delivery, 95% of midwives provide counselling on contraception services, 93% antenatal care, 98% childbirth care, 96% postnatal, 38% administer antiretroviral for PMTCT, 84% provided abortion care services and 37% performed manual vacuum aspiration (EPHI, FMoH & AMMD 2017c: 179).

According to the first state of the Ethiopia's midwifery 2012, Ethiopia's Ministry of Health (MoH) has made strengthening the health system a priority. The number of midwives in the country has increased from 1,275 in 2008 to 4,725 in 2012. A majority of them provide midwifery services in various hospitals and health-centres. There are more female midwives (3,662) than male midwives in Ethiopia (1,063). However, men are more qualified than women as most of them have bachelor's degrees. The government is the main employer of midwives since most of the hospitals; the government owns health centres and training institutions (Ethiopian Midwives Association 2012:1). According to the second state of Ethiopian midwives 2020, Ethiopia had a total of 16,925 midwives, with more than two-thirds of them being female. The majority of midwives received diploma-level training in midwifery, and more than 90% worked in hospitals and health centres. Personal and environmental challenges, as well as factors influencing satisfaction, include unfavourable work environments, a lack of educational and career development opportunities, and a lack of institutional support (Ethiopian Midwives Association 2020:15).

In Ethiopia, modern midwifery began in the 1950s and professional midwifery began in 1961 when the first three midwives graduated from a training programme that utilised the nurse-midwife programmes (FMoH 2014a: 6). These programmes include three years' training in nursing followed by one-year midwifery training. Since 1997, five other generic midwifery-training programmes have been offered (FMoH 2014a: 6). In 2016, there were 49 midwifery-teaching institutions, of which 23 provided diploma level midwifery programmes and 26 provided bachelors and Master of Science degrees in midwifery (FMoH 2016c: 73). In 2019, a PhD programme in midwifery was introduced. In 2020 there were 18,336 midwives in Ethiopia, and 1,426 of them were in Addis Ababa (study area) (MoH 2020:120).

According to the standard of midwifery care practice in Ethiopia, there are three categories of midwives: (1) Diploma midwives, who have successfully completed the prescribed three-year post-secondary midwifery training diploma course and are licensed to practice midwifery at a certificate qualified midwife capacity level, titled level IV midwife; (2) Bachelor's degree midwives who have successfully completed the prescribed four-year post-secondary midwifery training and are licensed to practise midwifery at a professional midwife capacity level, titled midwife professional, and (3) Master's degree midwives who have successfully completed the prescribed two-year Master's of Science course and are licensed to practise midwifery at a specialist capacity level, titled midwife specialist (FMoH 2014a:74).

By 2025, the FMoH (2016c: 21) hopes to have 29,686 midwives. The Midwifery 2030 pathway provides a unified policy and planning framework to guide the delivery of essential services to girls/women and newborns across the two SRMNAH care continuums: SRH services through pre-pregnancy to postnatal period (as needed), and from communities to referral hospitals (UNFPA 2014:36). There is a strong desire to include equity as a key component of the SDG agenda. Adolescent girls, on the other hand, are denied access to critical health services, particularly SRH care (UNPFA 2014a: 20).

More than half of midwives were happy with their professional status, which was closely followed by interactions with co-workers'. The vast majority of Ethiopian midwives were unhappy with their working conditions, interpersonal relationships with management, and job responsibilities. Job satisfaction had a negative impact on their decision to leave

their current job (Muluneh, Moges, Abebe, Hailu, Makonnen & Stulz 2021:4). In terms of work experience, three out of every four midwives and nurse had less than five years. Female participants had lower levels of knowledge than male participants. Participants who had trained were better practices. (Bekele, Assimamaw & Ali 2021:100365). A lack of guidelines, poor supportive supervision, communication gaps between midwives and clients, and low staff motivation hampered the ability to provide quality care (Geleto, Chojenta, Taddele & Loxton 2020:102819).

A study was conducted to determine the predictors of competency among final year undergraduate BSc midwifery students in Ethiopian higher education institutions. The proportion of competent students was discovered to be low. The average age of the study midwives was 23.6 years, and nearly half of the respondents were male. Their first field of study, midwifery, significantly impacted students' competency; students who had their teachers spend enough time with them at clinical practice sites; and the absence of students from other disciplines with similar interests at the practical site (Gessesse, Yirdaw & Mekonen 2021:100732). Other study found a low rate of research utilisation among midwives. Significant predictors of research uptake were attitude, self-efficacy in research utilisation skills and insufficient time for hospital level of health care (Dagne & Ayalew 2020:e039586).

According to a study conducted in Addis Ababa, Ethiopia, midwives' socio-demographic characteristics in health centres Addis Ababa, the majority, 70.6% of the study subjects were between the ages of 19 and 29; 61.8% of those who responded were female; 60.3% of those polled were single, while 37.5% were married. In terms of length of service, 61% of respondents had 0-4 years of experience and approximately 14.7% had 10-14 years of experience. The majority 84.6 had a diploma, while 15.4% held a degree. In this study, midwives' length of service was significantly associated with their knowledge (Henok & Yaekob 2015:57).

According to Bekru, Cherie and Anjulo (2017:5), the majority of midwives in Addis Ababa were female, with 69.2% being female, 30.8% being male, and 66.9% being single. The majority of the midwives were younger than 29 years old, with a mean age of 25.88 years; 70.6% held a diploma, while 29.4% held a bachelor's degree (BSc); 81.4% of midwives had less than three years of experience, 12.7% had four to six years of experience, and 5.9% had more than six years of experience; 54.8% of the midwives

worked in the delivery unit, 24% in the antenatal clinic, 13.1% in the postnatal clinic, and 7.0% in the family planning clinic. The vast majority, 87%, work as staff midwives, with only 12.7% serving as head of midwives.

According to a study conducted in Addis Ababa, Ethiopia, the socio-demographic characteristics of midwives, female midwives accounted for 74.6% of all midwives, while male midwives accounted for 25.4%. At the time, the average age of midwives was 25 years, with a standard deviation of 0.8. Three-quarters of the obstetric ward's working midwives had less than five years of experience. Those with 5-10 years of service made up 21.7%, while those with more than 10 years of service made up 2.4%. This group of young midwives requires a more robust training system, regular supportive supervision, expert mentoring, adequate midwife recruitment, and the commitment of administrative bodies (Hagos, Teka & Degu 2020:4).

1.3 STATEMENT OF THE PROBLEM

Adolescent girls deserve quality midwifery care throughout their reproductive life, without discrimination, marital status or parity with convenient service hours and competent providers. In Ethiopia, there are strategies, regulations, and standards in place to provide adolescent girls SRH care services. The health of adolescent girls is a priority, and efforts are being made to reduce adolescent pregnancy. Midwives are in the front lines of providing ANC and PNC for mothers, infants, and children.

Atuyambe, Kibira, Bukenya, Muhumuza, Apolot and Mulogo (2015:7) explain that adolescent girls preferred services provided by friendly female health care providers at the government health facilities all the time with reduced waiting time. In Ethiopia, most of the adolescent girls visit health facilities after working hours when in need of contraceptive services, abortion care and STI/HIV tests. However, provisions of those services are limited (Abebe & Awoke 2014:71; FMOH 2016b). In Ethiopia, on the other hand, 93% of midwives work at night or on weekends in health facilities and are normally available on-site twenty-four hours a day, seven days a week. Midwives, on the other hand, had the most limited services, providing women with pregnancy, childbirth, and postnatal care (EPHI, FMOH & AMDD 2017c: 29, 162, 178).

According to Habtu et al (2021:6), adolescent sexual reproductive health care services must be made more accessible and acceptable. Aside from increasing the number of midwives, their potential contribution to SRH care services for adolescent girls is not realised. As a result, the researcher wanted to examine how to improve SRH services and outcomes for adolescent girls in public health facilities in Addis Ababa, Ethiopia.

1.4 THEORETICAL GROUNDING OF THE STUDY

Theory serves as the foundation for practice, methodology, professional identity, and the expansion of formalised knowledge. Practice must be based not only on evidence but also on theory (Halldorsdottir & Karlsdottir 2011:806). Halldorsdottir and Karlsdottir (2011:807) presented an evolving theory on the empowerment of childbearing women in which the professionalism of midwives is central. According to the theory, the professional midwife consists of five major aspects: she cares for the childbearing woman and her family; she is professionally competent; she has professional wisdom and knows how to apply it; and is personally and professionally developing (Halldorsdottir & Karlsdottir 2011:808). The researcher used Halldorsdottir and Karlsdottir's (2011) evolving theory of professionalism in midwifery as the conceptual framework for the study (see Figure 1.1).

According to Halldorsdottir and Karlsdottir (2011:806), midwives' professional competence, work experience, working environment, socio-demographic status, and development are at the heart of midwives' practices. These elements come together to form a whole, which is the underlying premise of midwife's practices in adolescent sexual and reproductive health (see Figure 1.1).

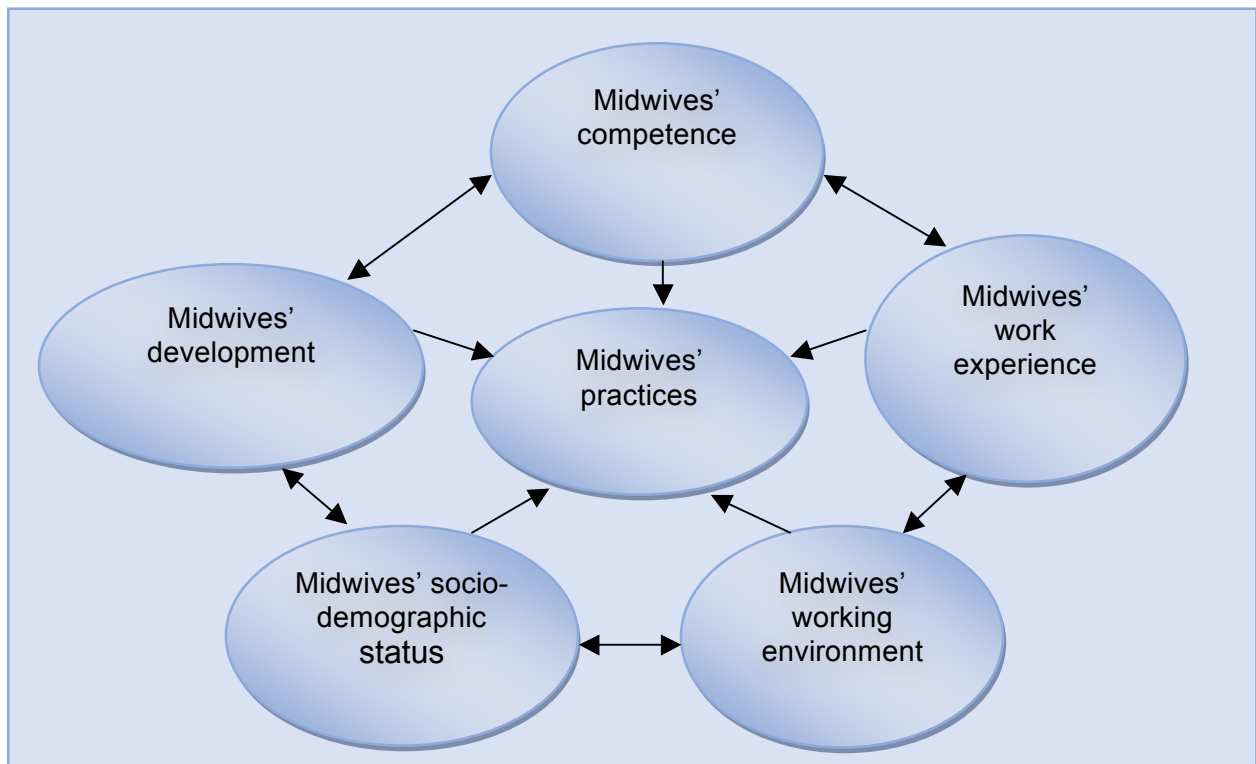


Figure 1.1 Theoretical framework of midwives' practice

Adapted from: Halldorsdottir and Karlsdottir (2011:814)

Midwives' professional competence, work experience, working environment, socio-demographic status, and professional development are central to their practices, and are presented as follows:

1.4.1 Midwives' professional competence

Midwives' competence is defined as the combination of knowledge, psychomotor, communication, and decision-making abilities that enable midwives to perform a specific task to a defined level of proficiency. Many theorists define competence in relation to behavioural tasks, and competency as relating to the personal characteristics that underpin task performance. Both terms have multiple meanings and are distinct. Understanding the meaning of competency necessitates first distinguishing between the terms 'competence' and 'competency'. The definition of midwifery competency emerges as a combination of knowledge, professional behaviour, and specific skills that are demonstrated at a defined level of proficiency in the context of midwifery education and practice (Fullerton, Ghérissi, Johnson & Thompson 2011:6).

The International confederation of Midwives (ICM) will serve as the primary conduit for global midwifery education and regulatory standards. The competency statements are divided into seven competency domains that address the midwife's role in the reproductive health and childbearing cycles of women. To support autonomous midwifery practice, it is necessary to develop and implement health care policies, raise awareness of midwives' distinct professional identities, and strengthen educational and regulatory frameworks (Fullerton, Thompson, Pairman & Moyo 2011:149, 155). The professional competence of midwives is a complex mix of knowledge, skills, attitudes, professionalism, and application of learning in practice. A core definition of competence and associated skills would be useful, but any meaningful definition must be contextualized and specific to the midwife's service needs. Continuous competence development and maintenance must be contextually relevant and linked to recent practice engagement (Casey, Cooney, O'Connell, Hegarty, Brady, O'Reilly, Kennedy, Heffernan, Fealy, McNamara & O'Connor 2017:657).

According to Lohela, Nesbitt, Manu, Vesel, Okyere, Kirkwood and Gabrysch (2016:4), a lack of competence may be a more significant impediment to clinical practice than a lack of appropriate drugs and equipment. According to Lohela et al (2016:5), competence varies significantly by facility type. Vignettes could be used to assess clinical competence as part of a more comprehensive approach

According to Halldorsdottir and Karlsdottir (2011:810-812), midwives' competency are an important part of midwives' practices and have a unique opportunity to improve care by utilising their knowledge, competence, and skills to provide continuity of care for girls and women. Midwives, on the other hand, face the difficult task of integrating professional competence into a cohesive whole for childbearing age girls and women.

1.4.2 Midwives work experience

According to an Ethiopian study, the majority of midwives had no more than two years of experience as a midwife. The average length of service was 2.6 years (Carr 2016:183). Furthermore, FMOH, EPHI, and AMDD (2016) describe in Ethiopian that the majority of midwives have been practicing for less than three years. BSc midwives, on the other hand, had been practicing for fewer years than the average and had been at the current facility for a shorter period of time.

There was a significant correlation between work experience and job satisfaction (Khavayet, Tahery, Alizadeh Ahvazi & Tabnak 2018:1189). A study in Addis Ababa shows that Two-third had less than five years' work experience (Shitu, Adugna & Abebe 2021:e0251819) According to a study conducted in Addis Ababa, Ethiopia, the majority of midwives had less than five years of experience (Hagos et al 2020:4). According to Bekru et al (2017:e01723101), the majority of midwives in Addis Ababa were had less than three years of experience, and few had more than six years of work experience.

According to Halldorsdottir and Karlsdottir (2011:810-812), midwives' work experience is an important part of midwives' practices, and their practices must be evidence-based. They are held formally responsible for their own clinical decisions. Midwives with experience understand what they're doing, why they're doing it, and how to do it correctly.

1.4.3 Midwives working environment

According to Shitu et al (2021:5), nearly half of midwives working in government hospitals and health centres reported job-related stress, and three out of every four participants were dissatisfied with their jobs. The vast majority of Jimma University's specialised teaching hospital staff, 96.1%, was staff nurses and midwives (ordinary staff), with only 3.9% being head nurses or midwives. Almost five out of ten had favorable attitudes toward physician collaboration, while the remaining 175 (42.8%) had an unfavorable attitude (Melkamu, Woldemariam, & Haftu 2020:4-5). Jimma University should help improve collaborative work between nurses and midwives with physicians. This could be achieved by providing related training, workshops, and seminars on the issue. The experience of disruptive behaviours and occupational status in the hospital were found to significantly affect participants' interactions with doctors (Melkamu et al 2020:4-5).

The most important factors influencing midwifery are as follows: friendly relationships with colleagues, career development, appropriate physical work environment, provision of equipment, facilities, and other necessary conditions, feeling of job security in the workplace, and acceptance of supervisors' knowledge and skills, as well as friendly relationships with them. Furthermore, the most important motivators influencing

midwives' job satisfaction are a sense of responsibility and success at work, an interest in the type of work, the honor and dignity of the profession, and a sense of independence and autonomy at work (Khavayet et al 2018:1189).

Professional courage to advance a path within midwives' fields of work resulted in a more health-promoting working life for midwives in workplaces. Visualising midwifery, organisational resources, and a reflective and learning environment that: The possibility of working as a midwife presents the health-promoting outcomes of a fulfilled primary concern with acquired grounded professional knowledge and professional identity, which led to attained professional courage, which can be viewed as a resistance resource to facilitate long-term occupational health. Consequently, this bravery, in turn, led to the possibility of establishing a path within the midwives' fields of work (Hansson et al 2021:4).

According to Bekru et al (2017:e01723101), in Addis Ababa the majority of the midwives worked in the delivery unit, small numbers in the antenatal clinic and in the postnatal clinic, and few in the family planning clinic. The vast majority of midwives work as staff midwives, with only few serving as head of midwives.

According to Halldorsdottir and Karlsdottir (2011:813), midwives' working environment is an important part of midwives' practice. Midwives communicate and collaborate to build professional intimacy among multidisciplinary teams and coworkers. Midwives are passionate about their work and understand their role and responsibility to their colleagues and the profession in order to provide standard continuity of care for girls/women.

1.4.4 Midwives socio-demographic status

In this study, socio-demographic factors are one of the independent variables (age, gender, marital status, and midwifery qualifications). According to the socio-demographic characteristics of midwives in Addis Ababa hospitals and health centres, the respondents' ages ranged from 20 to 56 years, with a median age of 26.5 years, and more than half were between the ages of 25 and 29. Almost two-thirds of those who participated were male. Three out of every four participants were single, and the vast majority had a bachelor's degree or higher. Two-thirds of those polled had less than five

years of professional experience. The majority of hospital midwives are young, male BSc holders with less than five years of experience (Shitu et al 2021:5) this is similar with Jimma University's specialised teaching hospital midwives, majority were BSc held and males made up 57.21% of all respondents, while females made up 42.79%. The participants' average year of service was 6.93 years (standard deviation 5.93), 36.4% were single, and 40.5% were between the ages of 20 and 29 (Melkamu et al 2020:4-5). According to a study conducted in Addis Ababa, Ethiopia, the socio-demographic characteristics of midwives, majority were female midwives, while male midwives accounted for few. At the time, majority of midwives were young age (Hagos et al 2020:4).

According to Bekru et al (2017:e01723101), the majority of midwives in Addis Ababa were female and were being single. The majority of the midwives were young and held a diploma. Studies show majority of midwives are female, young unmarried and diploma holder in midwifery (Carr 2016:183; Yaekob, Shimelis, Henok & Lamaro 2015:235). According to a study conducted in Arba Minch, Ethiopia, all youth friendly service providers were discovered to be females (Mulugeta et al 2019:3). According to a study on pre-service education in Ethiopia, the majority of females were enrolled in diploma programmes (Yigzaw, Ayalew, Kim, Gelagay, Dejene, Gibson, Teshome, Broerse, and Stekelenburg 2015:4). Another study on task analysis in Ethiopia discovered that 80.4% of midwives were females, 62.3% were younger than 25 years old, and 81.9% had a diploma qualification (Carr 2016:183). Barriers to quality midwifery services in low and middle-income countries, according to Filby, McConville and Portela (2016:9), include a lack of investment in quality midwifery education, lax or absent control and poor facility management.

According to Halldorsdottir and Karlsdottir (2011:813), the socio-demographic status of midwives is one of the important parts of midwifery practice. Midwives must be approachable, open, and sensitive to the needs of the woman. They must be ethically responsible and have a strong respect for women. Midwives are culturally literate, nonjudgmental, and consider their clients' cultural backgrounds. Midwives demonstrate women's good nature and empathy.

1.4.5 Midwives development

According to the International Conference on Population and Development, countries with enabling environments must ensure that frontline workers, such as midwives, are aware of existing laws and policies, as well as their obligations to apply them, and that improving health worker performance requires more than one-time training (Chandra-Mouli, Ferguson, Plesons, Paul, Chalasani, Amin, Pallitto, Sommers, Avila, Biaukula, Husain, Janusonyte, Mukherji, Nergiz Phaladi, Porter, Sauvarin, Camacho-Huber, Mehra, Caffè, Michielsen, Ross, Zhukov, Bekker, Celum, Dayton, Erulkar, Travers, Svanemyr, Maksud, Digolo-Nyagah, Diop, Lhaki, Adhikari, Mahon, Hansen, Greeley, Herat & Engel 2019:s19).

According to the Lancet Commission on Adolescent Health and Wellbeing, adolescents have many unmet health care needs and face barriers such as inexperience and lack of knowledge about accessing health care, as well as heightened sensitivity to confidentiality breaches. Health care providers must have attitudes, knowledge, and skills that promote adolescent engagement while maintaining a level of engagement with families. Universal health coverage necessitates the availability of care packages that are tailored to local needs and acceptable to adolescents and young adults. High-quality health worker training and adolescent responsive facilities are features of the most effective health care systems (Patton, Sawyer, Santelli, Ross, Afifi, Allen, Arora, Azzopardi, Baldwin, Bonell & Kakuma 2016:2425).

According to a study conducted in Addis Ababa, Ethiopia, the majority had a diploma, while few held a degree. Midwives' educational level, on-the-job training, and level of knowledge were significantly associated with their practice. Therefore, concerned bodies should give emphasis to education and training of midwives to improve midwives practice (Henok & Yaekob 2015:57).

Continuing Professional Development (CPD) should be on going, with a focus on theoretical learning and/or skill development. Mentorship and clinical supervision Peer review and reflection are critical in the development of continuous competence. Work-based learning for midwives should be given weight in their competency demonstration. The need to be accountable for patients' safety and ensure they have the necessary competencies to provide optimal care was deemed critical (Casey et al 2017:658).

Senior midwives and management should provide coaching, mentoring, and supportive supervision to junior midwives in adolescent health care services. The findings of this study agreed with those of Andersen, Basnett, Shrestha, Shrestha, Shah and Aryal (2016:184) in Nepal regarding the importance of providing support, technical updates, supervision, clinical mentoring, and on-going technical assistance in service provision. To create an enabling environment, encouragement, instruction, observation, coaching, and resolving supply or service delivery issues were required (Andersen et al 2016:184).

Midwives' development is an important part of midwifery practices. Midwives need evaluate themselves on a continuous basis through professional reflection and understand how to assess and improve their own knowledge, competence, and skills at work in order to grow both personally and professionally. Professional development for midwives is an important aspect of their work. Midwives look after themselves as individuals and as midwives (Halldorsdottir & Karlsdottir 2011:813).

1.5 PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of the study was to develop guidelines for midwives to improve adolescent girls' sexual reproductive health outcomes in public health facilities of Addis Ababa, Ethiopia.

In order to achieve the purpose, the objectives of the study were to:

- Determine the existing practices of midwives in adolescent girls' sexual reproductive health care service in the study area.
- Identify the factors affecting midwives' practices in providing adolescent girls' sexual reproductive health care service in the study area.
- Explore midwives' services provision in adolescent girls' sexual and reproductive health.
- Develop guidelines on midwives' practices to improve adolescent girls' sexual reproductive health outcomes.

1.6 RESEARCH QUESTIONS

In order to achieve the objectives, the study wished to answer the following research questions:

- What are the existing practices of midwives in adolescent girls' sexual reproductive health care service in the study area?
- What factors influence midwives' provision of adolescent girls' sexual reproductive health care service in the study area?
- How can midwives' service provision in adolescent girls' sexual and reproductive health improve?
- What guidelines should be developed for midwives to improve adolescent girls' sexual reproductive health outcomes in Ethiopia?

1.7 RESEARCH PARADIGM

A paradigm is a worldview, which is defined as a way of viewing natural phenomena that includes a set of philosophical assumptions and guides one's approach to research. Paradigms are lenses that aid researchers in focusing their attention on a phenomenon. Pragmatism is a worldview or set of rules governing how things work (Creswell 2011:35). Pragmatism asserts that reality is constantly renegotiated, debated, and interpreted, and that the best method is the one that solves the problem. In this study, the researcher used pragmatism as the research paradigm. Pragmatists focus on the study problem and employ all available approaches to rectify it (Creswell 2011:36). The researcher collected quantitative and qualitative data using a mixed methods design and a pragmatist paradigm.

1.8 RESEARCH DESIGN AND METHODOLOGY

In this study described the study design and methods used to achieve the study's purpose and answer the research questions.

1.8.1 Research design

A research design is the overall strategy for answering a research question, as well as the guideline for ensuring the study's credibility. The researcher used a mixed methods research design. (Polit & Beck 2017:741).

1.8.1.1 Mixed methods research design

The mixed methods research design is a technique for gathering, analysing, and synthesising quantitative and qualitative data in a single study (McIntosh-Scott, Mason, Mason-Whitehead & Coyl 2016:34). It addresses the level of integration priority, timing, and mixing decisions. The researcher used a concurrent mixed methods design to collect both quantitative and qualitative data sets at the same time, and the data was analysed separately (Polit & Beck 2017:584).

The decision was compelled by the need to quantify data from self-administered questionnaires and semi-structured interviews, which were then triangulated with midwives' and experienced midwives' perceptions.

The research was carried out in three distinct phases, which are detailed below:

- Phase 1. Quantitative research: A facility-based cross-sectional study with a self-administered questionnaire was conducted to determine midwives' existing practices and identify factors influencing midwives' practices on adolescent girls' sexual and reproductive health services.
- Phase 2. Qualitative research. Will use a semi-structured interview guide to explore midwives' service provision in adolescent girls' sexual and reproductive health in order to meet their practice needs. Interviews with experienced midwives were conducted in a semi-structured format.
- Phase 3. Guidelines: Based on the findings of Phases 1 and 2, guidelines for midwives' practices to improve adolescent girls' sexual and reproductive health outcomes were developed.

1.8.1.2 Quantitative research design

The quantitative research design, quantitative, descriptive cross-sectional, facility-based survey used by the researcher (Polit & Beck 2017:206).

1.8.2 Quantitative research methodology

The research methodology includes the population, sampling and sample, data collection, data analysis and interpretation, and findings (Polit & Beck 2017:741).

Setting and scope of the study

The research was carried out in Addis Ababa, Ethiopia's capital city. The study included midwives from government hospitals and health centres. Almost all health facilities in Addis Ababa have midwives on staff 24 hours a day, seven days a week (EmONC 2016:122).

Study population

The study's target population was midwives working in hospitals and health centres in Addis Ababa, Ethiopia (Polit & Beck 2017:250). The study's sample population consisted of midwives working in the two selected hospitals and 48 health centres.

Sample size

Sample sizes for quantitative and qualitative components are frequently different. Expect larger sample sizes for quantitative compensation (Polit & Beck 2017:587).

Sample size calculation

The sample size in quantitative studies is calculated by combining statistical and practical considerations. The quantitative sample size in this study was calculated using the formula for estimating a single population proportion $n = Z^2 * p(1-p) / (r)^2$ (Bowling 2014:193). The sample size for determining the factors that influenced midwives' practices was calculated using the EPI info software STATCAL formula

$$n_1(\text{for each group}) = \frac{\left[Z_{\alpha/2} \sqrt{(1+1/r) p(1-p)} + Z_{\beta} \sqrt{P_1(1-P_1) + \frac{P_2(1-P_2)}{r}} \right]^2}{(P_1 - P_2)^2}$$

The total number of midwives needed for the study was 558, with a 10% non-response rate (Dean, Sullivan & Soe 2013). There were 1,708 midwives employed in the study area (MoH 2019a), with 558 of them recruited from selected government hospitals and health centres.

Sampling methods

Joubert, Ehrlich, Katzenellenbogen and Karim (2014:99) random sampling (probability) is a specific selection technique that ensures sample representativeness and ensures that each individual has an equal chance of being included in the sample.

Sampling technique

To generate a sample of the population of interest, random sampling techniques were used. The number of midwives in each hospital and health centre was determined using a proportional allocation for population size, with a 2:1 ratio. Hospitals and health centres were chosen at random (lottery methods) (Parahoo 2014:264). The researcher chose all midwives working in the two hospitals and 48 health centres as study participants (Polit & Beck 2017:256).

Quantitative data collection

Between March and August 2018, data was collected in selected hospitals and health centres in Addis Ababa. In order to collect quantitative data from study participants, informed consent was obtained before they completed structured self-administered English version questionnaires. The questionnaires were completed anonymously and independently, which reduced the possibility of researcher bias (Creswell 2011:171-177). The survey consisted of 23 questions divided into five sections: socio-demographic profile, work experience, competence, working environment, and midwife

development (see Annexure 4). The researcher chose two research assistants and ten (10) data collectors and provided two-day training.

Quantitative data analysis

Data was captured and entered using the Epi Info version-7 computer software programme. For analysis, the data were imported into the STATA statistical data analysis computer software version 14. A statistician used descriptive and inferential statistics to analyse the data and synthesise and describe the findings (Polit & Beck 2017:391).

Quantitative data quality control

A study's validity and reliability are used to assess its quality (Joubert et al 2014:584). The degree to which the same measurement can yield similar results when repeated with the same subjects or groups is referred to as reliability (Joubert et al 2014:117). To ensure its reliability, the questionnaire was pre-tested on non-study participants who were not part of the main study (Joubert et al 2014:121).

1.8.3 Qualitative research design

Qualitative research is a systematic, holistic, flexible, and subjective approach to investigating people's experiences (McIntosh-Scott et al 2016:23). The qualitative study design used, the researcher chose a qualitative descriptive research design (McIntosh-Scott et al 2016:23).

1.8.4 Qualitative research methods

This section goes over the qualitative research methods that were used to carry out the study (Polit & Beck 2017:11).

Study population

The research population in the qualitative sample were experienced midwives in Addis Ababa, Ethiopia who had worked for at least 10 years.

Sampling and sample

To identify suitable interviewees, the participants were selected using a non-probability, purposive sampling approach (Joubert et al 2014:354). The guiding principle for sample size in qualitative studies is data saturation (Polit & Beck 2017:497, 587). For this report, 12 experienced midwives were invited, approved, and interviewed.

Qualitative data collection

Qualitative research gathers information from participants in the form of words and descriptions (Joubert et al 2014:349; Polit & Beck 2017:463). The researcher chose a face-to-face interview with a semi-structured interview guide developed as the method of choice. The questions in the interview guide were all open-ended (see Annexure 5) To ensure that the questionnaire was clear; the researcher performed a pilot study. Data was collected in selected health institutions between March and August of 2018.

Interviews

The study interviewed twelve experienced midwives who worked in various health institutions. Participants provided informed written consent prior to the start of the interview. Individual face-to-face interviews were conducted in their respective workplaces in a separate room. The interviews were audio-recorded, and field notes were taken as well.

Qualitative data analysis

The qualitative content analysis used by the researcher to identify themes and patterns and to condense text into smaller units (Polit & Beck 2017:742). The researcher transcribed the interviews verbatim and went over them several times. Atlas.ti version-8 computer software was used to code and analyse the data. To assist in identifying patterns in the data, the data was coded, reviewed, and themes were identified (Creswell 2011:147).

Trustworthiness

The quality of data collected determines the credibility of research. Researchers' trustworthiness is defined as their level of confidence in their data, as measured by strategies such as credibility, dependability, confirmability, and transferability (Polit & Beck 2017:745).

1.9 ETHICAL CONSIDERATIONS

The researcher obtained permission to carry out the research while adhering to the principles of autonomy, anonymity, confidentiality, and beneficence (Polit & Beck 2017:152). Prior to data collection, the research and ethics committee of the department of health study at the University of South Africa provided ethical approval and an ethical clearance letter (refer to Annexure 1). Furthermore, the Addis Ababa public health research and emergency management core process provided ethical clearance (refer to Annexure 2).

1.10 DEFINITIONS OF KEY TERMS

The conceptual definitions are given first, followed by the operational definitions.

1.10.1 Conceptual definitions

Adolescents

According to the WHO (2017a:VIII), a person aged 10-19 years. Young adolescent refers to 10-14-year-old, while older adolescent refers to 15–19-year-old. Blum, Astone, Decker and Mouli (2014:321) classify adolescents between the ages of 10 to 19 as being in the development and change stage. This study's adolescent girls lived in Addis Ababa, Ethiopia.

Adolescent health

Adolescent health includes SRH. Adolescence is one of life's most underappreciated stages, characterised by dramatic physical, cognitive, and social changes. This study

focused on the SRH of adolescent girls in the study area (Tharp, Carter, Fasula, Hatfield-Timajchy, Jayne, Latzman & Kinsey 2013:912).

Midwives

Midwives are individuals who have successfully completed a midwifery education programme, are legally licensed to practice/demonstrate their midwifery competencies and standards, and build relationships with women in order to strengthen women's own capabilities to care for themselves and their families (Ten Hoop-Bender, Bernis, Campbell, Downe, Fauveau, Fogstad, Homer, Kennedy, Matthews, McFadden & Renfrew 2014:1227).

Midwives' practices

Midwives' practices combine technical competence with compassionate care for childbearing women and newborns throughout the entire continuum of care and life cycle (pregnancy, pregnancy, childbirth, and post-partum) and in any setting, including the home, community, and health facilities (Ten Hoop-Bender et al 2014:1226). The study focused on midwives' practices in providing sexual and reproductive health care services to adolescent girls in the study area.

Reproductive health

A complete state of physical, mental, and social well-being is defined as reproductive health. Understanding adolescence is the central concept of adolescent sexual and reproductive health (Callahan 1973:77; Schalet, Santelli, Russell, Halpern, Miller, Pickering, Goldberg & Hoenig 2014:1596). In this study, the focus was on the sexual reproductive health of adolescent girls.

Sexual reproductive health services

Sexual reproductive health services are a type of health care that is provided to adolescent girls and women and include information and counselling, contraception counselling and services, maternal health care, comprehensive abortion care, and

STI/HIV prevention and treatment. The focus of this study was on sexual reproductive health care services for adolescent girls in the study area (WHO 2018d:3).

Sexuality

Sexuality is defined as the feelings, relationships, and connections that lay the groundwork for sexual development. Numerous and multi-level issues influence personal attitudes, motivations, and experiences, which can either help or hinder the development of sexual self-efficacy and healthy relationships (Igras, Macieira, Murphy & Lundgren 2014:560). The study area's focal point was sexuality of AGSRH.

1.10.2 Operational definitions

Operational definitions were used to define variables in terms of processes.

1.10.2.1 Dependent variables/outcomes

The midwives' practices of providing sexual reproductive health care services that were examined in this study.

- Provided contraception counselling and provision including implant, intrauterine devices and emergency contraception counselling and provision within the last three months, six months and one year (dichotomies, provided or not).
- Provided comprehensive abortion care, including post-abortion contraception, in all cases within the previous one, three and six, years (dichotomies, provided or not).
- Provided diagnosis and treatment of STI and HIV care within the last three months, six months and one year (dichotomies, provided or not).

1.10.2.2 Independent variables/outcomes

- **Midwives' competency:** the independent variables in this study were defined as a midwife's fundamental professional behaviour, which consists of a combination of knowledge, attitude, and technical skill. This study concentrated on midwives' competency in providing sexual and reproductive health services to adolescent girls (Habtu et al 2021:6).

- **Midwives' work experience** referred to the midwives' years of services, experience in AGSRH, experience in SRH in hospital and health centres, both urban and rural
- **Midwives' working environment** referred to policy, guidelines, regulation, supervision, trained staff, midwives' turnover, staffing, and availability of equipment and supplies (Bharj, Luyben, Avery, Johnson, Barger & Bick 2016:5).
- **Midwives' development** referred to capacity building mechanisms such as availability of continuing professional development and in-service training, midwifery educational status, short- and long-term training in reproductive health, using guidelines, supportive supervision, and job preferences (Dawson, Kililo, Geita, Mola, Brodie, Rumsey, Copeland, Neill & Homer 2016:183).
- **Socio-demographic** Midwives' age, gender, marital status, and educational level were among the socio-demographic characteristics of midwives (Bekru et al 2017:5).

1.11 SIGNIFICANCE OF THE STUDY

The findings should promote midwives' practices in adolescent girls' SRH services and benefit adolescent girls through receiving quality care. The findings should help policymakers develop standards for midwifery practice.

1.12 SCOPE AND LIMITATIONS OF THE STUDY

The study included midwives who worked in one Regain, Addis Ababa Ethiopia's urban areas. As a result, the findings may not apply to midwives who work in rural areas.

1.13 OUTLINE OF THE STUDY

The study consists of seven chapters:

- Chapter 1 introduces the study, briefly describing the problem, purpose and significance, research design and methodology of the study, and ethical considerations.
- Chapter 2 discusses the literature review conducted for the study.
- Chapter 3 describes the research design and methodology.
- Chapter 4 discusses the data analysis.

- Chapter 5 discusses the technical and procedural guidelines.
- Chapter 6 discusses the findings.
- Chapter 7 presents the conclusions and limitations of the study and makes recommendations for further research.

1.14 SUMMARY

The first chapter on the study's orientation described the background information, problem statement, research purpose, objectives, and research questions for the research problem. The study's significance, as well as its design and methodology, ethical considerations, and key concepts, have all been defined. The first chapter also discussed the theoretical framework of the study in the context of midwives' practices in sexual reproductive health care services for adolescents. The conceptual framework and literature review are discussed in the second chapter.

CHAPTER 2

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

2.1 INTRODUCTION

Chapter 1 introduced the study and outlined the problem, purpose, research design and methodology of the study. This chapter discusses the literature review conducted for the study.

A literature review allows the researcher to compare his/her findings to those of other research (Creswell 2011:60; Polit & Beck 2017:105). The literature review covered midwifery theories; midwives' models of care; competency of midwives' practices; midwives and ASRH services, SRH systems; adolescent girls' SRH needs; contraceptive counselling and services provision; abortion care that is comprehensive; STI and HIV prevention and treatment; Ethiopian policy and guidelines on SRH services; Ethiopian health system organisation; adolescent SRH services in Ethiopia, and adolescents' services utilisation.

2.2 MIDWIFERY THEORIES

Theory serves as the foundation for practice, methodology, professional identity, and the advancement of formalised knowledge. Practice must be evidence-based as well as theory-based. As a result, midwifery must be theory-based, because theories provide a broad framework for practice and can articulate a profession's goals and core values (Halldorsdottir & Karlsdottir 2011:806). Decision-making, leadership, and supervision models, birth territory theory, and transcending barriers theory are all examples of midwifery theories.

2.2.1 Decision-making theories

Places the woman as a decision-making partner in all aspects. Jefford, Fahy and Sundin (2011:246) compared several decision-making theories. Decision-making in midwifery care, according to the decision-making theory, midwives must make informed

decisions about clinical midwifery decisions. Midwife clinical decision-making requires intrapersonal negotiation, sensitivity, awareness, and consideration of the environment and the people in it (Jefford et al 2011:251).

Jefford et al (2011:249) described the ICM's five-step decision-making framework for midwifery is as follows:

- For a complete assessment, collect information from the woman, the woman's and the infant's records, and any laboratory tests in a systematic manner.
- Based on the correct interpretation of the information gathered in Step 1, identify actual or potential problems.
- Create a comprehensive plan of care for the woman and her family based on the needs of the woman or infant and supported by the data gathered.
- Implement and continuously update the plan of care within a reasonable time frame.
- Evaluate the effectiveness of care provided to the woman and her family; if unsuccessful, consider alternatives, returning to Step 1 to collect additional data and/or develop a new plan.

Decision-making theory concludes midwives are working with healthy women who will be given decision-making power, a midwife who involves the woman in all aspects of decision-making. Unlike medical clinical reasoning, it ensures that the woman is the final decision-maker in her own care. A midwife-specific decision-making model is required to guide midwives in their scope of practice, the factors to consider when making decisions, and how to make decisions in collaboration with the women with whom they work. Women's interests in midwifery should be taken into account as well (Jefford et al 2011:252).

2.2.2 Leadership theories

According to Hinchliffe (2010:588), supervisors can use transformational, developmental and action-centred techniques and models to carry out their leadership role more effectively.

Supervisors in the developmental model use a coaching style and support to boost self-esteem and confidence. A novice in a particular field task will need guidance and

support from a supervisor and will collaborate closely with them. Expert supervisors are capable of handling situations as they arise and only require delegation. By getting to know the supervisee, supervisors of midwives (SOMs) can facilitate competency growth and development and influence the supervisee's practice. It encourages practice improvement while giving staff the opportunity to make creative and innovative changes in a safe environment with the support of midwifery supervisors (Hinchliffe 2010:591).

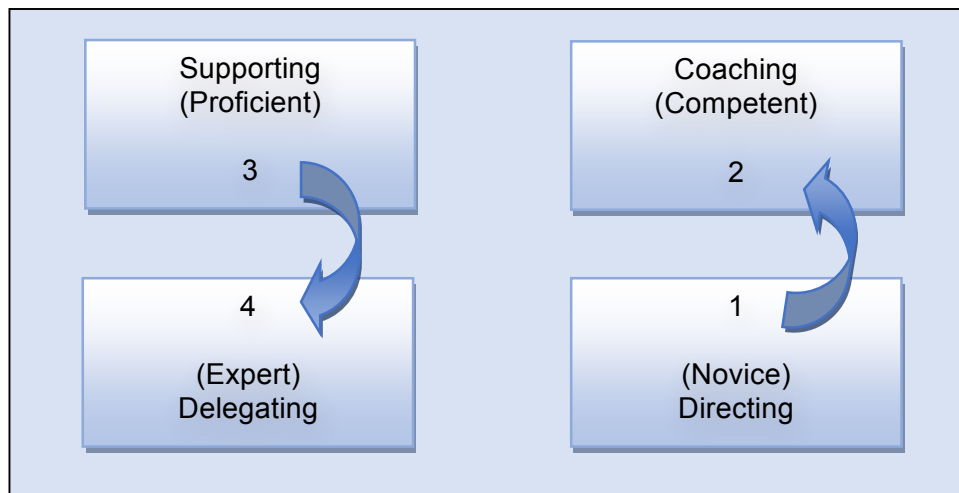


Figure 2.1 Development of the supervisee

Source: Hinchliffe (2010:591)

According to the leadership theory, there are a variety of leadership styles and theories available for the supervisors of midwives (SOMs) to use as a framework. The most successful of these enables the supervisors of midwives to influence the profession's and practice's direction, while also encouraging the growth and development of supervisees and providing them with the motivation and empowerment to provide quality care and become future leaders. Supervisors of midwives must be able to adapt their leadership style to the needs of the profession and organisation. The SOMs must be aware of their emotional intelligence to help them be strong leaders who are able to face challenges (Hinchliffe 2010:592). According to Ngabonzima, Asingizwe and Kouveliotis (2020:19, 35, 39), midwife managers used the directive (autocratic) leadership style more than any other leadership style in the Path-Goal Leadership tool, followed by the supportive (transformational) leadership style. Midwives used the achievement-oriented leadership style the least (transactional).

According to the report on the State of the World's Midwifery (2021), SRMNAH midwives face leadership challenges. Career advancement is hampered by a lack of

opportunities for midwives to hold leadership positions, as well as a scarcity of female role models. To improve the quality of care provided by midwives, leadership and governance are required. According to this report, women make up 70% of the workforce in health care services. Leadership and governance are required to improve the quality of SRMNAH care provided by midwives. The report identified one of the priority areas for investment in leadership and governance (UNFPA, ICM & WHO 2021:51, 53).

2.2.3 Birth territory theory

The birth territory theory was developed and synthesised by Fahy and Parratt (2006) based on their experiences as midwives and researchers. Fahy and Parratt (2006:48) use two examples to demonstrate the theory. In one story, the midwife's dominance and control resulted in a negative experience, whereas in the other, the midwife's guardianship and supportive role resulted in a positive experience for both mother and child (Fahy & Parratt 2006:49).

2.2.4 Transcending barriers theory

Barry, Hauck, O'Donoghue and Clarke (2013:1352) developed the transcending barriers theory.

According to Barry et al (2013:1357), in the first stage, newly graduated midwives clearly identify their philosophy of midwifery, which is a combination of understanding in the academic setting, experience in the clinical area as midwifery student, and acquired knowledge. In the second stage, the new midwives are confronted with the 'bigger picture' and lose control, feel frustrated and exasperated, lose sight of the midwifery philosophy, and learn to trust. In the third stage, they evaluate their personal and professional situation within the context of their belief and values, recall their aspirations and decide on what is most important to them, and considering change becomes their primary focus. The result of forming plans and making decisions then prepares newly-graduated midwives for action and practice (Barry et al 2013:1357).

2.2.5 The theory of veiled midwifery

In 2019, Hansson, Lundgren, Hensing and Carlsson (2019:82) state that the theory of veiled midwifery describes the social pattern between midwives and other professions in the labour ward. In the baby factory, the midwives work in a strained environment, with some working in dissonance and others in harmony. There are attempts by other professionals to collaborate and gain access to the world of midwifery via three revealing strategies: scrutinising, streamlining, and collaborating admission (Hansson et al 2019:82).

According to Hansson et al (2019:83), the first strategy is scrutinising, in which other professionals, as well as other midwives, review, judge, grade, and question the midwives. The second strategy, streamlining, explains how other professionals work to reveal midwifery in order to create a more cohesive picture of midwives. The third emerging strategy is collaborating admission; other professionals are attempting to gain entry into the midwifery world and collaborate with midwives (Hansson et al 2019:83). The model is made up of five interconnected major themes, three of which are central to midwifery care (Hansson et al 2019:81).

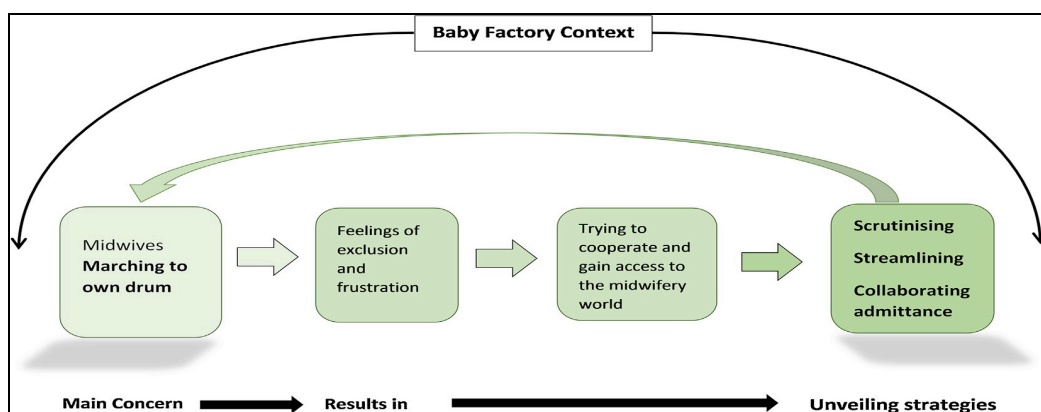


Figure 2.2 The theory of veiled midwifery

Source: (Hansson et al 2019:82)

2.3 MIDWIVES' MODEL OF CARE PRACTICES

This section discusses the philosophy and model of midwives' care practices, as well as the midwives' continuum of care.

2.3.1 Philosophy of midwives' care practices

According to the International Confederation of Midwives [ICM] (2017b: 1-4), throughout the world midwifery has been practiced for centuries, with midwives serving as the professionals of choice for childbearing girls and women everywhere. Continuity of care is a philosophy and a process that enables midwives to develop relationships with clients (ICM 2017b: 1-4). Consequently, midwives' care is holistic, continuous, and respectful; promotes, protects and supports girl and women's health. In addition, midwives maintain their competitiveness to ensure evidence-based practice (ICM 2017b: 4).

2.3.2 Midwives' continuum-of-care model

The midwives' care model is client-centred. The continuum of care is distinguished by two characteristics (ICM 2015:9). The first dimension of the care continuum is time. The second dimension of the care continuum is place (see Figure 2.3). Midwives have evidence-based essential competencies in care delivery, preventive measures, and the promotion of girls' and women's health. Midwives offer counselling and education, family planning services, antenatal, childbirth, and postpartum care, neonatal and childhood care, as well as comprehensive abortion care in any setting (ICM 2015:9).



Figure 2.3 The continuum of care model, a framework for midwives' practices

Source: ICM (2015:10)

2.4 MIDWIVES' COMPETENCIES FOR PRACTICE

The ICM is a leader in the development of midwifery education and practices, and promotes standards, guidelines and content of midwifery pre-service education programmes (Butler et al 2018:169). The essential competencies for midwives' practices outline the minimum knowledge, skills, and professional behaviours required for qualification as a midwife. Midwives' competencies and roles in sexual and reproductive health include cervical cancer screening, HPV vaccination, contraception, including post-abortion contraception, infertility, and sexual and reproductive health policy and law (Butler et al 2018:169).

2.4.1 Competency framework

According to the ICM (2019:4, 16), the competencies are organised into four interrelated categories.

2.4.1.1 General competencies

In 2019, ICM (2019:8) general competencies are defined as a midwife's autonomy and accountability as a health professional. Competencies in categories 2-4 are each specific to a stage. Education and training providers should ensure that general competencies are woven into all curricula. The competencies in categories 2, 3, and 4 must be evaluated, as well as those in category 1 (ICM 2019:8).

2.4.1.2 Pre-pregnancy and antenatal care

Identifying and assisting in the removal of barriers to accessing and using sexual and reproductive health services is one of the competencies of midwives (ICM 2019:13). This category of competencies refers to pre-pregnancy care. Perform STI and HIV prevention and screening procedures. Provide contraception counselling and services. Provide care to adolescent girls who have an unintended or mistimed pregnancy; assess the health of the woman and foetus; promote health and well-being; detect complications during pregnancy (ICM 2019:13).

2.4.1.3 Care during labour and birth

Assessment and care of women during labour to facilitate physiological processes and a safe birth; immediate care of the newborn infant; and detection and management of complications in mother and infant are all examples of competencies in this category (ICM 2019:4, 16).

2.4.1.4 Ongoing care of girls/women and newborns

Competencies in this category address maternal and infant health assessment, health education, support for breast-feeding, detection of complications, and provision of family planning services (ICM 2019:19).

2.5 MIDWIVES' ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH SERVICE

This section discusses midwifery pre-service training; midwifery regulations; midwives in health facilities; midwives' provision of services; pre-pregnancy services; midwives' self-efficacy and intentions; midwives' dilemmas, and task shifting and sharing.

2.5.1 Midwifery pre-service training

Jones, Sam, Bull, James, Ameh and Van den Broek (2016:28) identified the need for both autonomy and academic quality support. To assess the quality of comprehensive sexuality education, a school-level index was developed. Guatemala got the lowest score. Schools must have dedicated teachers who are trained in learning and teaching, in addition to infrastructure improvements. Jones et al (2016:28) highlight the lack of autonomy and control over the on-going programme by the school coordinators.

2.5.2 Midwifery regulations

According to Ranchoff and Declercq (2020:121), despite changes in midwifery scope of practice laws between 2012 and 2016, the comparative difference remained relatively stable throughout the study period, only about half of the countries have legislation that recognises midwives as an autonomous, regulated profession. A body that is not fully

functional and requires assistance to carry out its responsibilities governs midwifery practice. Accrediting education providers, assessing competency prior to registration, and determining the scope of practice are all the responsibility of regulatory organisations (Lopes et al 2016:41).

According to Lopes, Titulaer, Bokosi, Homer, and Ten Hoop-Bender (2015:1098), providers in SRH play an important role in achieving universal health coverage goals. Governments using a variety of methods estimate the number of midwives, including the number of midwives per total population and the number of midwives per birth. The number of SRMNAH workers needed per 10,000 reproductive-age women varies according to demography and epidemiology. Tasks are assigned based on the competencies and interventions of the health workers (Ten Hoop-Bender et al 2017:50).

2.5.3 Midwives in health facilities

Midwives, nurses, health officers, and doctors expect provide maternal and newborn health (MNH) services in Ethiopia. Three-quarters of females provided care, 78% of deliveries were midwife-assisted, and midwife-assisted deliveries were more common in hospitals than health centres (94% vs. 72%). Health centres employed 5.8 MNH personnel on average, while hospitals employed 17 MNH personnel (Sheferaw, Bazant, Gibson, Fenta, Ayalew, Belay, Worku, Kebebu, Woldie, Kim & Van Den Akker 2017:64).

2.5.4 Knowledge or skills and practices of evidence-based practice

Evidence-based practice (EBP) improves care quality as well as the individual and professional development of nurses and midwives. Heydari, Mazlom, Ranjbar and Scurlock-Evans (2014:325) report that the majority of nurses have low levels of EBP knowledge and skills. Coaching training outcomes ranged from inappropriate use of coaching skills to transformed managerial practice. As a result, how nurses and midwives acquire and integrate coaching skills into routine practice varies depending on the programme's design and delivery (Rafferty & Fairbrother 2015:1259).

2.5.5 Midwives' provision of services

The proportion of workload devoted to various stages of the care continuum is expected to shift, with a greater demand for FTEs to provide pre-pregnancy services. It is emphasised that midwifery can meet the majority of the needs for SRMNAH services. Demonstrating that approximately 80% of the need for FTEs is at the primary level of care, 60% of the time required is at the primary level of care, 30% at the secondary level, and 10% at the tertiary level (Ten Hoop-Bender et al 2017:50, 52)

Jonas et al (2017:13) investigated the factors influencing the provision of adequate, high quality sexual and reproductive health care (SRH). Among the factors considered by Jonas et al (2017:13) were their basic SRH knowledge and skills, as well as their behaviours and attitudes toward providing SRH services. It is feasible and potentially successful to provide a continuous education programme for health care workers in quality SRH services for women and adolescents in particular (Jonas et al 2017:13). According to Fontein-Kuipers et al (2016:23), midwives believe that knowing the characteristics and health needs of their population has aided them in providing woman-centered care. Midwives, on the other hand, see both internal and external obstacles. The majority of midwives cited a lack of an emotional connection or a sense of a positive relationship between the midwife and the woman as an inherent barrier (Fontein-Kuipers et al 2016:24).

2.6 ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH SERVICES PROVISION

This section discusses the provision of adolescent sexual and reproductive services by midwives, such as health care workers' performance and behaviours towards adolescent girls.

2.6.1 Performance of health workers

According to the WHO (2019:59), health workers providing services should receive appropriate recurrent training and sensitisation to ensure that they have the skills, knowledge, and understanding to provide services to adolescents.

According to Javadnoori et al (2016:608), academic fields have a significant impact on the performance of health care workers. Midwives performed better than those with other majors. In schools, inadequate health care worker competence in sexual health education for female adolescents. Academic degrees had no effect on health care workers' performance. Despite adequate knowledge, a positive attitude, and confidence, health care workers' performance in sexual health education was insufficient, according to Javadnoori et al (2016:610).

2.6.2 Health care workers' behaviours towards adolescent girls

According to Jonas et al (2018:9), nurses face challenges when providing SRH services to adolescents. Women had high expectations for continuity of care and care that was centered on them. Jonas et al (2018:7) some nurses believed they lacked sufficient SRH skills, limiting their ability to provide adequate SRH services. Morris and Rushwan (2015:S42) came to the conclusion that health care workers play a critical role in ASRH services. Medical professionals can advocate for legal abortion and adequate post-abortion care. Addressing adolescent health issues is critical to a country's future health.

The point of service delivery is the most direct point of contact and should be given special attention. Interpersonal communication skills development is a component of technical competence for health care providers. Providers must be well trained and at ease with a variety of methods for a wide range of clients (WHO 2017c: 2). According to Hakansson, Oguttu, Gemzell-Danielsson and Makenzius (2018:14), while young people preferred not to engage in sexual activity, abstinence was not always possible. In Kenya, the lack of clear abortion regulations and policies contributes to the reinforcement of stigmatising attitudes toward young women seeking abortions and contraception.

2.7 SEXUAL AND REPRODUCTIVE HEALTH SYSTEMS

SRH and HIV programming have been integrated into health care delivery systems over the last decade (Warren, Hopkins, Narasimhan, Collins, Askew & Mayhew 2017:106). Researchers owe it to rights holders to map and examine the connections between SRH and the SDGs (Warren et al 2017:102). The following section discusses sexual

and reproductive health systems, including legislation and policy technology and innovation.

2.7.1 Legislation and policy

On a global and national scale, criminal law is used to prohibit the provision of and access to abortion services. This has serious consequences for women who are expecting an unplanned pregnancy (Starrs, Ezeh, Barker, Basu, Bertrand, Blum, Coll-Seck, Grover, Laski, Roa & Sathar 2018:2650). Safe abortion services, infertility treatment, cervical cancer prevention, STI prevention, and violence against women and girls are all examples of international policy issues that are frequently overlooked. Sexual and reproductive health services save lives while also improving health and well being (Starrs et al 2018:2644).

WHO (2018d: 3) recommends that efforts be made to involve adolescent girls and service providers in the implementation of evidence-based approaches. Building health care providers' competence and empathy is critical for providing holistic care to adolescent girls. Advocacy coalitions, according to McDougall (2016:316), are becoming increasingly important in the global health landscape. In terms of SRH service use, adolescent girls continue to lag behind adult women. There is an urgent need to develop age-appropriate strategies for increasing adolescent girls' access to SRH (Li, Patton, Sabet, Zhou, Subramanian & Lu 2020:4).

2.7.2 Technology and innovation

Digital media is opening up new avenues for SRHR information and counselling (Starrs et al 2018:2651). Delivering SRHR services to empower women to take control of their health and fertility may pit individuals' sexual health rights against conservative or patriarchal social norms (Bacchus, Reiss, Church, Colombini, Pearson, Naved, Smith, Andersen & Free 2019:512). Nanda and Tandon (2019:351) stated that the implementation of ASRHR could be facilitated by technology due to its vast reach and ability to conceal and deliver sensitive information and services. Technology-based interventions must be designed to complement one another.

2.8 ADOLESCENT GIRLS SEXUAL AND REPRODUCTIVE HEALTH NEEDS

Significant progress has been made on a global and regional scale, but far more action is required. Many programmes and projects aimed at improving ASRHR were carried out on a small scale and over a short period of time (Chandra-Mouli, Svanemyr, Amin, Fogstad, Say, Girard & Temmerman 2015:S4). The most frequently reported barriers across all ASRH services were safety, fear of family finding out, and cost (Thatte, Bingenheimer, Ndiaye & Rimal 2016:57). Females made their sexual debut at an average age of 17 years, while men were skeptical of modern contraceptive methods (Grindlay, Dako-Gyeke, Ngo, Eva, Gobah, Reiger, Chandrasekara & Blanchard 2018:6, 11). Adolescents have multiple SRH needs that require special attention. According to Atuyambe et al (2015:9), such needs could be met by establishing adolescent-friendly clinics with sexuality information and friendly health service providers.

2.8.1 Menarche and maturation

Menarche is the start of sexual maturation and is influenced by a number of factors. Menarche occurs primarily between the ages of 12 and 14 years. Socioeconomic class and birth order have influenced age, as well as sex and race (Tarannum, Khalique & Eram 2018:397).

According to Ajah, Onubogu, Anozie, Lawani, Iyoke, Onwe and Ajah (2015:1221), there is a pressing need to establish adolescent-friendly clinics and incorporate sexuality education into school curricula. Premenstrual syndrome and dysmenorrhea were the most common menstrual problems, with respondents resorting to self-medication and absenteeism from school. The menstrual experience encompasses a variety of experiences for women and girls, ranging from hygiene practices used to manage menstrual bleeding to feelings of shame and containment. Evidence emphasises the importance of practitioners and policymakers paying attention to menstruation as well as how women perceive menstruation management (Hennegan, Shannon, Rubli, Schwab & Melendez-Torres 2019:33).

2.8.2 Gender-based violence

Intimate partner violence is a major contributor to women's sexual and reproductive health problems, according to WHO (2013:31-35). Gender-based violence (GBV) training should be provided to all health care providers. Within the health sector, there are integrated entry points where women can seek health care without having to disclose violence.

According to CSA and ICF (2016), domestic violence is of great concern from a health and economic perspective in Ethiopia. Ethiopia revised its family law in 2000, its criminal law and constitution in 2005. Only 24.6% of women age 15-19 who has ever experienced any type of physical or sexual violence by anyone have sought help. The prevalence of violence against women was found to be relatively higher. Women's age, education level, and occupation all had a significant association with intimate partner violence against women. Identifying high-risk individuals is critical for strengthening the link between social and national health systems, family laws, and police investigations in order to reduce the high impact of violence against women (Gebrewahd, Gebremeskel & Tadesse 2020:6).

2.8.3 Prevention of cervical cancer

The discovery that persistent human papillomavirus (HPV) infection is the leading cause of cervical cancer has led to the development of prophylactic vaccines and HPV assays that detect the virus's nucleic acids. Today, new primary prevention tools (prophylactic human papillomavirus (HPV) vaccination) – particularly among girls – and secondary prevention (screening with validated HPV assays and treatment of cervical precancerous lesions) have been shown to be effective. Most cervical cancers and deaths can be prevented with integrated HPV-based screening and vaccination (Arbyn, Weiderpass, Bruni, De Sanjosé, Saraiya, Ferlay & Bray 2020:e191, e203).

2.8.4 Refugee adolescent girls

According to Sudhinaraset, Diamond-Smith, Thet, and Aung (2016:249-253), female migrants were younger. Female migrants are more likely than non-migrants to use modern contraception methods. According to Munyaneza and Mhlongo (2019:4),

women refugees in Durban, KwaZulu-Natal, face a variety of challenges, including medical xenophobia and discrimination. Refugee women will benefit from assistance with their reproductive health needs. Ivanova, Rai, Mlahagwa, Tumuhairwe, Bakuli, Nyakato and Kemigisha (2019:5) are some of the names on the list. In Uganda, access to sexual and reproductive health (SRH) services among refugee adolescent girls was found to be limited. Distance to facilities, lack of privacy, and medicine were cited as barriers to seeking SRH care among Nakivale refugee settlement girls.

2.8.5 Girls' unmet need for sexual and reproductive health services

The high number of adolescent deaths in poor and developing countries, on the other hand, draws attention to patterns of illness in this important group (WHO 2015a: 14). Despite obvious needs, adolescent girls frequently face barriers to sexual and reproductive health (SRH) care services (Svanemyr, Amin, Robles & Greene 2015: S7). In most African countries, 25% of adolescent girls do not have access to contraception. Girls are more likely than women to seek abortions from traditional providers or to attempt abortions themselves. The most significant barriers to SRH care in developing countries are cost and privacy (Woog, Susheela, Alyssa & Jesse 2015:5, 12, 23).

Working closely with adolescent and youth populations will ensure that HIV testing and STI screening are implemented in acceptable and encouraging ways. Adolescents implicitly perceive themselves as candidates for general health services, but they are hesitant to request HIV and SRH services (Nkosi, Seeley, Ngwenya, Mchunu, Gumede, Ferguson & Doyle 2019:204). According to Sully, Biddlecom and Darroch (2019:5), adolescent reproductive health services are not uniformly underserved. This is especially true in the case of contraceptive coverage, where there are significant disparities and impacts based on age.

2.9 SEXUAL AND REPRODUCTIVE HEALTH SERVICES

Sexual reproductive health (SRH) care services including, health education and counselling services; contraception services; abortion care; STI/HIV prevention; maternal and newborn care; preventing, detecting, and counselling about gender-based violence (GBV); preventing, detecting, and treating cervical cancer and infertility; and

providing services for female genital mutilation are component of essential SRH services (Engel et al 2019:S44).

2.10 ADOLESCENT SEXUAL REPRODUCTIVE HEALTH SERVICES

According to WHO (2017a: 33), Global Accelerated Action for Adolescent Health (AA-HA!) is a review of evidence-based adolescent sexual and reproductive health interventions, including counselling and services; contraception services; abortion care; prevention and treatment of sexually transmitted infections, including HIV; response to female genital mutilation, pre-pregnancy, pregnancy, birth, and postpartum care. Adolescent girls in Uganda prefer that sexual reproductive health services be available 24 hours a day, seven days a week. Adolescent-friendly services are required (Atuyambe et al 2015:41).

The majority of primary health care units close in the afternoon and do not have an adolescent room. In the study, 13.9% of health care units in the country provide low-quality reproductive services, 68.6% provide medium-quality services, and 17.5% provide high-quality services (Villalobos, Allen-Leigh, Salazar-Alberto, De Castro, Barrientos-Gutiérrez, Leyva-Lopez & Rojas-Martinez 2017:6). In their study, Antenatal care, cervical cancer early detection, and family planning programmes had average efficiency rates of 92.4%, 97.5%, and 86.2%, respectively (Ruiz-Rodriguez, Rodriguez-Villamizar & Heredia-Pi 2016:582).

2.11 CONTRACEPTIVE COUNSELLING AND SERVICES PROVISION

Sustainable Development Goal 3.7 advocates for universal access to sexual and reproductive health care services, including family planning (Starbird, Norton & Marcus 2016:193). Adolescent life goals, as well as reproductive intentions, should be addressed by contraception services. Adolescent antenatal, postpartum, safe and/or post-abortion care should include modern contraceptive counselling. Providers of health care should spend enough time with their adolescent patients (Engel et al 2019:S44).

2.12 COMPREHENSIVE ABORTION CARE PROVISION

Access to abortion care services, Medication abortion, particularly misoprostol, is less expensive and more widely available than surgical abortion (Woog et al 2015:23). According to Bain et al (2019:15), adolescent sexual reproductive health services should include safe abortion care. According to Harries and Constant (2020:79), the majority of providers were sympathetic and understanding of the situation, as well as the difficulties that come with an unintended pregnancy. According to Nair et al (2015:293), eight global standards for improving the quality of adolescent health care services are needed: adolescent health literacy; community support; an appropriate package of services; provider competencies; facility characteristics; equity and non-discrimination; data and quality improvement; and adolescent participation.

Post-abortion contraception counselling and provision, the study looked at contraceptive use and satisfaction among women seeking post-abortion care in Kisumu, Kenya. Injections were the most commonly used method, with implants and IUDs uncommon. Strategies to improve contraceptive counselling, particularly for adolescent girls, could lead to increased compliance (Makenzius, Faxelid Gemzell-Danielsson, Odero, Klingberg-Allvin & Oguttu 2018:10).

2.13 SEXUALLY TRANSMITTED INFECTIONS AND HIV PREVENTION AND TREATMENT

Services for sexually transmitted infections and human immunodeficiency virus (HIV) are covered below.

2.13.1 Sexually transmitted infections services

School-based reproductive and health services for adolescents should remain a top priority (Shaw, Metge, Taylor, Chartier, Charette, Lix, Santos, Sarkar, Nickel & Burland 2016:98, 102) Long wait times are a major deterrent for young women seeking STI testing. According to a Canadian study, non-enrolled adolescents had the highest rates of STIs and pregnancies. The women desired convenient, regular STI testing, according to Normansell, Drennan and Oakeshott (2016:326, 328). Most of the clinics' quick testing, expert care and free treatment were appreciated by many of the younger

participants. Long wait times were a significant barrier to young women seeking STI testing.

2.13.2 Human Immuno-deficiency Virus (HIV) services

In 2016, WHO (2016c: 22) outlined services for all key populations; to effectively respond to HIV among key populations, a combination of interventions is required. As part of national HPV programmes, adolescent programming should include HPV vaccination.

Get serious about HIV prevention and treatment must be tailored to target marginalised communities and populations most at risk of HIV infection. Ministries must integrate services at the site-level to identify cost savings across disease processes (Piot, Karim, SSA, Hecht, Legido-Quigley, Buse, Stover, Resch, Ryckman, Møgedal, Dybul & Goosby 2015:171-211).

2.14 SEXUAL AND REPRODUCTIVE HEALTH SERVICES IN ETHIOPIA

In Ethiopian essential health service packages (EHSP), adolescent sexual and reproductive health was identified as a priority health intervention (MoH 2019b: 27). Ensuring universal access to primary health care (PHC) and Ethiopia's essential health services package discussed as follow.

2.14.1 Ensuring universal access to primary health care (PHC)

The health extension programme (HEP) was established in 2003, according to the MoH Annual Performance Report 2012 EFY 2019/2020. The MoH has created a new 15-year road map (2020-2035) to guide Ethiopia's efforts to optimise the HEP. The first attempt to optimise the second-generation health extension programme was implemented in 2016 (MoH 2020:18). The community health extension programme (HEP), according to Assefa, Gelaw, Hill, Taye and Van Damme (2019:33), is the primary mechanism for achieving Universal Health Coverage. The HEP has enabled Ethiopia to make significant progress toward universal coverage for primary health care services through community health programmes. The 2019 National Assessment of the HEP identified the programme's challenges and highlighted the need for a new roadmap.

2.14.2 Ethiopia's essential health services package

The 1993 National Health Policy emphasises all segments of the population's access to a basic package of quality primary health care services (FMoH 2016a: 41). The term 'universal health coverage' refers to the provision of essential health services at primary health care units. One of the major components and high-priority interventions is the provision of adolescent sexual and reproductive health services (FMoH 2016a: 76). In 2016, the MoH recognised the growing trend of population need and ensure the safety of sexual reproductive health clinical practice in Ethiopia (Food, Medicine and Health Care Administration & Control Authority [FMHACA] 2016:5).

2.15 ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH SERVICES IN ETHIOPIA

This section discusses standard and minimum service package, technical and procedural guidelines, adolescents' services utilisation, contraceptive methods used, post-abortion contraceptive, and comprehensive knowledge of STI/HIV, teenage pregnancy and motherhood and attitude of health care providers.

2.15.1 Standard and minimum service package

The Ethiopian MoH scaling up national adolescent and youth standards focused on comprehensive service standards and package. Standards three, health facility characteristics/convenient operating hours for adolescent health services in health facilities should be comprehensive ranges of services in health facilities at convenient operating hours. However, sexual reproductive health services for adolescent girls are subpar. Adolescent sexual reproductive health service standards are frequently not met adequately. The expansion of coverage of adolescent girls' friendly health services in public health facilities has been slow (FMoH 2017a: 121; FMoH 2017b: 16). Ethiopian, technical and procedural guidelines for abortion care indicated learning methods should address knowledge, clinical skills and approach. Midlevel providers, such as midwives, are authorised to provide comprehensive abortion services (FMoH 2014b: 24).

2.15.2 Adolescents' services utilisation

A study looked at the level of reproductive health knowledge and service utilisation among rural adolescents in Northwest Ethiopia's Machakel district. More than two-thirds of adolescents were aware of reproductive health issues. One-fifth of the adolescents had ever used reproductive health services such as family planning, STD treatment, and information, education, and communication (Abajobir & Seme 2014:147). The study looked at women of reproductive age in Ethiopia and their knowledge, attitudes, and practices regarding abortion care. Radio/TV was the respondents' primary source of information. The majority of respondents are aware of the methods of prevention of abortion (Adera, Wudu, & Yimam 2015:619).

2.15.3 Contraceptive methods used

Contraceptive methods are classified as modern or traditional. Modern methods include female sterilisation, male sterilisation, the intrauterine contraceptive device (IUD), implants, injectables, the pill, male condoms, female condoms, emergency contraception, standard days method (SDM), and lactational amenorrhoea method (LAM). Methods such as rhythm, withdrawal, and other folk methods are grouped as traditional (Ethiopian Public Health Institute & Federal Ministry of Health Addis Ababa [Ethiopia] and ICF International 2019:8).

2.15.4 Post-abortion contraceptive

Ethiopia's health system is stepping up efforts to improve the quality of post-abortion family planning (PAFP) services and expanding method choice in public facilities. To improve clinical skills, long-acting reversible contraceptive (LARC) trainings used both didactic and practical training. The training was intended primarily for midwives, nurses, and health officers. Samuel, Fetters and Desta (2016:S65) discovered that interventions increased PAFP uptake at project sites. During the intervention period, the proportion of abortion patients who received LARCs gradually increased (Samuel et al 2016:S62). Study examined KAP of mid-level providers (MLPs) on safe abortion care (SAC) Found 53.1% of respondents had adequate knowledge. Majority claimed to know the current abortion law. But many failed to understand the specific provisions of the law. Half of respondents gave post abortion family planning methods (Assefa 2019:142, 146).

2.15.5 Comprehensive knowledge of STI/HIV

The study assessed the level of HIV/AIDS knowledge, attitude, and practice among Ethiopian university students. The totality of knowledge was significantly correlated with the totality of attitude. Implications for assisting students in developing comprehensive knowledge and a desirable attitude toward self-protective skills were discussed. (Gemed, Gandile & Bikamo 2017:54, 59). The trend of young women with comprehensive knowledge about STI/HIV unchanged (very low) from 2005 to 2016. The percentage of youth with knowledge about HIV prevention is lower among those aged 15-17 than among older youth (CSA 2016:226). Adults aged 15-19 were less likely than older respondents to know a place where they could get tested for HIV. 40% of women had ever been tested and had received the results of their last test. Knowledge of HIV status helps HIV-negative individuals makes specific decisions to reduce risk (CSA 2016:41).

2.16 SUMMARY

The literature review conducted for the study was discussed in this chapter. The third chapter describes the study's research design and methodology

CHAPTER 3

RESEARCH DESIGN AND METHODOLOGY

3.1 INTRODUCTION

The previous chapter discussed the conceptual framework and literature review for this study. This chapter provided a thorough description of the research design and methodology used to carry out this study. The chapter describes the mixed methods, quantitative, and qualitative study design; methodology, which includes study setting, study populations, sample and sampling techniques, data collection procedures and analysis; validity, reliability, and trustworthiness; and ethical considerations of the research.

3.2 PURPOSE OF THE STUDY

The study was to develop guidelines for midwives to improve adolescent girls' sexual reproductive health outcomes.

As outlined in earlier chapters the objectives of this study were to:

- Determine the existing practices of midwives in adolescent girls' sexual reproductive health care service in the study area.
- Identify the factors affecting midwives' practices in providing adolescent girls' sexual reproductive health care service in the study area.
- Explore midwives' services provision in adolescent girls' sexual and reproductive health.
- Develop guidelines for midwives' practices to improve adolescent girls' sexual reproductive health outcomes.

Accordingly, the study wished to answer the following research questions:

- What are the existing practices of midwives in adolescent girls' sexual reproductive health care service in the study area?

- What factors influence midwives' provision of adolescent girls' sexual reproductive health care service in the study area?
- How can midwives' service provision in adolescent girls' sexual and reproductive health be improved?
- What guidelines should be developed for midwives to improve adolescent girls' sexual reproductive health outcomes in Ethiopia?

3.3 RATIONAL OF THE STUDY

The purpose of this study was to develop guidelines for midwives to improve the sexual reproductive health outcomes of adolescent girls in public health facilities in Addis Ababa, Ethiopia. The researchers hope that this study will increase understanding among public health managers, health planners, policymakers, midwifery managers, midwives, and other stakeholders in order to promote midwifery practices and the sexual reproductive health outcomes of adolescent girls. Furthermore, having developed guidelines on midwives' practices will add to the existing body of knowledge to improve midwives' provision of sexual and reproductive health care services to adolescent girls. This study found significant elsewhere in the health sector, especially for developing countries like Ethiopia.

3.4 SCOPE OF THE STUDY

The study was carried out in Addis Ababa, one of the most populous urban areas in the country. The sample was drawn from midwives who work in public hospitals and health centres, according to the researcher. This city was deliberately chosen for its performance. According to Ethiopia EmONC (2016:122), midwives on staff 24 hours a day, seven days a week in almost all health facilities in Addis Ababa, Ethiopia: The primary providers of SRH services are midwives. However, adolescent girls' sexual and reproductive health services are provided in limited hospitals and health centres. This study's primary focus was on midwifery practices in urban settings. Other health care providers, apart from midwives provide sexual reproductive health care were, however, not included in this study. The study's findings will be presented to policymakers, programme managers, midwives, and other relevant stakeholders for policy change and/or programme design. It is critical that future research considers the sexual

reproductive health care service for rural adolescent girls in relation to midwives and other health providers

3.5 ETHIOPIAN HEALTH SYSTEM ORGANISATION

Ethiopia's health care system reflects and is defined by the country's political system. Administrative decentralisation will be granted to Regional Health Bureau (RHB) and district-level health offices (FMoH 2016a: 54). The system provides the most comprehensive platform for the delivery of health services to adolescents, with a primary focus on SRH care. Lack of strong leadership and a failure to integrate adolescent sexual and reproductive health services require improvement at all levels of the health system (MoH 2020:16).

3.5.1 Human resources for health

Ethiopia has major HRH management challenges including shortage, urban/rural and regional disparities. There is limited investment in human resources for health management (HRM) capacity development. The human resources information system (HRIS) is not fully functional (FMoH 2016a: 47).

3.5.2 Ethiopian health service delivery arrangement

According to the MoH Annual Performance Report 2012 EFY 2019/2020, there are about 17,975 health posts, 3,735 health centres and 353 hospitals operating in the public health care system (MoH 2020:110). According to the FMoH (2016a: 142), Ethiopia's health care delivery arrangement is divided into three levels: primary, secondary, and tertiary level. All three levels are expected to provide adolescent sexual reproductive health care services (FMoH 2016a: 142).

3.5.2.1 Primary level health care services

All primary health care units are expected to provide adolescent sexual reproductive health (ASRH) care services (FMoH 2016a: 142). In Ethiopia, each primary health care unit is composed of one health centre with five satellite health posts and a primary hospital. A health post is the lowest level of the Ethiopian health care system staffed by

two health extension workers each per kebele (village). Health centres are expected to serve inpatient and ambulatory services and staffed with an average of 20 staff. A primary hospital has an inpatient capacity of 25-50 beds and is staffed by an average number of 53 people and provides inpatient and ambulatory services.

3.5.2.2 Secondary level health care services

Secondary level health care is composed of a *general hospital*, which provides inpatient, and ambulatory services. General hospitals provide specialty services in different disciplines and referral and linkage between facilities and expected to serve 1.0-1.5 million people.

3.5.2.3 Tertiary level health care services

Specialised hospitals receive referrals from general hospitals, and are the ultimate centres for all health care services. Specialised hospitals are expected to serve 3.5-5 million people. All specialised hospitals are expected to provide adolescent sexual reproductive health care services (FMoH 2016a: 142) (see Figure 3.1).

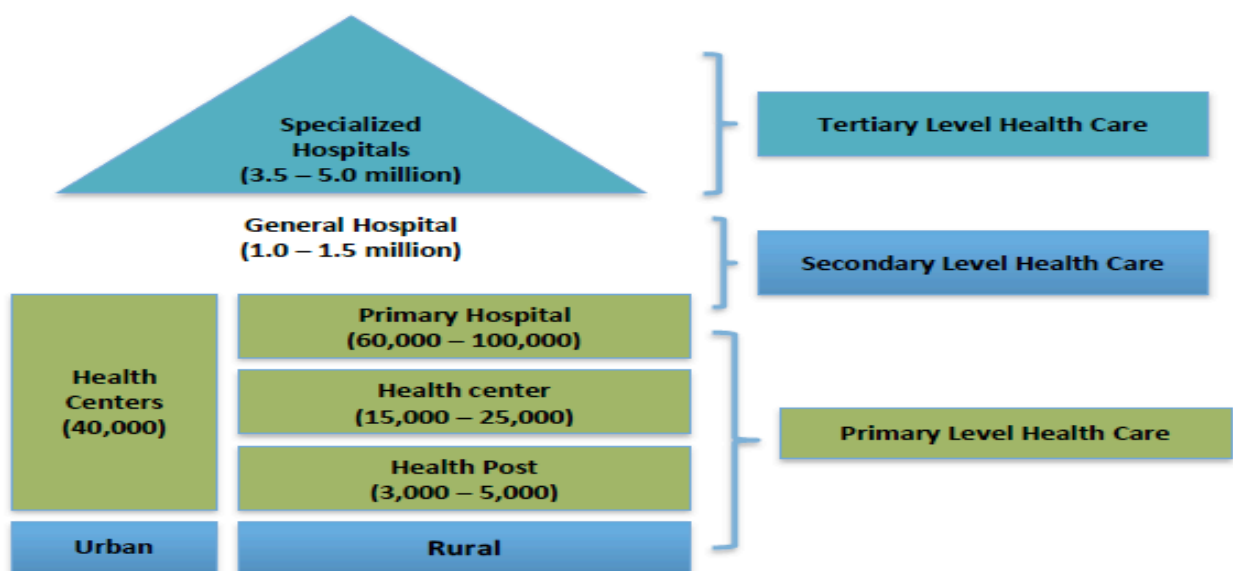


Figure 3.1 Ethiopian health systems

Source: FMoH (2016:142)

3.6 SETTING OF THE STUDY

The study was conducted in selected health facilities providing sexual and reproductive health services in Addis Ababa, Ethiopia's capital city. Addis Ababa has a population of 4.1 million (52% female) in 2020, making it the country's largest and most diverse city. Because of the high rate of rural-urban migration, Addis Ababa accounts for a disproportionate share of population growth. This exposed adolescent girls to unsafe sexual practices, with the result that adolescent girls had limited access to sexual and reproductive health care services. The quantitative settings were government hospitals and health centres in Addis Ababa run by the Addis Ababa City Administrative Health Bureau.

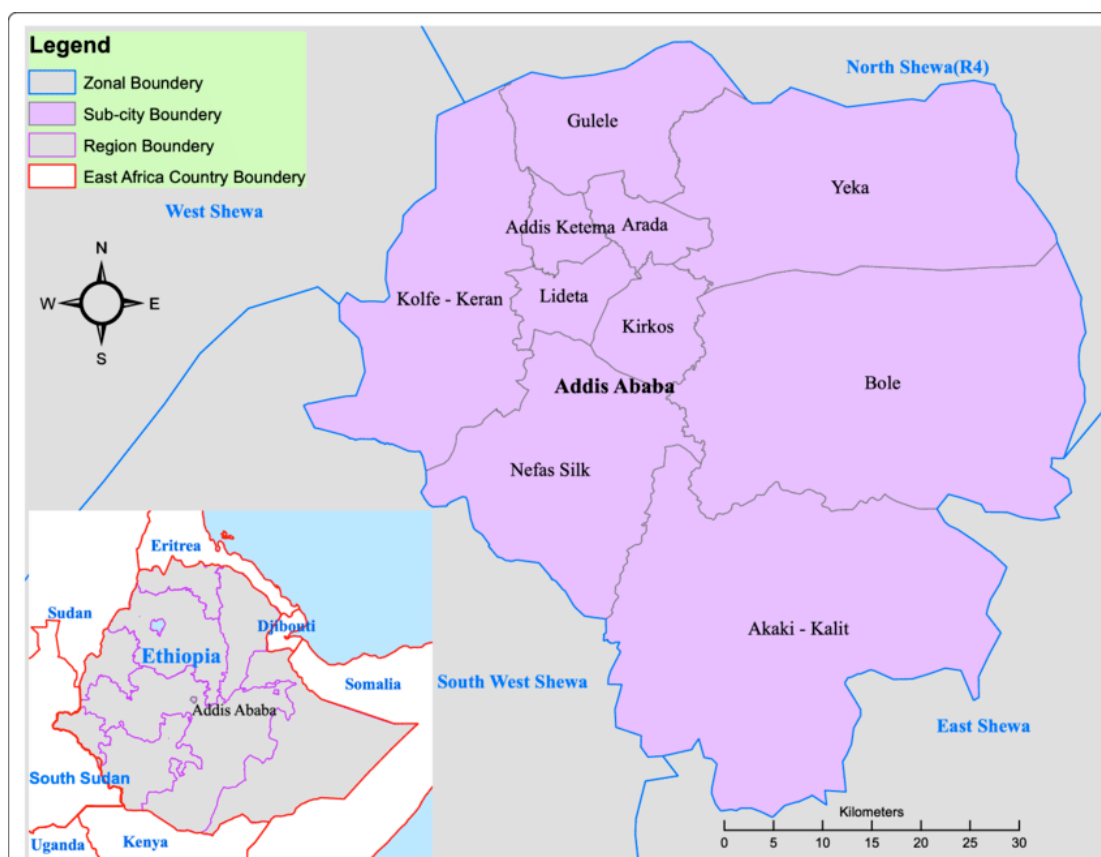


Figure 3.2 Map of Ethiopia and Addis Ababa location of study area

Source: Map of Addis Ababa (From: https://www.researchgate.net/figure/Map-showing-Addis-Ababa-Sub-cities-Source-Shapefile-from-Ethiopian-Karta-Agency_fig1_327024130)

3.7 RESEARCH DESIGN

According to Joubert et al (2014:78), study design is the study's "architecture," as it determines how to sample the population, collect measurements, and analyse data. The structured approach taken by researchers to answer a specific research question is referred to as study design. The research question determines the study design. As a result, the researcher used mixed methods designs in this study.

The overall strategy for answering a research question, as well as the guideline for ensuring the study's credibility, is referred to as the research design. In order to gain an overview as well as a deeper understanding of midwives' practices in sexual and reproductive health care services for adolescent girls. Based on the research questions, the researcher used a mixed methods research design (Polit & Beck 2017:741).

3.7.1 Mixed methods research design

The researcher used a simultaneous mixed methods research design for the study in order to collect quantitative and qualitative data and integrate the two types of data (Creswell 2011:32; Guetterman, Fatters & Creswell 2015:554).

Mixed methods design and interpretive integration are especially common in concurrent mixed methods designs, according to Polit and Beck (2017:591). In this study, the researcher used an approach in which quantitative data is analysed using statistical techniques and qualitative data is analysed using qualitative analysis methods, both in accordance with the standards of excellence for each method. The findings from the two separate analyses are then combined in an attempt to synthesise the results and develop an overall interpretation; the emphasis is on comparing the two types of findings. The researcher in this study used the concurrent mixed methods design.

Creswell (2011:55) and Guetterman et al (2015:554) emphasised the use of mixed methods research as a methodology in the health sciences to gain a more complete understanding of issues and to hear the voices of participants. It addresses the level of integration priority, timing, and mixing decisions, as well as the possibility of missing out on significant findings. In this study, a mixed methods research design was used to collect and analyse both qualitative and quantitative data during the same phase of the

research process, and the integration of the two sets of results into an overall interpretation draws conclusions in a single study, drawing on the strengths of both approaches.

3.7.1.1 Sequencing in mixed methods designs

The planned integration of qualitative and quantitative data within single studies or a coordinated series of studies is a methodological trend that has been gaining traction. Polit and Beck (2017:582) state that several critical decisions must be made when designing a mixed-method study. One question is whether a fixed design should even be used at all. Sequencing, prioritisation, and integration are also important design decisions. For the sequencing of components of a mixed methods study, there are three main options: Qualitative data is gathered first, followed by quantitative data, or both types are gathered concurrently. When two types of data are collected simultaneously, the approach is called sequential. The planned integration of qualitative and quantitative data within single studies or a coordinated series of studies is a methodological trend that has been gaining traction. Polit and Beck (2017:582) state that several critical decisions must be made when designing a mixed-method study. One question is whether a fixed design should even be used at all. Sequencing, prioritisation, and integration are also important design decisions. For the sequencing of components of a mixed methods study, there are three main options: Qualitative data is gathered first, followed by quantitative data, or both types are gathered concurrently. When two types of data are collected simultaneously, the approach is called sequential. These sequential designs progress through two or more distinct phases. When data is collected at the same time, the method is commonly referred to as concurrent, though the terms simultaneous and parallel have also been used. Concurrent designs take place in a single phase. The researcher used concurrent designs in a single phase to collect quantitative and qualitative data in this study Polit and Beck (2017:582).

3.7.1.2 Prioritization and integration in mixed methods design

Prioritization

Polit and Beck's (2017:582) statement on prioritization in mixed methods design determines whether to emphasize qualitative or quantitative approaches in a mixed

methods study. One possibility is to give the two components equal (QUALITATIVE+QUANTITATIVE) or roughly equal weight. The distinction is sometimes referred to as equal versus dominant (QUANTITATIVE + QUALITATIVE or QUALITATIVE + QUANTITATIVE) status. Although giving equal weight to the qualitative and quantitative components of a study may be appealing in some cases. The qualitative and quantitative components were given equal weight in this study.

Integration

The way qualitative and quantitative approaches are combined and incorporated in mixed methods designs is referred to as integration a third key design concern in mixed methods designs is how qualitative and quantitative methods will be combined and integrated. When strands are integrated, mixed methods research reaches its full potential for providing enhances insights. For integration decisions, there are three basic strategies. First, during the interpretation of qualitative and quantitative findings, data types can be mixed. Second, merging can occur during data analysis via a combined analysis, and third, integration can occur during data collection via a connecting strategy in which the results of one strand influence data collection in a subsequent strand. In this study, the integration of strands occurred during the interpretation of the qualitative and quantitative findings (Polit & Beck 2017:582).

3.7.1.3 Convergent mixed methods designs

Advanced mixed methods strategies, as well as qualitative and quantitative data collection and analysis, take place concurrently. After the data collection process has been completed or completed, the two types of data are analysed separately and then merged. The use of mixed methods entails combining quantitative and qualitative data. A researcher uses this method to collect both quantitative and qualitative data, analyse them separately, and then compare the results to see if the findings confirm or contradict each other (Guetterman et al 2015:555; John 2014).

The goal of convergent design (also known as design triangulation) is to collect complementary data about the central phenomenon under investigation – that is, to triangulate data sources. This design collects qualitative and quantitative data concurrently and with equal priority. QUALITATIVE+QUANTITATIVE is the notation for

a convergent design. The convergence model's purpose is to arrive at an internally confirmed conclusion about a single phenomenon or problem and to connect the two data sets during the interpretation stage. Data from both qualitative and quantitative sources were obtained and analysed simultaneously in this study. The results of the two different designs were compared and interpreted together (Polit & Beck 2017:584).

3.7.1.4 Data analysis in mixed methods studies

In mixed-method research, both quantitative and qualitative data were analysed. The two types of data were analysed separately before being combined in a side-by-side comparison for data analysis. Data analysis was discussed in both quantitative and qualitative phases (Creswell 2011:204).

3.7.1.5 Synthesising in mixed methods design

The concept of mixed methods study revolves around synthesising or combining data (McIntosh-Scott et al 2016:34). Data must be combined in such a way that a more complete interpretation of the research issue or phenomenon under study is obtained than if only one method (quantitative or qualitative) is used. Mixed method analysis adds to the legitimacy of a study by providing more complete data on a research issue than would be provided by a single approach. Which further enhances the validity of a study. The mixed methods design is a method for collecting, analysing, and synthesising quantitative and qualitative data in a single study. As a consequence, data is richer, and methodological research can be conducted in more original and creative ways (McIntosh-Scott et al 2016:34).

3.7.1.6 Study phases

Following the above discussion, in order to achieve the study's purpose and objectives as well as to address the research questions, the study was conducted in the following three phases:

- Phase 1. Quantitative: By conducting facility-based cross-sectional study by utilising a self-administered questionnaire to determine midwives' existing practices and

identify factors influencing midwives' practices on adolescent girls' sexual and reproductive health services.

- Phase 2. Qualitative: Utilising a semi-structured interviews guide to explore midwives' services provision in adolescent girls' sexual and reproductive health in order to meet their practices need. Semi-structured interviews were conducted with experienced midwives. These responses were facilitated by exploration of experiences on meeting adolescent girls' sexual reproductive health services from midwives.
- Phase 3. Guidelines: From the results Phases 1 and 2, to develop guidelines for midwives' practices to improve adolescent girls' sexual and reproductive health outcomes.

3.8 PHASE 1. QUANTITATIVE: DETERMINE MIDWIVES' PRACTICES AND IDENTIFY FACTORS ASRH SERVICES

Quantitative Phase 1 described in the following section:

3.8.1 Quantitative research design

The overall plan by which the researchers decide and communicate with others is defined as research design. Furthermore, the research design serves as the rationale and justification for each decision that shapes the how of the research journey. A quantitative descriptive facility based and cross-sectional survey was conducted (Ranjit & Kuma 2014:123). Phase 1 was designed to address objective 1 of the study, which was to determine midwives' existing practices on adolescent girls' sexual, and reproductive health care services and objective 2 to identify the factors influencing midwives' practices

3.8.1.1 Quantitative study

Measurement is a central theme in quantitative research, stemming from its logical positivist foundation. Quantitative research is critical for the advancement of evidence-based practice. It can be used in health care to describe, explain, predict, and control phenomena. All quantitative studies fall into one of three categories: experimental, quasi-experimental, or non-experimental. The researchers develop a sampling strategy

that specifies how they will be chosen and how many will be included. This was a non-experimental study (McIntosh-Scott et al 2016:28).

3.8.1.2 Cross-sectional

Cross-sectional studies may be descriptive or analytical to quantify the extent of a health problem in a population (Joubert et al 2014:79; Polit & Beck 2017:206). Quantitative studies emphasise commonalities, measurements and variables in a study population. The sample is drawn at random from a defined population. The number of contacts in cross-sectional studies, one-shot studies, or status studies in quantitative research (Polit & Beck 2017:206).

3.8.1.3 Facility-based survey

A facility-based cross-sectional survey was carried out at government hospitals and health centres in Addis Ababa. The researcher used a facility-based cross-sectional survey to collect quantitative data at selected public health facilities (Assefa, Shibre, Asher & Fekadu 2012:239). In Addis Ababa, the health facility to population ratio is one hospital serving 1.0-1.5 million people. 40,000 people expected to be served by one health centre (FMoH 2016a: 142).

3.8.2 Quantitative research methodology

Methodology refers to the theoretical assumptions and principles that underpin a specific research approach (PRIJNR 2015). Research methodology is a strategy for carrying out specific phases of the study, whereas research methods are techniques used by researchers to structure the study and collect and analyse data relevant to the research question. The research methodology includes the population, sampling and sample, data collection, data analysis and interpretation, observations and findings. The research methods used to carry out the study are described in this section (Polit & Beck 2017:741).

3.8.2.1 Health facilities selection

Study hospitals and health centres are chosen. In Addis Ababa, health facilities are classified into two types: hospitals and health centres. All health care facilities are expected to provide sexual and reproductive health care to all clients who require it. Midwives in hospitals and health centres provide sexual and reproductive health care services to all reproductive-aged adolescent girls and women in need. The Addis Ababa City Administrative Health Bureau consists of four hospitals and 96 health centres. The health bureau provided a list of hospitals and health centres that provide sexual and reproductive health services. Two hospitals and 48 health centres were selected using stratified random sampling and simple random sampling (lottery methods).

3.8.2.2 Population

A study population is the entire group of entities, people, or things that share some characteristics and are relevant to the research. The population for this study was midwives working in Addis Ababa, Ethiopia (Polit & Beck 2017:337; Joubert et al 2014:98). Polit and Beck (2017:338) differentiate between target population data and reachable population data. The number of midwives for every 1,000 institutional deliveries, as well as the number per 5,000 populations, is 6 per 1,000 annual institutional deliveries in the United States. In Addis Ababa, there are 13 midwives for every 1,000 institutional deliveries. In terms of the number of midwives per 5,000 people, there are two midwives for every 5,000 people. The Addis Ababa regions met the ratios of one midwife for every 5,000 people and six midwives for every 1,000 deliveries (FMOH, EPHI & AMDD 2016:172).

3.8.2.2.1 Study (target) population

According to Parahoo (2014:259), the target population is a subset of the theoretical population. Study population is the term used to describe the population to be studied. The target population is thus the group from which a researcher hopes to draw a sample, taking into account how they can be accessed and who can realistically participate in order to make overviews. The study may include all of the units in the target population, but more often than not, a sample or subset of the target population is

chosen. The target population for this study was midwives working in hospitals and health centres in Addis Ababa, Ethiopia.

3.8.2.2.2 *Sample*

A sample is a subgroup of a larger group of people, components, communities, and items selected to represent the entire population. The representativeness and scale of a sample are two important factors to consider when evaluating quantitative studies. Midwives working in the selected hospitals and health centres made up the study's sample population (Polit & Beck 2017:250).

3.8.2.2.3 *Sampling frame*

The sampling frame, according to Bowling (2014:207), is the list of population members (units) from which the sample is drawn, with each element appearing only once. A sampling frame is required to conduct random sampling; a sample can only be representative of the study population if the original frame is complete. Sampling units are the items on the sampling frame. Depending on the type of random sampling used and the focus of the study, the sampling frame could include individuals, groups, or institutions (Joubert et al 2014:99). The Addis Ababa city administrative health Bureau provided a list of hospitals and health centres in Addis Ababa that provide sexual and reproductive health services. A list of four public hospitals and 96 health centres in the Addis Ababa City administration that provide sexual and reproductive health services served as the sampling frame for quantitative data collection in this report.

3.8.2.3 *Sample size*

According to Bowling (2014:193), sample size is determined by balancing statistical and practical considerations. In general, the larger the sample, the smaller the statistically significant results are likely to be obtained. The sample size should be calculated during the study's design stage. In most statistical textbooks, the formula for calculating sample size and sampling error is provided. According to Polit and Beck (2017:587), sample sizes for quantitative and qualitative components are frequently different. Expect larger sample sizes for quantitative compensation.

3.8.2.4 Sample size calculation

The sample size in quantitative studies is calculated by combining statistical and practical considerations (Bowling 2014:193). In this study, the quantitative sample size was estimated using the formula for estimating a single population proportion $n = Z^2 * p(1-p)/(r)^2$, where the z value was taken as 1.96; p=the proportion of midwives providing adolescent sexual reproductive health care services was assumed to be 50%; and r = the margin of error in estimation was assumed to be 5%. The sample size was 384 because $N = (1.96)^2 * 0.5(1-0.5)/(0.05)^2$. A non-response rate of 10% (38) was introduced to account for the non-response rate, resulting in a sample size of 422.

The sample size for the second objective, determining the factors that influenced midwives' practises, was calculated for two populations in the case-control study using the STATCAL formula from the EPI info software.

$$n_1(\text{for each group}) = \frac{\left[Z_{\alpha/2} \sqrt{(1+1/r)p(1-p)} + Z_{\beta} \sqrt{P_1(1-P_1) + \frac{P_2(1-P_2)}{r}} \right]^2}{(P_1 - P_2)^2}$$

The sample size was calculated based on the assumption that skill was the most important determinant or factor-influencing midwives' practise in SRH care services for adolescent girls. It was assumed that 50% of skilled midwives provided ASRH care services, compared to 37% of skilled midwives who did not.

n_1 =sample size of practising skilled midwives

n_2 =sample size of non-practising skilled midwives

P_1 =proportion of skilled midwives among practising midwives

P_2 =proportion of skilled midwives among non-practising midwives

P =pooled population proportion= $p_1 + p_2 / 1 + r = 0.17\%$

$\alpha = 5\%$ and power of the study= 80%

$r = n_1/n_2 = 4$ for the population allocation ratio

Ratio of practising midwives: non-practising=1:2

Non-response=10%

The sample sizes for practising and non-practising midwives were 169 and 338, respectively. To account for a 10% non-response rate, 507 midwives were required for sampling. A total of 558 midwives were needed for the final sample size. The study was conducted using the sample with the larger sample size from the two samples mentioned above (Dean et al 2013). In Phase 1, the sample comprised 558 out of 1,708 midwives working in study area in Addis Ababa, Ethiopia (MoH 2019 a).

3.8.3 Sampling and sampling techniques

A carefully selected sample and sampling are required for the credibility of research findings and to provide data that is representative of the population from which the sample is drawn. The following population sampling and sampling techniques are described.

3.8.3.1 Sampling methods

Sampling, as defined by Joubert et al (2014:99) and Parahoo (2014:259), is the process of selecting cases to represent an entire population. One of the most important decisions in designing a study is deciding what data to collect, how to collect it, and from whom. There are two types of sampling in research: random sampling (probability) and non-random sampling (non-probability). Random sampling is a specific selection technique that ensures sample representativeness and ensures that each individual has a known probability of being included in the sample (non-probability) (Joubert et al 2014:99; Parahoo 2014:259).

3.8.3.2 Sampling technique

Sampling methods for quantitative study a proportional allocation for population size, with a 2:1 ratio, was used to determine the number of midwives in each hospital (at least 20 midwives/hospital) and health centre (at least 10 midwives/health centre) (Parahoo 2014:264). The researcher used stratified random sampling to select study hospitals and health centres from the sampling frame. The study's hospitals and health

centres were chosen at random (lottery methods). Two hospitals and 48 health centres were selected. As study participants, all midwives working in selected hospitals and health centres were included in the study.

3.8.3.2.1 Stratified sampling

To improve representativeness, the researcher used stratified random sampling in this study. Stratified random sampling divides the population into homogeneous subsets or strata from which random elements are drawn. The most common method for generating a stratified sample is to group elements from the same stratum together and then randomly select the desired number of elements (Polit & Beck 2017:256). The strata were sampled from the population of interest for quantitative data collection using simple or systematic random sampling (Bowling 2014:207).

3.8.3.2.2 Random sampling

Random (probability) and non-random (non-probability) sampling is the two types of sampling used in research. Random sampling guarantees representative and that there is a good chance of being included in the sample (Joubert et al 2014:99). The population of interest was sampled from the strata using simple or systematic random sampling. In the quantitative component of this study, the sample was selected by using stratified random sampling (Bowling 2014:207).

3.9 QUANTITATIVE DATA COLLECTION

There is usually more than one way to collect the desired data. According to Joubert et al (2014:111), it is the process of gathering information from study participants. The information gathered may consist of responses to questions posed to respondents. Data collection refers to the systematic collection of information during the course of a study for statistical exploration of a problem. Quantitative research uses deductive reasoning to make assumptions and moves through a series of measures in accordance with a predetermined strategy (Polit & Beck 2017:11).

3.9.1 Data-collection instrument

Quantitative data are collected using highly organised methods that obtain precisely the same information from research participants in a comparable and pre-specified manner (Polit & Beck 2012:105). A standardised self-administered English version questionnaire was used to collect quantitative data from participants in this study (Creswell 2011:171-177). The researcher developed the questionnaire based on the theoretical model, Theoretical framework on the midwives' practices (Halldorsdottir & Karlsdottir 2011:814), a literature review, and the research objectives. Since they had completed their midwifery training in English, all of the respondents could read and understand the language. The aim was to assess and identify factors in midwives' practices in sexual reproductive health care services, as well as to develop guidelines for midwives' practice (see Annexure 4).

3.9.2 Pilot study or pre-test

A pilot study is a trial run of aspects of a larger study. A series of small pilot studies are required to refine the instrument when developing the questionnaire. They require a thorough examination of the questionnaire in order to improve its quality. Depending on the size and diversity of the planned main study, only a few participants are typically chosen for each pilot study (Joubert et al 2014:121). As part of the pilot study, midwives who did not work in the sampled hospitals and health centres were eligible to participate in the study. Midwives who did not work in the sampled hospitals and health centres were recruited as Pilot study participants but were not included in the study. The results of the pre-test questionnaire were reviewed, corrected, and incorporated into the final questionnaire. Midwives who participated in the pre-test were not participants in the main study.

3.9.3 Structure of data-collection questionnaire

A self-administered data-collection questionnaire was used to assess participant midwives' activities in adolescent girls' sexual reproductive health care services. The survey had 23 questions. According to the theoretical framework for midwifery practices, it was divided into five sections (Halldorsdottir & Karlsdottir 2011:814).

A self-administered data-collection questionnaire was used to assess participant midwives' activities in adolescent girls' sexual reproductive health care services. There were 23 questions on the survey (see Annexure 4). The instrument was divided into five sections according to the theoretical framework for midwifery practice (Halldorsdottir & Karlsdottir 2011:814): socio-demographic profile, work experience, competence, working environment, and midwifery development.

3.9.3.1 Socio-demographic status of midwives

Background information subscale covered a four-item: sex, age, marital status, and education. The following variables were coded: sex (1=male, 2=Female), age group (1=20-24, 2=25-29, 3=30-34, 4= \geq 35), marital status (1=unmarried, 2=married) and highest midwifery education level (1=diploma in nurse-midwifery, 2=diploma in midwifery, 3=BSc in midwifery, 4=MSc in midwifery).

3.9.3.2 Work experience of midwives

Midwives experience subscales a three-item: midwifery education, first facility worked at, and years of service were all covered by respondents' experiences. The variables were coded as follows: recent midwifery school attended (1= university 2=health science college), first facility of work as a midwife (1=health centre, 2=hospital, 3=teaching institutions and services year as a midwife (1=1-3, 2=4-6, 3=7-9, 4=10 years or longer).

3.9.3.3 Competence of midwives

Liker scale of 1-5 was used to assess level of confident subscale a five-item: The level of confidence covered providing information and counselling services, contraceptive counselling and services, comprehensive abortion care, diagnosis and treatment for sexually transmitted infections and human immune deficiency virus. The variables were coded as follows: (1=extremely poor confidence; 2=poor confidence; 3=unsure; 4=good confidence, and 5=excellent confidence).

3.9.3.4 Working environment of midwives

The working atmosphere of respondents included the following six items: type of health facility currently employed; number of health facilities employed in the previous three years; shift/duty worked; availability of contraceptive methods including at weekend/night duty hours; number of midwives on weekend/night duty every day, and a desire for better working conditions. (1=yes, 2=no) is used to code the variables.

3.9.3.5 Midwives development

The following topics were addressed in respondents' development five-item availability of guidelines, standards of midwives' care practice, technical support or supervision, in-service training and training received related to adolescents were asked. The variables were coded as follows: (1=yes, 2=no).

3.9.4 Preparation for data collection (quantitative)

The researcher recruited two research assistants and 10 data collectors. The research assistants and data collectors were midwives that did not work in the sampled hospitals and health centres. The researcher trained research assistants and data collectors for two days. The training in-classroom instruction on how to use the formal questionnaire, data collection process and tools as well as basic research methodologies and techniques. As part of the training, the research assistants and data collectors were taken through participatory training sessions that included fieldwork session to pre-test the tools.

3.9.5 Field work: Administration of self-administered questionnaire

Before beginning to collect data, the data collectors met with hospital and health centre management to brief them on the study's plan. The team then introduced itself to the participants' midwives, explaining the purpose of the study and answering any questions they had. The research assistant monitored the data collection process every day.

Data collectors distributed structured self-administered questionnaires to participants' midwives after obtaining informed consent. Midwives from selected hospitals and health centres completed a self-administered questionnaire. A questionnaire is a set of questions that a respondent must answer in order to provide an indirect measure of the variables under consideration. The participants' data was gathered at a specific point in time in their respective health facilities. Questionnaires were filled out anonymously and independently, reducing the possibility of researcher bias; data collectors then collected the completed self-administered questionnaires. The interview will last in less than 45 minutes. The researcher and research assistant checked the completeness of the questionnaires collected on a daily basis. Data were collected between March and August 2018 in the selected hospitals and health centres.

3.10 QUANTITATIVE DATA ANALYSIS

The purpose of data analysis is to organize and structure bring about meaning to the information gathered (Polit & Beck 2017:530; Joubert et al 2014:111).

Data review was carried out after data collection. The researcher in this study reviewed the completed questionnaires for completeness and accuracy before cleaning the results. Data were captured and entered, using the Epi Info version-7 computer software programme. The data were cleaned and analysed using the STATA statistical data analysis computer software version 14. To analyse the data and synthesise and describe the findings, descriptive and inferential statistics are used. Descriptive statistics, such as means, standard deviations and frequency were computed for all items, and frequency tables were generated, which were then presented as tables and graphs. The crude and adjusted odds ratios were used to calculate inferential statistics to analyse correlations between the dependent and independent variables, with significance determined at the 95% confidence intervals (Polit & Beck 2017:391, 407, 411). In addition, a 0.05 p-value was used to determine significance. A multivariable logistic regression model was used to control for potential confounding variables and the results were presented as tables (Joubert et al 2014:152).

3.11 RELIABILITY AND VALIDITY OF QUANTITATIVE STUDY

The validity and reliability of a study are used to assess its quality. The quality of the instruments was evaluated and tested prior to administering them to the study population. In order to test for validity and reliability, the questionnaire was pretested on midwives who did not participate in the main study in order to analyse and revise the instrument (Joubert et al 2014:584).

3.11.1 Validity

The extent to which an empirical measure reflects the true meaning of the concept is referred to as validity. The validity of the data-collection instrument under consideration is referred to as validity (Joubert et al 2015:584). The accuracy and trustworthiness of a data-collection instrument in analysis is referred to as validity (Polit & Beck 2017:236). Conducting a literature review on the concepts under study ensured the validity of this study. The questionnaire was created using an extensive literature review. The draft questionnaire was discussed with the supervisor, and a panel of experts, including midwives and sexual and reproductive health experts, for relevance, comprehensiveness, readability, and applicability, reviewed the instrument.

3.11.1.1 Internal and external validity

Internal validity refers to the degree to which the study findings are a true reflection of reality rather than the result of extraneous variables (Joubert et al 2014:584). The extent to which the study's findings can be generalized beyond the study's participants to other populations is referred to as external validity (Joubert et al 2014:585; Creswell 2011:210-211).

3.11.2 Reliability

The degree to which similar results can be obtained when the same measurement is repeated with the same subjects or group is referred to as reliability (Joubert et al 2014:117). Documenting all procedures used in its development and execution so that future researchers could replicate it ensured the study's reliability. Furthermore, to ensure reliability the researcher trained research assistants and data collectors for two

days, and as part of the training, participants were taken through participatory training sessions that included field procedures, allowing them to conduct the self-administrative questioners in the same manner for all participants.

3.12 PHASE 2: QUALITATIVE: EXPLORE MIDWIVES SERVICES PROVISION ON ASRH

The following sections discussed qualitative Phase 2:

3.12.1 Qualitative research design

Qualitative research is a systematic, holistic, flexible, and subjective approach to investigating people's experiences (McIntosh-Scott et al 2016:23). Qualitative studies collect data from participants in the form of words and descriptions in order to gain insight into their perceptions, attitudes, and life experiences (Joubert et al 2014:349; Polit & Beck 2017:463). The researcher used a qualitative descriptive research design, individual qualitative interviews with midwives in Addis Ababa, Ethiopia.

Phase 2 was designed to address objective 3 of the study, which was to explore midwives' services provision in adolescent girls' sexual and reproductive health, interview with experienced midwives.

3.12.2 Qualitative research methods

This section goes over the qualitative research methods that were used to carry out the study (Polit & Beck 2017:11). This allowed the researcher to describe midwives' provision of SRH care services to adolescent girls, and their perspectives on how adolescent girls' health services can be improved.

3.12.2.1 Study participants

The qualitative samples, the study's participants, were representatives of experienced midwives in Addis Ababa, Ethiopia included midwives from the Addis Ababa administrative regional health bureau, the University, the Health Science College, the Hospital, and from Health Centres

3.12.2.2 Sampling and sample

The participants were selected using non-probability, purposive sampling (Joubert et al 2014:354). Purposive sampling approach was used to identify suitable interviewees participants. Thus, midwives were purposefully chosen to meet the study's objectives. Twelve midwives were chosen for the study (Jonas et al 2018:3).

The inclusion criteria required the following in order to be considered for the study:

- Be experienced midwives (ten years' or more).
- Have ten years or more service.
- Worked as a midwife in Addis Ababa
- Be willing to participate.
- Midwives had to be educated at diploma or bachelor level
- Midwives who did not have ten years' experience were excluded.

As a result, one midwife from the Addis Ababa administrative regional health bureau, two from the University, four from the health science college, one from the hospital, and four from the health centres were selected as interviewees, representatives of experienced midwives in Addis Ababa, Ethiopia who practice in sexual and reproductive health services.

Sample size

In qualitative studies, the guiding principle for sample size is data saturation. A total of 12 experienced midwives were invited, approved, and interviewed for this report and the final sample size was 12 midwives (Polit & Beck 2017:497, 587).

3.13 QUALITATIVE DATA COLLECTION

Data collection is the precise, systematic gathering of information relevant to the study's research purpose or objectives (Polit & Beck 2017:416). Qualitative data collection is a versatile on-going process of previously collected data. Interview technique provided the

opportunity to further explore some of the findings from the qualitative portion of the study. Using individual face-to-face interviews enabled the researcher to explore issues through probing and clarify issues (Polit & Beck 2012:416). The researcher chose an individual face-to-face interview with a semi-structured interview guide (see Annexure 5) supplemented by qualitative probing techniques were used to collect qualitative data for this study. Data were collected between March and August 2018 in selected health institutions.

3.13.1 Development of the interview guide

The semi-structured interview guide developed for this study based on the research goals and literature review. The questions in the interview guide were all open-ended. The research supervisor, to ensure that the variables were correctly captured reviewed, the interview guide. There were open-ended questions in the interview guide (see Annexure 5). Following the respondents' socio-demographic profile, the semi-structured interview guide questions relevant to the study questions were posed as follows:

- The respondents' socio-demographic profile.
- What is your background as a midwife in the field of SRH for adolescent sexual reproductive health care service?
- What is your personal opinion on midwives' practices in adolescent sexual reproductive health care service?
- What challenges do you experience in your midwifery practice in adolescent girls' sexual reproductive health care service?
- What can be done to increase the use of midwives in adolescent girls' sexual reproductive health care service?

3.13.2 Pre-testing

The draft semi-structured interview guide, which included five questions designed to probe midwives' practices on adolescent girls' sexual and reproductive health services, was pre-tested and then used for the interviews. Pre-testing of the semi-structured interview guide was done on two midwives who did not to participate in the main study and on whom pretesting of the self-administrative questioners was not done. The main objective of pre-testing was to ascertain whether the process of interviewing would

generate the required information. This resulted in adjustments of the semi-structured interview guides such as removing some questions and modification of others to explore themes that would be emerging.

3.13.3 Field work

Experienced midwives working at different facilities were informed about the study, then invited to participate. Interested midwives were given verbal and written information about the study, including the fact that participation was voluntary and that withdrawal was allowed at any time without explanation. Midwives agreeing to participate sign an informed consent form. Interviews were conducted near the midwives' workplaces (Bogren et al 2020:3). For details about the study participants, see result Table 4.1

Interviews with experienced midwives

Individual interviews were included in Phase 2. Semi-structured interviews were conducted with experienced midwives who worked in Addis Ababa's administrative regional health bureau, university, health Science College, hospital, and health centres. During the interviews, respondents were informed about the study's design and purpose, that their participation was entirely voluntary, and that they could withdraw at any time without explanation. Before the interview began, respondents were given the opportunity to ask any questions they wished. The participants provided written informed consent. To maintain confidentiality and privacy, individual face-to-face interviews were conducted in a separate room at their respective workplaces.

Interviews, which were recorded and transcribed verbatim, were used to contextualise midwives' experiences. Participants described their day-to-day practice scenarios and discussed how these scenarios influenced their provision of ASRH services (Geraghty, Speelman & Bayes 2019:e298). The interviews lasted 40-50 minutes and were audio-recorded with the consent of the respondents. Field notes were taken during the interview as well. Twelve experienced midwives from various health institutions were interviewed. Collecting data was stopped when participants fail to provide new information. After 12 interviews with midwives, researchers discovered that no additional data was available. Because this indicated that data saturation had occurred, the researchers halted the interviews with 12 midwives.

The researcher gathered information from audio-recorded interviews and memos that were verbatim transcribed. Participants were asked questions such as, "Could you please tell me about your experience with ASRH care services?" "How do you feel about midwives' ASRH care practices?" "What challenges do you face in your midwifery practice when providing sexual reproductive health care to adolescent girls?" "How can we increase the availability of midwives in ASRH care services?" The researcher also used probing questions to elicit participant experiences, such as: Do you believe ASRH services are a standard part of the midwifery role? "Have you had any memorable encounters with adolescent girls?" "Have you been a midwife for a long time?" or "Can you describe a specific workplace situation that may require the use of ASRH services this weekend?" What kind of specific assistance do you require? " What is your suggestion to scale up midwives services on ASRH " in addition to "please tell me more about midwives services for adolescent girls client in your current facility" (Geraghty et al 2019:e298).

Data management and quality

The following interviews were used to assess the readiness of the digital audio recording tool prior to data collection. The investigators simultaneously recorded the participants' words in order to allow for later verbatim interpretation. To avoid memory loss during data collection, contextual data obtained from each interview was immediately documented in a memo.

3.14 QUALITATIVE DATA ANALYSIS

The main purpose of data analysis is to provide order, structure, and meaning to qualitative data collected (Polit & Beck 2017:742). In this study the researcher used qualitative content analysis to identify themes and patterns and to condense text into smaller units. Content analysis sustained until no new information was found for existing themes. Data collection and analysis continued during the study until saturation was reached (Polit & Beck 2017:742).

The analysis began during the transcription of the interviews, transcribed the audiotaped interviews verbatim and read through the transcriptions several times. The

analysis continued with code, compare, categorize. Coded and analysed the data using the Atlas.ti version 8-computer software program. The data were coded, reviewed, and themes were identified. The researcher constructed notes, codes, and labels for units, as well as illustrative interview extracts. Finally, following several refinements to the analysis, a final consensus on the reported results was reached (Creswell 2011:147).

The data has been analysed. First transcriptions read several times to become acquainted with the data. Following that, meaning units in new readings were marked, compared, and sorted into codes, which were then compared and clustered into subcategories, generic categories, and four main categories. The results were finalised after several analysis refinements ranging from text details to wholeness (Bogren et al 2020:3).

Data analysis, the collected data was evaluated, analysed, and the information was coded. The transcribed words from each interview were reviewed line-by-line and theme-by-theme, with themes being added incrementally as interviews were conducted. The identification of concepts that describe what emerged from the data (Geraghty et al 2019:e298).

The interviews were transcribed, and the content analysis methodology employed an integrated deductive and inductive coding approach to assign meaning to similar concepts (codes) that emerged from the data, as well as to organise the data into major and minor themes to formally document linkages between concepts. Transcripts were first iteratively reviewed with a deductive coding approach to relevant text segments. This process was repeated until there were no new themes emerging. This iterative process was then repeated using an inductive coding approach to identify novel, salient themes that had not previously been reflected. The themes that emerged were organised into a final codebook, which was used to recode all transcripts (Henry, Wood, Moshashane, Ramontshonyana, Amutah, Maleki, Howlett, Brooks, Mussa, Joel & Steenhoff 2021:506).

Preparation for data analysis

Prior to analysis, it is critical to organise the data in hard or electronic copy for easy identification and retrieval. From the beginning of the planning stage, this process

becomes an integral part of the research process. The transcripts (both electronic and hard copy) for experienced midwives were labelled sequentially, with the first as 'p1', the second as 'p2', and so on, according to how the interviews were conducted. When necessary, participants' direct quotations were used to substantiate explanations in themes (Gwatiringa 2020:89).

3.15 TRUSTWORTHINESS OF QUALITATIVE STUDY

The credibility of research is determined by the quality of data collected. The term "trustworthiness" refers to the ability to determine whether data collected during the research process is credible, transferable, dependable, or confirmable. Trustworthiness is defined as "the level of confidence that qualitative researchers have in their data, as measured by strategies such as credibility, dependability, confirmability, and transferability" (Polit & Beck 2017:745). Trustworthiness demonstrates how data interpretations and conclusions reflect the experiences of the participants (Creswell 2011:210; Joubert et al 2014:584). The researcher made certain that the interview followed the research protocol. Data was collected until saturation was achieved. The degree to which findings can be qualitatively confirmed is measured by conformability. Credibility is determined by the standard to which research is conducted, analysed, and presented. The research findings' dependability ensures that they are consistent and repeatable. Transferability refers to the extent to which the research can be applied in other contexts. The researcher went into great detail about the study.

3.15.1 Credibility

The integrity and quality of qualitative research are determined by the criterion of credibility (Polit & Beck 2017:745). By building rapport and trust with the participants, the researcher established credibility in this study (Polit & Beck 2017:745). Credibility in this study, a series of reviews was performed on interview guides. The study compared documents and perspectives from key informants, who were midwives, as well as the investigator's triangulation, qualifications, and experience, and a research process that was also scrutinised by a reviewer and my supervisor. In addition, the findings were reviewed, validated, and confirmed by the researcher's supervisor.

3.15.2 Confirmability

Confirmability is a technique for ensuring that the information provided by participants is accurately represented in the collected data. Confirmability is a criterion for integrity in qualitative research (Polit & Beck 2017:745). The midwives who took part in it confirmed the findings of this study. A supervisor and another expert followed a thorough literature review from the University of South Africa.

3.15.3 Transferability

The ability to generalise data is defined as "transferability" (Polit & Beck 2017:746). The likelihood that the study findings will apply to others in similar situations is referred to as transferability (Polit & Beck 2017:746). The study's transferability was achieved through a thorough analysis of the methodology and a clear description of the study sites. To improve transferability, the researcher indicates the number of participants in the study, inclusion and exclusion criteria, data collection methods, duration and time periods of data collection in this study. In addition, the researcher used mixed-method to ensure transferability.

3.15.4 Dependability

Data dependability refers to the dependability and stability of data over time and conditions (Polit & Beck 2017:748). If the study is repeated in different settings with different participants, the research findings will remain unchanged. The study process and procedures for determining whether were acceptable advised by the researcher's supervisor (Polit & Beck 2017:748). To ensure consistency, the researcher kept his objectivity throughout. The data gathered during the data collection process has been saved for future reference. In this study, the researcher's supervisor reviewed the transcripts to verify dependability. Providing adequate documentation enhanced this study's dependability. The supervisor reviewed the codes and themes, as well as the documentation for all stages of the research process and results. The supervisor approved all the methodology write-up, transcripts, and data analysis outline. A panel of experts assembled by the University of South Africa reviewed the entire study.

3.16 PHASE 3: DEVELOPMENT OF GUIDELINES FOR MIDWIVES' PRACTICES TO IMPROVE ASRH

Development of technical and procedural guidelines for midwives on adolescent girls' sexual and reproductive health care services

The process of developing guidelines adheres to the key steps recommended by WHO (2014a:8). To draft the guidelines, the researcher used the findings from studies in Phases 1, 2, and 3, as well as an extensive review of relevant literature and related guidelines. A group of senior midwives, adolescent sexual and reproductive health experts, and other health professionals first reviewed the draft document to reach agreement on the content and determine its feasibility in the Ethiopian context. The supervisor then reviewed the draft guidelines document.

The second draft guidelines document was then consultation meetings with a group of health professionals comprised of the Ethiopian Ministry of Health (MoH)/Sexual and Reproductive, Maternal, Newborn Adolescent Health and Nutrition (SRMNCAH-N) directorate and Women and Youth directorate; the Ethiopian Midwives Association; Adolescent sexual and reproductive health experts; obstetrician, gynaecologist and others in order to reach consensus. The researcher completed guidelines to implement an integrated approach to AGSRH care services provided by midwives.

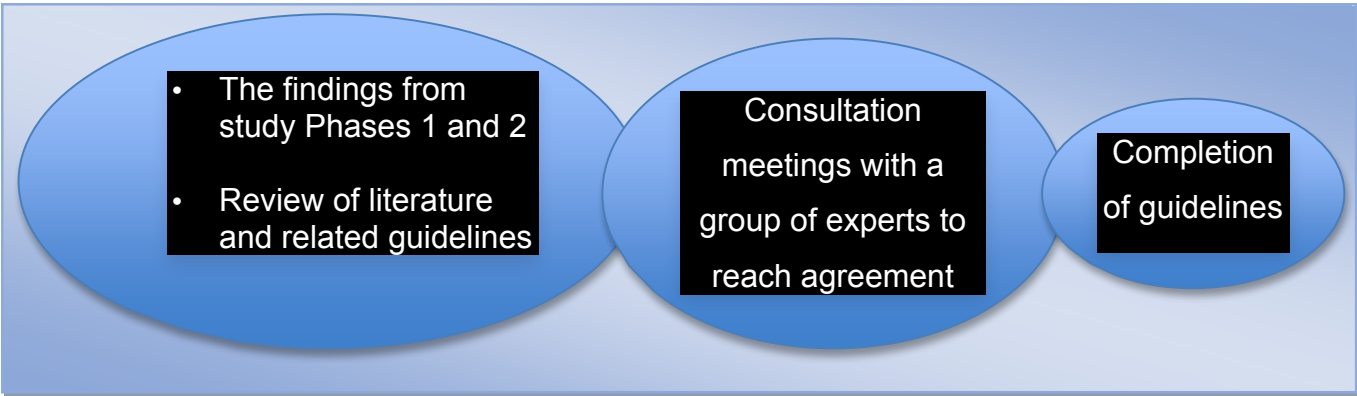


Figure 3.3 Framework for development of guidelines for midwives' practices to improve adolescent girls' sexual reproductive health services

3.17 ETHICAL CONSIDERATIONS

Before data collection, ethical approval and an ethical clearance letter (refer to Annexure 1) was obtained from research and ethics committee of the department of health study at University of South Africa. In addition, ethical clearance was obtained from the Addis Ababa public health research and emergency management core process (refer to Annexure 2) to collect data from hospitals and health centres and for further requires. The section that follows was explained. Consent, confidentiality and anonymity, beneficence and non-maleficence were the ethical principles that guided this study. Midwives who participated in the study were informed about the study's parameters and how they would be participating, and they provided informed consent. Self-administered questionnaires were halted when participants expressed concerns about filling out the information, as well as to ensure that participants felt safe and relaxed in their surroundings. The participants were guaranteed confidentiality and anonymity, as well as a private setting where no one could hear what they were talking about. The researcher did not use any information that could be used to identify the midwives, such as the participants' names or addresses.

3.17.1 Informed consent

Individual participants in epidemiological research, their informed consent should always be sought and preferably recorded in writing (Joubert & Ehrlich 2014:37). Participants who agreed were obtained their written informed consent (refer to Annexure 3) to assurance willingness to participate in the study. The participants' participation in the study was contingent on their consent (verbal and written). The participants were informed of the study's purpose and objectives. They were also told that they could withdraw from the study at any time without explain the reason. Refusing to participate or continue resulted in no loss of personal benefit. Confidentiality was also emphasised in the letter to hospitals and health clinics, as well as the consent form for participants. These concerns were raised during the data collection process and at the start of each self-administered questionnaire. In Annexure 3 copy of the participant's informed consent form is attached.

3.17.2 Confidentiality and anonymity

Several precautions were taken to ensure that the information gathered from participants, including personal information, remained as private as possible. The study design included a coding system that assigned a unique code to each participant (Siriwardhana, Adikari, Jayaweera & Sumathipala 2013:3, 5). Self-introduce, in this study, participants were informed about the study's purpose and that their responses would be kept confidential, as well as that they were free to withdraw from the study. To ensure anonymity all participants were assigned a unique study identity number. To keep confidentiality, the names of participants were not taken or revealed. If you choose to participate in the study, you will remain anonymous and confidential. The participant's name will not be recorded, and the information you provide will be kept strictly confidential and will not be shared with anyone without your permission. This survey is entirely voluntary, and you are free to skip any or all of the questions. However, we hope you will take part in this survey because your participation is important to us (Siriwardhana et al 2013:3).

3.17.3 Beneficence and non-maleficence

Participants in this study were informed that while the study would not directly benefit them, it would help midwives in the future. The information you provide may not be immediately useful to you, but it is critical in informing policymakers and programme designers and stimulating the formulation of appropriate measures to ensure quality in adolescent health care in Addis Ababa. Researchers must take actions that will benefit others or the participants while not injuring or harming any of them. Because the proposed study does not involve any intrusive procedures, if you decide to participate in the research project, you will not suffer any physical or psychological harm. The researcher was considerate, and the participants were assured that their time and information would be used effectively. Findings were disseminated among the study population (Siriwardhana et al 2013:4).

3.18 SUMMARY

The study used mixed methods of data collection, analysis, integration and interpretation of the findings. Quantitative data was collected through a structured self-administered questionnaire with two hospitals and 48 health centre midwives. Data was exported to statistical data analysis computer software programs, STATA version14 for data analysis. Qualitative data was analysed by using transcribed data and entered into the Atlas.ti 8 computer program. Chapter 4 analysis and literature control results presented

CHAPTER 4

DATA ANALYSIS AND INTERPRETATION, AND RESULTS

4.1 INTRODUCTION

The preceding Chapter 3 clarifies the methodology while also clearly defining the phases of this study as quantitative (Phase 1) and qualitative (Phase 2), respectively. In this chapter presents the findings of quantitative and qualitative data analysis, interpretation, and results discussed. The research was carried out in two state hospitals and 48 state health centres in Addis Ababa, Ethiopia's capital. In the following section, the results are presented, with quantitative data analysis discussed first, followed by qualitative data analysis.

4.2 QUANTITATIVE DATA ANALYSIS

The quantitative results are presented according to the objectives and the subheadings of the questionnaire. The self-administered questioners are used to collect data on midwives practice on adolescent girls sexual and reproductive health. A total of 533 completed questionnaires were received out of a total of 558 distributed, resulting in a 96% response rate. Of the respondents, 89% worked in 48 health centres and 11% worked in the two hospitals.

4.2.1 Respondents' practices in the provision of ASRH services

The results are presented under the following sub-headings.

4.2.1.1 Respondents' socio-demographic profile

Of the respondents, 74.3% (n=396) were female. The respondents' ages ranged from 21 to 54 years, with a mean age of 26.5 years (+3.5 years standard deviation). 88.7% (n=473) of respondents were 20-29 years old, and 36.3% (n=19) were over 35 years old. 67.7% (n=361) were unmarried, and 32.3% (n=172) were married. 63.7% (n=338) had a diploma in midwifery, and 36.3% (n=19) had a degree in midwifery (see Table

4.1). The majority of midwives, according to research, are female, young, unmarried, and hold a midwifery diploma. Reflects the fact that the vast majority of midwives are females who are solely concerned with women. As a result of the findings, current midwives have an excellent opportunity to serve adolescent girls of similar sex and age. (Bekru et al 2017:4; Filby, McConville & Portela 2016:9; FMOH, EPHI & AMDD 2016:175; Jonas et al 2016:658).

Table 4.1 Respondents' socio-demographic profiles in the provision of ASRH services in Addis Ababa, Ethiopia

Variables	Adolescent sexual reproductive health care services			
	Provided	Not provided	Total N=533 (%)	P-value
Sex				
Male	35	102	137 (25.7)	<0.02*
Female	67	329	396 (74.3)	
Age group				
20-29	31	442	473(88.7)	<0.049*
30-39	8	52	60(11.3)	
Marital status				
Unmarried	20	339	359(67.6)	<0.04*
Married	18	154	172(32.4)	

*Statistically significant

Females had fewer BSc in midwifery than males. According to Table 4.2, 68.2% (n=268) of the 394 female respondents had a diploma in midwifery and 32.0% (n=126) had a BSc in midwifery.

Table 4.2 Gender and qualification of respondents in Addis Ababa, Ethiopia

Variables	Diploma in midwifery	BSc and above in midwifery	Total N=533 (%)	P-value
Sex				
Male	70	67	137(25.8)	P<0.0001*
Female	268	126	394(74.2)	

*Statistically significant

4.2.1.2 Respondents' work experience

The respondents' work experiences included providing reproductive health care services over the weekend/night, performing procedures, having a positive intention,

being competent, and having their first facility work experience in providing SRH care services to adolescent girls.

4.2.1.2.1 Respondents on SRH services for adolescents girls

Of the respondents, 15.4% (n=82) provided information and counselling; 22.7% (n=121) comprehensive abortion care; 36.4% (n=194) diagnosis and treatment for STIs/HIV; and 40.2% (n=214) contraceptive services; and a majority (90.6% or n=480) provided a variety of services, including intrapartum care, as part of SRH services to adolescent girls (see Figure 4.1). In this study, a small number of midwives provided adolescent girls with information and counselling, as well as contraceptive services, comprehensive abortion care, and STI/HIV diagnosis and treatment. In this regard, midwives' practices have little impact on the provision of SRH services to adolescent girls. Because midwives are underutilised, adolescent girls are denied access to them. Overall, the findings of the study indicate that midwives' practices regarding adolescent girls' sexual and reproductive health should be expanded in a variety of settings, including health centres and hospitals, in accordance with global and national midwifery standards, as well as a minimum services package.

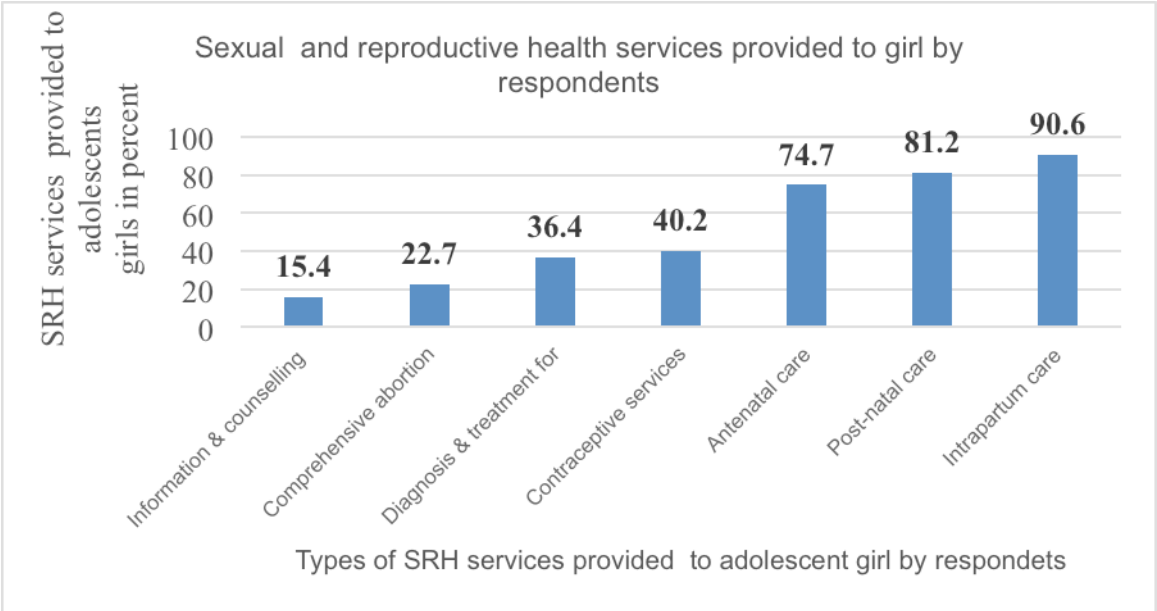


Figure 4.1 Respondents on SRH services provided for adolescent girls

4.2.1.2.2 Respondents' provision of SRH services to adolescent girls during the weekend/night duty

5.4% (n=29) provided information and counselling services; 18.4% (n=98) provided contraceptive services; 14.8% (n=79) provided comprehensive abortion care; 12.4% (n=66) provided STI/HIV diagnosis and treatment; 16.0% (n=85) provided antenatal care; and a majority (90.6% or n=480) provided a variety of services, including intrapartum care during labour (see Figure 4.2). Ethiopia MoH standard and minimum services package on adolescent and youth health in facility characteristics states that all health facilities are with convenient working hours, flexible appointment procedures possibility of consultation with or without an appointment. Service providers offer consultations during all hours, preferably 24hour /7days, minimum waiting time and procedures must have adolescent friendly environment (FMoH 2017:11). However, midwives provided services during weekend/ duty hours, 5.4% were provided adolescents sexual reproductive health care services, 18.4% were contraceptive, 14.8% comprehensive abortion care, 12.4% diagnosis treatment for sexually transmitted infections and 16% human immune deficiency virus. Midwives are underutilised in SRH services and do not serve adolescent girls. Despite the fact that midwives are available 24 hours a day, seven days a week, adolescent girls receive almost no information and counselling, comprehensive abortion care, STI/HIV diagnosis and treatment, and contraceptive services from midwives on weekends and at night.

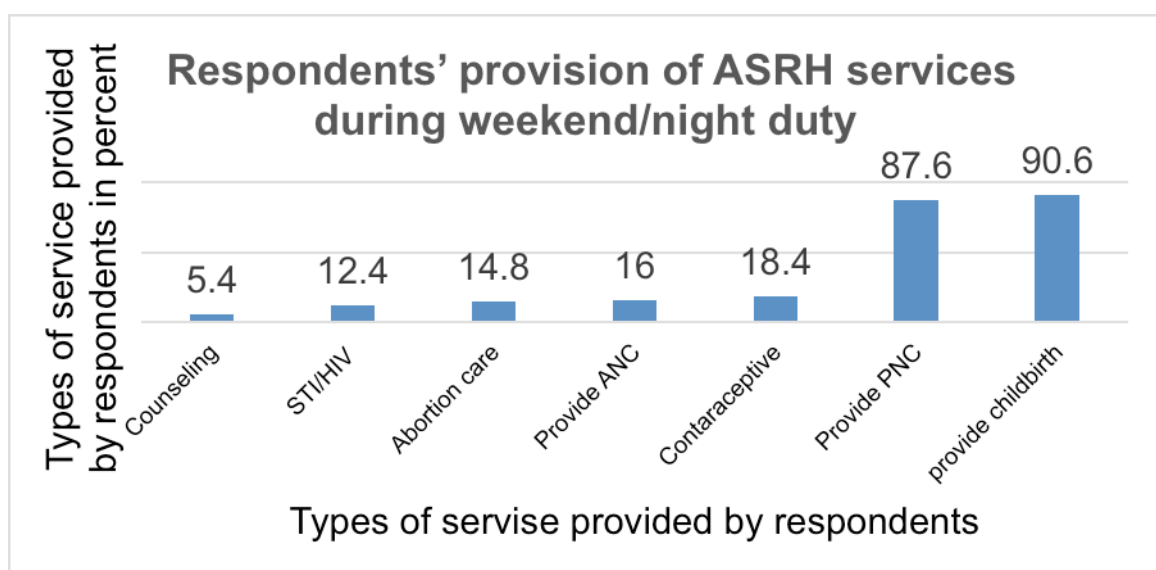


Figure 4.2 Respondents' provision of ASRH services during weekend/night duty

4.2.1.2.3 Respondents' provision of procedures in ASRH services

Of the respondents, 23.8% (n=127) inserted intrauterine devices; 30.2% (n=161) implanted; 16.1% (n=86) performed manual vacuum aspiration; 12.1% (n=64) administered abortion medication; and 37.0% (n=197) provided STIs/HIV care and treatment (see Figure 4.3). Manual vacuum aspiration and abortion medication are among the core competencies of midwives. However, abortion care was performed by a very small number of midwives in this study. Abortion procedures are regarded as a core competency in the field of midwifery. Midwives can perform abortions using either a medical vacuum aspirator or a manual vacuum aspirator. The option appears to be feasible and is already in use in resource-constrained environments such as Ethiopia (FMoH 2014b: 26; WHO 2015b: 33, 37; WHO 2018b: 19).

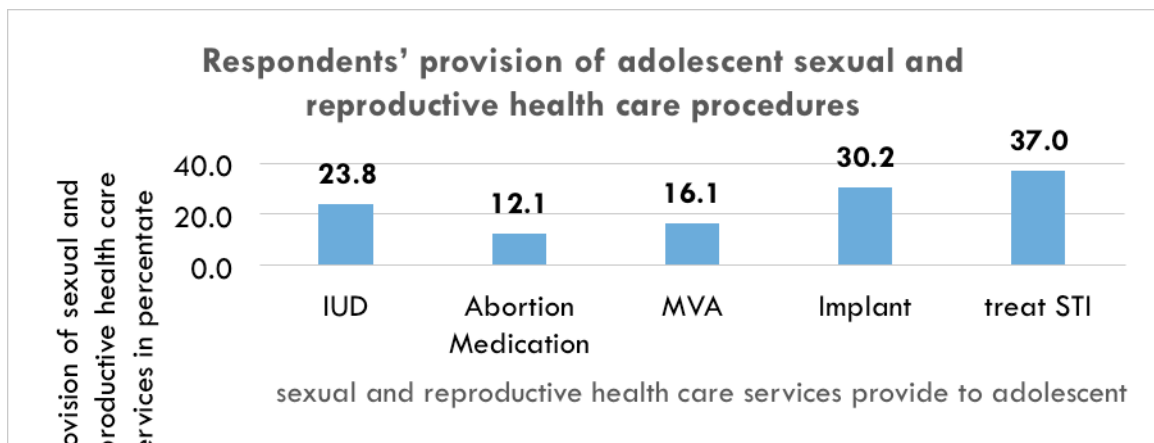


Figure 4.3 Respondents' provision of SRH care procedures for adolescent girls

4.2.1.2.4 Respondents' positive intention to provide SRH for adolescent girls

Of the respondents, 44.9% (n=235) indicated a positive intention to provide a few comprehensive abortion services, whereas the majority (93.4% or n=498) indicated a positive intention to provide a variety of services, including contraceptive services, as part of ASRH (see Figure 4.4). Few respondents in this study expressed a desire to provide comprehensive abortion services. A South African study found that the more confident midwives are, the more likely they are to provide services to adolescent girls (Jonas et al 2016:658). An Ethiopian study found that pre-service midwifery students never performed or practiced manual vacuum aspiration, making it the least learned and practiced skill (Carr 2016:185).

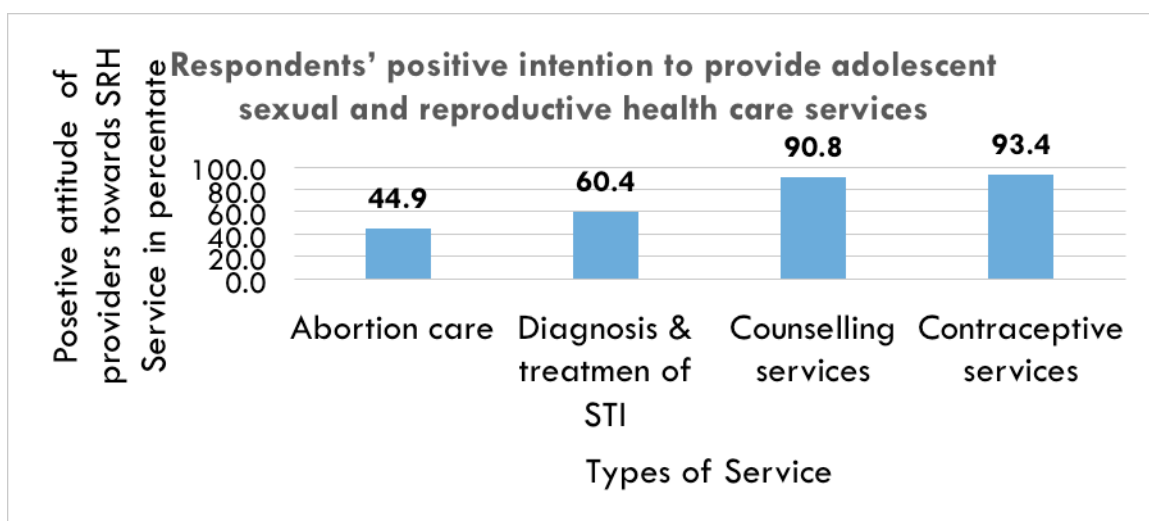


Figure 4.4 Positive intentions of respondents to provide ASRH services

4.2.1.2.5 Respondents' confidence in AGSRH care services provision

Regarding respondents' competency in providing AGSRH services, 37.7% (n=200) indicated confidence in contraceptive services, while the majority (98.7% or n=524) indicated confidence in a variety of services, including intrapartum care as part of ASRH (see Figure 4.5).

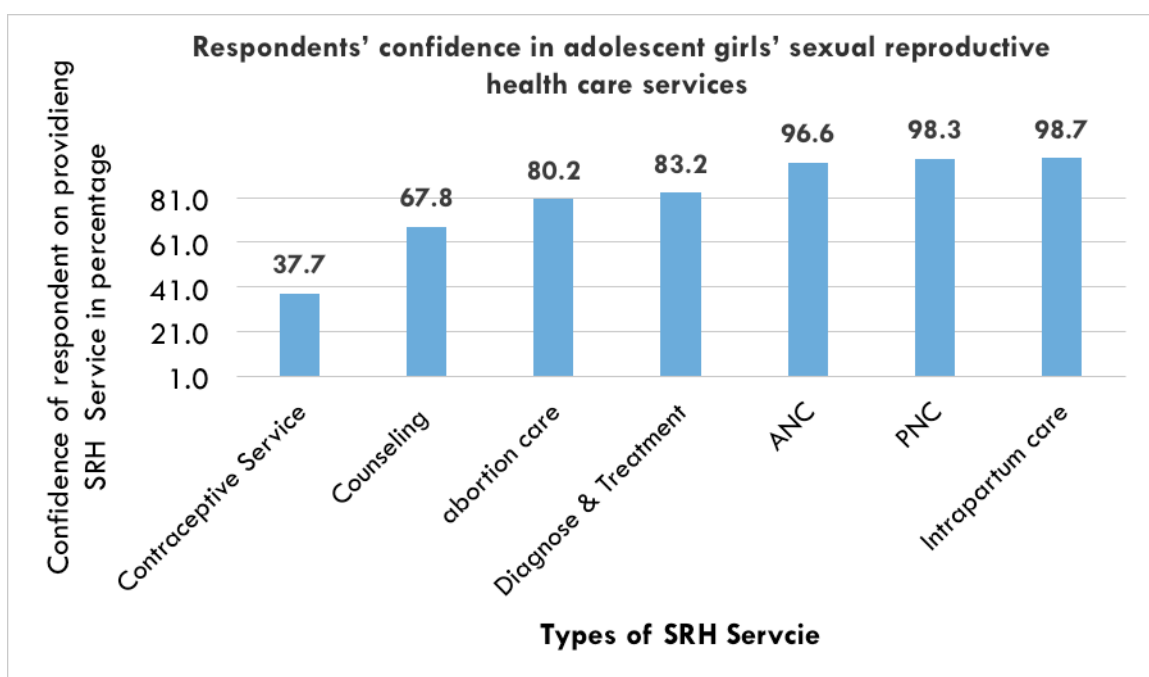


Figure 4.5 Respondents' confidence in ASRH services

4.2.1.2.6 The educational and work backgrounds of respondents in ASRH services

When asked about the first facility where they worked as midwives, 84.6% (n=451) said it was a health centre, while 15.0% (n=80) said it was a hospital, which helped midwives provide ASRH services (see Table 4.3). In this study, education in midwifery, whether from a university or a health science college, as well as service Years of experience as a midwife have yielded no improvement in sexual reproductive health services for adolescent girls. Midwives with health centre work experience, on the other hand, provide better care to adolescent girls.

Table 4.3 Educational and work backgrounds of respondents in ASRH services in Addis Ababa, Ethiopia

Adolescent sexual and reproductive health care services				
Variables	Provided	Not provided	Total N=533 (%)	P-value
Midwifery institution attended				
University	61	96	157 (29.5)	0.28
Health science college	165	211	376 (70.5)	
First facility of work as a midwife				
Health centre	202	249	451 (84.6)	0.02*
Hospital	24	56	80 (15.0)	
Years' service as a midwife				
1-3 years	103	138	241 (48.3)	0.89
4-6 years	84	123	207 (41.5)	
7-9 years	13	14	27 (5.4)	
10 years or longer	10	14	24 (4.8)	

*Statistically significant

4.2.1.3 Respondents' competency

The study looked at respondents' confidence in providing SRH services to adolescent girls as well as their competency in providing SRH care services to adolescent girls.

4.2.1.3.1 Respondents' confidence in providing SRH services to adolescent girls

Of the respondents, 27.6% (n=147) expressed confidence in providing CAC, 50.0% (n=266) in providing STI/HIV services, and 54.2% (n=289) in providing contraceptive services (see Figure 4.6). In this study midwives are not fully practicing their competence on adolescent girls sexual and reproductive health care services within their scope. Midwives express against-abortion sentiments, causing a conflict between personal morality and the professional duty to provide quality abortion care. Moral and duty conflicts appeared to have a negative impact on the quality of care provided to women seeking care as a result of complications from induced abortion. Midwives should be able to care for all women, even if they are opposed to abortion, The midwives believed they were gaining valuable midwifery skills and, as a result, confidence in their abilities. (Cleeve, Nalwadda, Zadik, Sterner & Klingberg-Allvin 2019:74).

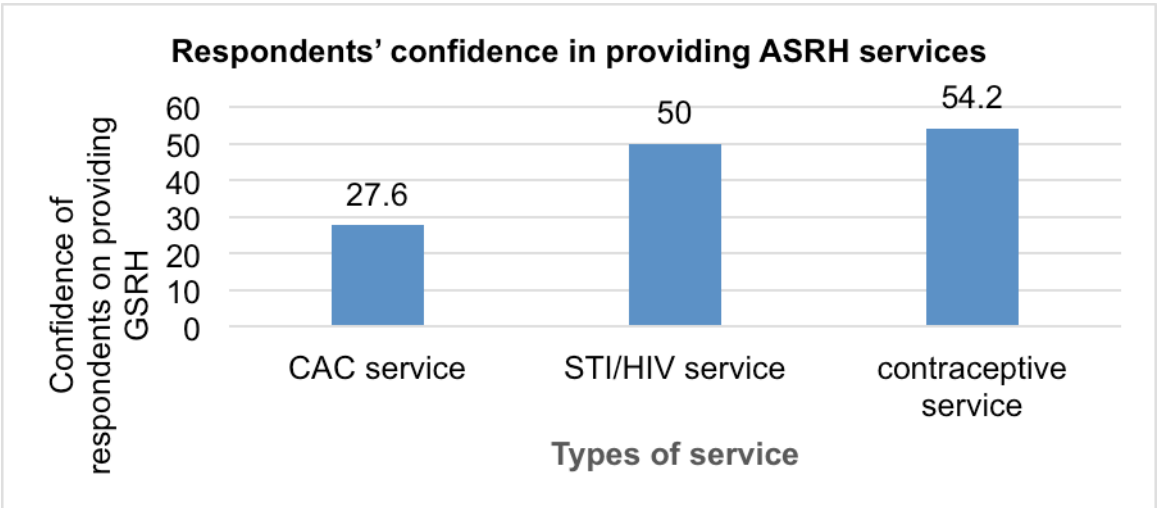


Figure 4.6 Respondents' confidence in providing AGSRH services

4.2.1.3.2 Respondents' level of competence in AGSRH services provision

Of the respondents, 37.7% (n=200) felt confident in providing contraceptive counselling and services; 67.8% (n=360) felt confident in providing ASRH information and counselling; and the majority (83.2% or n=442) felt confident in providing STI diagnosis and treatment and HIV services for ASRH services (see Table 4.4). The majority of midwives provide both intrapartum and postpartum care, and the level of trust in the provision of intrapartum and post-natal care services was high. However, this does not contribute to the improvement of sexual and reproductive health services for adolescent girls, indicating that midwives should provide sexual and reproductive health services to adolescent girls, which will necessitate additional support. There was a significant

relationship between FP self-efficacy and intentions to provide FP services. This positive correlation indicates that the more confident the nurse-midwives are in providing FP services to adolescents, the more likely they are to provide FP services to adolescents. Nurses' and midwives' intentions to provide MCH services to adolescents were related to years of experience and a higher level of confidence in providing MCH services. MCH self-efficacy was related to providing MCH services to adolescents (Jonas et al 2016:658).

Table 4.4 Respondents' level of confidence in the provision of SRH Services to adolescents in Addis Ababa, Ethiopia

Variables	Adolescent sexual reproductive health care services			P-value
	Provided	Not provided	Total N=531 (%)	
Level of confidence in provision of information and counselling				
Confident	65	295	360 (67.8)	0.02*
Not confident	17	154	171 (32.2)	
Level of confidence in provision of contraception counselling and provision				
Confident	101	99	200 (37.7)	<0.001*
Not confident	113	218	331 (62.3)	
Level of confidence in provision of comprehensive abortion care				
Confident	104	322	426 (80.2)	0.02*
Not confident	17	88	105 (19.8)	
Level of confidence in provision of diagnosis and treatment for STI and HIV				
Confident	198	244	442 (83.2)	<0.000*
Not confident	17	72	89 (16.8)	
Level of confidence in provision of antenatal care				
Confident	388	125	513 (96.6)	0.003*
Not confident	8	10	18 (3.4)	
Level of confidence in provision of intrapartum care services				
Confident	471	53	524 (98.7)	0.36
Not confident	7	0	7 (1.3)	
Level of confidence in provision of post-natal care services				
Confident	424	98	522 (98.3)	0.79
Not confident	7	2	9 (1.7)	

*Statistically significant

4.2.1.4 Respondents' working environment

Respondents were asked to indicate their working environment under the following subheadings: type of health facility currently working at, shift/duty work, availability of contraceptive methods in the last six months, availability of contraceptive methods

during night/weekend duty hours, number of midwives on night/weekend duty per day, and if and how they would like to see the working situation change.

4.2.1.4.1 Respondents' working environments under various subheadings

According to the respondents' current type of health facility, 89.1% (n=473) worked in health centres, while 10.9% (n=58) worked in hospitals. Respondents' shift/duty work, 94.0% (n=501) said they worked day, night, and weekend shifts. According to the number of midwives on night/weekend duty reported by respondents, 80.9% (n=431) reported two midwives on night/weekend duty in their health centres and 9.8% (n=52) reported six midwives on night/weekend duty in their hospitals. 7.2% (n=38) indicated that capacity building training should be provided, and 15.4% (n=82) indicated that they would like to see more staff and less workload in the work environment (see Table 4.5). Working hours: In this study, midwives who work on weekends and holidays have an advantage when working with adolescent girls. The majority of midwives reported working full-time and shift work throughout the week. The majority of them worked night shifts, weekends, and holidays (other than Monday through Friday office hours) (Taylor, Cross-Sudworth, Goodwin, Kenyon & MacArthur 2019:130).

Table 4.5 Respondents' working environment in Addis Ababa, Ethiopia

Variables	Adolescent sexual reproductive health care services			
	Provided	Not provided	Total N=533 (%)	P-value
Type of health facility currently working				
Hospital	7	51	58 (10.9)	0.001*
Health centre	218	255	473 (89.1)	
Number of health facilities you have worked in the past 3 years				
1	184	241	425 (79.7)	0.52
2 or more	42	54	92 (17.3)	
Shift/duty				
Day shift	6	4	10 (1.9)	0.03*
Night shift	5	0	5 (0.9)	
Day and night shift	5	8	13 (2.4)	
Day and weekend shift	0	4	4 (0.8)	
Day, night and weekend shift	210	291	501 (94.0)	
Availability of contraceptives methods for the last 6 months				
Implants				
Yes	171	159	330 (61.9)	0.001*
No	55	148	203 (38.1)	
Intrauterine devices (IUDs)				
Yes	165	171	336 (63.0)	0.001*
No	61	136	197 (37.0)	

Emergency contraceptive				
Yes	132	128	260 (48.8)	0.001*
No	94	179	273 (51.2)	
Availability of contraceptives methods at night/weekend				
Implants				
Yes	37	30	67 (12.6)	0.02*
No	189	277	466 (87.4)	
Emergency contraceptives				
Yes	54	47	101 (19.0)	0.01*
No	172	260	432 (81.0)	
Number of midwives on night /weekend duty per day				
1	3	7	10 (1.9)	0.001*
2	203	228	431 (80.9)	
3	13	23	36 (6.8)	
6	7	45	52 (9.8)	
Like to see improved in working situation				
Capacity building/Training				
Yes	21	17	38 (7.2)	0.001*
No	385	108	493 (92.8)	
Less workload (more staff)				
Yes	15	67	82 (15.4)	0.009*
No	147	302	449 (84.6)	

*Statistically significant

4.2.1.5 Respondents' development

The results of the respondents' development are presented under the following sub-headings: available guideline on adolescent sexual reproductive health care services, technical support or supervision from external body in the last 3 months, and in-service training during the last 12 months on providing adolescent girls' SRH care services.

4.2.1.5.1 Respondents' available guidelines on ASRH care services

Respondents were asked what guidelines on SRH services for adolescents were available, 40.3% (n=215) indicated that guidelines on family planning were available; 26.5% (n=141) indicated guidelines on comprehensive abortion care, and 66.4% (n=354) indicated guidelines on standard of midwives' care practices (see Table 4.6). Despite the fact that a guideline on sexual reproductive health was an important tool in this study, access to the guideline was limited to midwives. Midwives stated that they had difficulty gaining access, were unaware, and followed the guidelines (Sampurna, Ratnasari, Etika, Hulzebos, Dijk, Bos & Sauer 2018:3).

4.2.1.5.2 *Respondents' technical support or supervision from external body in the last year*

Respondents were asked whether they had received technical support or supervision over the last 3 or 12 months, 35.5% (n=189) indicated that they had in the last 3 months; 22.7% (n=121) had in the last 12 months; 16.5% (n=88) had long ago, and 25.3% (n=135) had no support or supervision received (see Table 4.6).

Table 4.6 Development of respondents in the provision of ASRH services in Addis Ababa, Ethiopia

Variables	Adolescent sexual and reproductive health care services			P-value
	Provided	Not provided	Total N=533 (%)	
Available guidelines on adolescent sexual and reproductive health care services				
Guideline on family planning				
Yes	116	99	215 (40.3)	<0.0001*
No	110	208	318 (59.7)	
Guideline on comprehensive abortion care				
Yes	75	66	141 (26.5)	0.003*
No	151	241	392 (73.6)	
Standard of midwives' care practice				
Yes	162	192	354 (66.4)	0.03*
No	64	115	179 (33.6)	
Received technical support or supervision from external body in the last year				
Yes, in the last 3 months	80	109	189 (35.5)	0.001*
Yes, in the last 12 months	61	60	121 (22.7)	
Yes, but long ago	46	42	88 (16.5)	
No support or supervision	39	96	135 (25.3)	

*Statistically significant

4.2.1.5.3 *Respondents received in-service training in adolescent SRH services provision over the previous 12 months*

The respondents were asked if they had received in-service training in the previous 12 months. Of the respondents who provided ASRH care services, 22.0% (n=18) had received in-service training on ASRH services; 29.0% (n=24) on family planning; 16.0% (n=30) on comprehensive abortion care; 22.0% (n=51) on STI diagnosis and treatment;

42.0% (n=96) on diagnosis and treatment of HIV, and 25.0% (n=21) on related to adolescent SRH care services provision; and 44.0% (n=101) had received BEmONC in-services training (see Table 4.7). A limited number of midwives were trained in this study. Provider discomfort: the most common reason for not providing long-acting reversible contraception (LARC) was a lack of insertion training or comfort with inserting LARC devices, as well as misconceptions about the safety of LARC for adolescents (Brittain, Tevendale, Mueller, Kulkarni, Middleton, Garrison, Read-Wahidi & Koumans 2020:623).

Table 4.7 In-service training in the provision of ASRH services received by respondents in the last 12 months in Addis Ababa, Ethiopia

Variables	Adolescent sexual reproductive health care services			P-value
	Provided	Not provided	Total N=533 (%)	
In-service training during the last 12 months				
Adolescent sexual and reproductive health services				
Yes	18	34	52 (9.8)	<0.001*
No	64	417	481 (90.2)	
Family planning services				
Yes	80	46	126 (23.6)	<0.0001*
No	146	261	407 (76.4)	
Comprehensive abortion care				
Yes	38	22	60 (11.3)	0.001*
No	188	285	473 (88.7)	
Diagnosis and treatment of STI				
Yes	51	35	86 (16.1)	0.001*
No	175	272	447 (83.9)	
Diagnosis and treatment of human immune deficiency virus (HIV)				
Yes	96	93	189 (35.5)	0.004*
No	130	214	344 (64.5)	
BEmONC training				
Yes	101	116	217 (40.7)	0.11
No	125	191	316 (59.3)	
Training received in relation to adolescent sexual and reproductive health services				
Yes	21	43	64 (12.1)	<0.001*
No	61	406	467 (88.0)	

*Statistically significant

4.2.2 Bivariate and multivariable analysis of respondents' practices

The identified factors that influenced respondents' practices in providing ASRH services were measured. A bivariate and multivariable analysis of respondents who provided

ASRH care services was performed with a 95% confidence interval (CI) to identify factors that were significantly associated with respondents' practices in adolescent SRH services.

The results of bivariate and multivariable analysis are presented under the following sub-headings: bivariate analysis of respondents' midwives' practices in provided ASRH services provision and multivariable analysis on respondents' practices in ASRH service provision.

4.2.2.1 Bivariate analysis of respondents' practices in ASRH services provision

A bivariate analysis was done to identify factors that had a statistically significant association with the dependent variable of the respondent's practices in the provision of ASRH services using a 95% confidence interval (CI). The study found that the type of health facility; level of confidence in providing information and counselling for adolescent girls; level of confidence in FP services; availability of contraceptive implants and guidelines on FP services; and training on family planning services were statistically significantly associated with the respondents' practices in ASRH care services.

The study found that the respondents who worked in the health centres (COR=6.3 (95% CI, 2.8-14.1)) had confidence in the provision of information and counselling for adolescent girls (COR=1.7 (95% CI 1.2-2.5)), and confidence in the provision of contraceptive counselling services (COR=1.9 (95% CI 1.3-2.4)) and were more likely to provide ASRH services than those who worked in hospitals. Furthermore, the respondents who reported the availability of family planning guidelines (COR=2.2 (95% CI, 1.5-3.2)), and availability of implant contraceptives (COR=2.9 (95% CI, 2.0-4.2)), and were trained in family planning service (COR=3.1 with 95% CI, 2.0-4.7)) were more likely to provide ASRH services compared to their counterparts who did not (see Table 4.8).

4.2.2.2 Multivariable analysis of respondents' practices in ASRH services provision

A multivariate analysis using logistic regression was done to predict respondents' practices in the provision of ASRH services. The respondents' level of confidence in

contraceptive services provision, the availability of family planning guidelines, availability of contraceptive implants, and training in family planning services had a statistically significant association with the respondents' practices in adolescents' SRH care services provision.

The study found that the level of confidence of the respondents (AOR=1.7 (95% CI, 1.0-2.9)) was more confident in providing contraception counselling and services that were more likely to provide ASRH care. Add-on, respondents who reported accessibility of family planning guidelines (AOR=2.1 (95% CI, 1.2-3.4)) and availability of contraceptive implants (AOR=2.2 (95% CI, 1.2-4.1)) and were trained in family planning services (AOR =3.3 (95% CI, 1.7-6.7)) were possible to provide ASRH services (see Table 4.8).

Table 4.8 Bivariate and multivariable analysis of factors in respondents' practice in ASRH services provision in Addis Ababa, Ethiopia

Variables	Categories	Adolescent sexual reproductive health care services		Bivariate model	Multivariable model
		Provided	Not provided	Unadjusted OR 95% CI	Adjusted OR 95% CI
Type of health facility currently working	Hospitals	7	51	1	1
	Health centres	218	255	6.3 (2.8-14.1)	1.63 (0.54-4.9)
Level of confidence in information and counselling provision	Confident	65	295	1.7 (1.2-2.5)	1.75 (0.94-3.2)
	Not confident	17	154	1	1
Level of confidence in contraceptive services provision	Confident	101	99	1.9 (1.3-2.4)	1.69 (1.0-2.9)
	Not confident	113	218	1	1
Available guideline on family planning	Yes	116	99	2.2 (1.5-3.2)	2.06 (1.24-3.4)
	No	110	208	1	1
Available contraceptive implants	Yes	171	159	2.9 (2.0-4.2)	2.19 (1.19-4.0)
	No	55	148	1	1
Trained in family planning services	Yes	80	46	3.1 (2.0-4.7)	3.33 (1.65-6.7)
	No	146	261	1	1

4.3 QUALITATIVE DATA ANALYSIS AND RESULTS

The third objective was to explore the respondents' provision of adolescent girls' SRH services. The researcher wished to develop guidelines on midwives' practices to improve AGSRH outcomes.

Data collected from 12 experienced respondents in face-to-face interviews, which were audio-recorded, transcribed and analysed. The respondents shared their work experience, views, challenges, and suggestions on how to improve ASRH services provision.

Four themes emerged from the data, namely the respondents':

- Experience in adolescents' SRH care context
- Opinions/views
- Challenges in practices of ASRH service provision
- Suggestions to improve midwives' practices in ASRH service provision

The results are presented under the following sub-headings:

Respondents' socio-demographic profile

Theme 1: Respondents' experiences in ASRH services provision

Theme 2: Respondents' opinions and views

Theme 3: Respondents' challenges in practices of ASRH service provision

Theme 4: Respondents' suggestions for the improvement of practice in AGSRH services provision.

4.3.1 Respondents' socio-demographic profile

Age, sex, marital status, education, work experience, and workplace of respondents covered under socio-demographic profile (see Table 4.9).

Table 4.9 Socio-demographic profile of respondents in Addis Ababa, Ethiopia

Respondent	Age/ Years	Gender	Marital status	Education	Experience /years	Workplace
1	42	Female	Married	Master's degree in midwifery	20	Health Centre
2	44	Female	Married	BSc in midwifery	27	Hospital
3	50	Female	Married	Master's degree in midwifery	28	AARHB
4	51	Female	Married	Master's degree in midwifery	28	H/S College
5	51	Female	Married	Master's degree in midwifery	28	H/S College
6	50	Female	Married	Master's degree in midwifery	32	University
7	50	Female	Married	Master's degree in midwifery	30	H/S College
8	35	Female	Married	BSc in midwifery	14	Health Centre
9	32	Female	Married	Master's degree in midwifery	10	University
10	53	Female	Married	BSc in midwifery	34	Health Centre
11	53	Female	Married	BSc in midwifery	34	Health Centre
12	60	Female	Married	Master's degree in midwifery	40	H/S College

Key: AARHB = Addis Ababa administrative regional health bureau

H/S = Health Science

The respondents were aged between 32 and 60 years old, with a mean age of 47.3 years; had a BSc or Master's degree in Midwifery; had between 10 and 40 years' working experience, and worked in health centres, hospitals, universities, health science colleges, and the Addis Ababa Administrative Regional Health Bureau (AARHB) (see Table 4.9).

4.3.2 Theme 1: Respondents' experience in ASRH services provision

The respondents' experience in ASRH service provision included health education and counselling; contraceptive counselling and provision; comprehensive abortion care; STI/HIV diagnosis and treatment; antenatal, intrapartum and PNC.

4.3.2.1 Respondents' experience in health education

The respondents stated that they had provided health education in high schools. According to respondents,

“I was providing mass health education in schools on the topics of puberty, how to prevent unintended pregnancy and its complications, and prevention of STI/HIV, provide guidance and advice if any problem happened, contact health centre.” (P8)

“Most of the health education provided in school was focused on pregnancy prevention, the consequences of sex before marriage, and sexually transmitted infections/human immunodeficiency virus prevention.” (P12)

Taking adolescent sexual and reproductive health services to where adolescents live from primary to university levels improves negotiating skills, acceptance and increases service use (Denno Hoopes & Chandra-Mouli 2015).

“Midwife instructors should provide advice on prevention and not expose student midwives without knowledge of reproductive health issues. Student midwives should know how to protect themselves and if they start sexual contact, they should use the contraceptive methods.” (P7)

Hakansson, Oguttu, Gemzell-Danielsson and Makenzius (2018) describe adolescent-friendly services that are considered important for increasing compliance with contraceptive methods counselling and abortion services. It also decreases psychological stress and helps guide adolescent girls through their choices. The sexual reproductive health service providers should emphasis giving correct information, counselling and acting as non-judgemental counsellors rather than decision makers.

4.3.2.2 Respondents' experience in contraception counselling and services

The respondents advised adolescent girls about different methods, dual protection with condoms to protect them from pregnancy and STI/HIV, provided contraceptive services of their choice. Some of the respondents indicated that it was better than before and

adolescent girls came to health facilities for contraceptive services and started using long-acting contraceptive methods. According to respondents,

“Midwives continuously provide health education on short- and long-acting contraception counselling. Still, contraceptives services must be non-judgmentally provided for married adolescents’ girls.” (P4)

In the UK, McCance and Cameron (2014:182) found that midwives provided teenagers with targeted contraceptive advice. A study in Ethiopia found that most midwives were willing to provide contraception counselling and services to unmarried adolescent girls who requested contraception with confidentiality (Burrowes, Holcombe, Jara, Carter & Smith 2017:263).

“I remember one case when I was working in a health centre during a weekend. A girl came to me very stressed because after sexual contact the condom was left inside her body. I removed the condom from her vagina, provided contraceptive counselling, inserted an intrauterine device, and provided her with condoms as dual protection.” (P1)

A study done in Sweden shows that midwives provided counselling about the advantages and disadvantages of different contraceptive methods to girls and women. Long-acting contraceptive methods were considered to be safe contraceptive methods. Such as the intrauterine device and the implant (Hoglund & Larsson 2019).

“Midwives provided contraception counselling and services including long-acting methods. Midwives are to insert intrauterine contraceptive devices and implants since they are the only trained providers.” (P9)

In Nigeria, Alalayande, Bello-Garko, Nuhu, and Somefun, (2018) express nurse/midwives agreed to provide implants to unmarried adolescents, rather than advise them against premarital sex. On the other hand, they did not agree to give condoms, pills and injectables to unmarried teenagers, but advised them on how to manage their sexual urges.

In Ghana, girls believed that contraceptive use at too young an age could lead to delayed getting pregnant, childbearing or infertility. Girls/women believed that they

lacked specific knowledge about how methods work or how they are supposed to be used (Hindin, McGough & Adanu 2014).

4.3.2.3 Respondents' experience in comprehensive abortion care services

The respondents referred to their experiences in abortion care complications and deaths. Hospitals have a septic room for post-abortion care and hospital midwives provide post-abortion care including counselling on post-abortion contraceptive services. Most abortion clients were young students who were not married, but some married women also came. According to respondents,

“Midwives provided counselling for abortion clients to give birth not attempt to have an abortion. Nevertheless, they come to health facilities with septic incomplete abortion cases. Post-abortion cases were high from Friday night up to Sunday night. Midwives provided post-abortion care day and night.” (P6)

“Midwives provided comprehensive abortion care, including second trimester abortion by medically induced abortion care. Second trimester abortions and repeat cases were more common among adolescent girls”. (P9)

This was consistent with study done in Ethiopia, where midwives struggled with providing contraceptive services to unmarried adolescents (Burrowes et al 2017:8).

According to Oppong-Darko, Amponsa-Achiano and Darj (2017), the use of misoprostol, normally used for postpartum haemorrhages, was known and used illegally for the termination of pregnancy. A pregnant girl attempted an unsafe abortion outside health facility settings. Midwives are ready to help in case of incomplete abortions and miscarriage complications.

“At that time abortion care services were not provided in health centres. After liberalisation of the abortion law, midwives provided abortion care at health centres according to the law.” (P11)

According to Tarr-Attia, Boiwu and Martnez-Pérez, (2019:4), some young women in Liberia have inserted intra vaginally cassava, chalk, and local herbs such as 'rocket-propelled grenade' to provoke an abortion. Midwives report having attended women

who had died due to sepsis secondary to this intra vaginal insertion for abortion practices.

“Most abortion cases come from far, out of catchment areas. There were clients from different areas due to a desire for confidentiality and not wanting to be seen by their family or relatives. Midwives did not provide post-abortion contraceptives services, but after counselling connected clients for family planning services.”
(P9)

Because of privacy concerns, adolescents in South Africa were embarrassed to be seen at clinics and preferred consulting health facilities outside their catchment areas, where they were unknown (Nkosi et al 2019:207).

4.3.2.4 Respondents’ experience in antenatal care, intrapartum and PNC services

The respondents’ experience included working in delivery rooms and postnatal wards, managing labour and delivery for women and adolescents, working on rotation in antenatal, intrapartum and postnatal care, and providing services for adolescent girls mainly due to complications from labour and delivery. According to respondents,

“Even during midwifery education, instructors teach student midwives more about maternal and children health; their focus was on antenatal, delivery and postnatal care.” (P5)

Connor, Edvardsson and Spelten (2018) clarify in Victoria, the health professionals in particular were quite adamant that the girls, whether seeking pregnancy prevention advise or care during pregnancy, was their client therefore, putting all the focus and supports for health professionals was on the girls.

“One adolescent girl with her mother came in the complaint of abdominal pain. In the assessment the girl found to be in labour pain. I said ‘it is okay, she is having labour pains’. Her mother didn’t know she was pregnant and she felt very sad. Finally, the adolescent girl delivered normally and stayed a long time in the health facility until her mother arranged a home with another family member.” (P7)

According to Tarr-Attia et al (2019:4), some young women in Liberia have inserted intra vaginally cassava, chalk, and local herbs such as 'rocket-propelled grenade' to provoke an abortion. Midwives report having attended women who had died due to sepsis secondary to this intra vaginal insertion for abortion practices.

Fullerton, Gherissi et al (2011) explain that professional midwifery of fully qualified midwives is a preferred cadre of skilled birth attendants to promote and strengthen women's health service provision. According to Li, Lu and Hou (2018), midwives working in hospitals and other maternity services are mainly in charge of providing care for mothers and infants during the whole process of childbirth

4.3.2.5 Respondents' experience in sexually-transmitted infections/HIV services

The respondents' experienced in providing STI/HIV counselling and testing for pregnant girls during antenatal care. Health centres midwives provide syndromic management of STIs. According to respondents,

“Adolescent girls are one of the target groups and also included in the guideline on prevention of mother-to-child transmission as the first prong. There were cases of adolescent girls at the age of 15 and who were orphans and positive since their parents were also positive for human immune deficiency virus, counselled and put-on treatments.” (P3)

“Midwives provide health education on communicable diseases, like sexually-transmitted infections, and other services for females by using outreach, most of which were youngsters. Midwives provide advice that if they see any sign of disease they should come as early as they can, at that time there was no condom to prevent sexually transmitted infections.” (P12)

“Midwives involved in school health provide health education on sexually transmitted infection/human immunodeficiency virus prevention and testing for adolescent girls.” (P7)

In Cape Town, South Africa, health care providers provided STIs/HIV services for adolescent girls to reduce the high infection rates (Jonas et al 2018:7). Health providers provide out-of-facility sexual reproductive health education and services to adolescents

by means of messages reflecting abstinence, faithfulness, STI/HIV and unplanned pregnancy prevention and treatment through self-referral (Denno et al 2015:S26).

4.3.3 Theme 2: Respondents' opinions and views

The respondents were asked their opinions and views on contraceptive counselling and services provision; comprehensive abortion care, and sexually-transmitted infections/human immunodeficiency virus care services.

4.3.3.1 Respondents' opinions and views on contraceptive services provision

The respondents were asked their views on midwives' provision of contraceptive methods including long acting and emergency contraceptives. Previously midwives provided health care services for women including postnatal contraceptive counselling and services. Adolescent girls' underutilisation of contraceptive services led to unintended pregnancy, termination of pregnancy and consequences.

Midwives are working 24 hours a day and 7 days a week. Midwives who are on duty at night and weekends can provide contraceptive services for adolescent girls. Midwives can also provide contraceptive counselling and services during postnatal and post-abortion care. Midwives on call at night and on weekends can offer contraception counselling and services to adolescent girls during postnatal and post-abortion care. They can provide counselling and contraceptive services instead of linking services to family planning rooms. According to respondents,

“Midwives were requested to work in family planning rooms when there were staff shortages, as if it was extra work. Family planning services are midwives' main task and should be conducted by midwives.” (P12)

This was similar to a study done in Nepal, where the health facility was open 24 hours a day, 365 days a year, and midwives were available at all hours of the day and night, with friendly and caring midwives (Shah, Rehfuss, Paudel, Maskey & Delius 2018:8).

“Senior midwives were working in all midwives’ competence including insertions and removal of intrauterine device and contraceptive Implant; these midwives were also transferring their experiences for junior midwives and midwifery students.” (P1)

According to Shah, Rehfuess, Paudel, Maskey and Delius (2018), in Nepal, the midwives at the facilities were very young and unqualified to provide contraceptive services, and the midwives themselves were unsure of their abilities.

“I had experience of another country. In Sweden, midwives provided all contraceptive methods any time when adolescent girls needed.” (P7)

“There was an experience from a midwife at the age of retirement. She strongly supported adolescent girls in provision and the use of contraceptive services. However, some religions denied contraceptive services provision for unmarried adolescent girls.” (P9)

“I am working for adolescent girls in provision of contraceptive services, comprehensive abortion care, STI/HIV including weekends/nights.” (P1)

“Married adolescent girls want long-acting contraceptives after two or three children. Midwives should provide frequent counselling and services. After delivery I provided counselling and contraceptive services.” (P4)

4.3.3.2 Respondents’ opinions and views on comprehensive abortion care

The Ethiopian abortion law and guideline allow midwives to provide comprehensive abortion care for adolescent girls including at weekends and nights. According to a respondent,

“I am very happy with Ethiopian abortion law. I saw many adolescent girls and women who died due to unsafe abortion. Most illegal abortion cases were high school and university students. So, midwives should provide comprehensive abortion care for adolescent girls to save them from unsafe abortion and their lives.” (P12)

A study in Ghana found that midwives had mixed feelings about abortion services. Oppong-Darko et al (2017:1501) reported some midwives felt that, while abortion was against their religious beliefs, they were willing to provide abortion care within the confines of the law in order to save lives.

4.3.3.3 Respondents' opinions and views on sexually-transmitted infections/HIV

The respondents stated that midwives could work with adolescent girls on STI and HIV counselling, diagnosis and treatment to prevent further spread, as well as pre-pregnancy counselling and testing. According to a respondent,

“Midwives are in the health facilities during weekends and duty hours so should be assigned to work on sexually-transmitted infections and human immunodeficiency virus.” (P1)

Newton-Levinson, Leichter and Chandra-Mouli (2016:14) describe provider behaviours toward youth sexually transmitted infection/sexual and reproductive health care services were a primary source of youth's experiences of stigma and shame. The nurse-midwife only goes to see married people and women who are pregnant. Who comes to ask what we want? Nurse-midwife is very shy to even approach these people for a condom. It would mean that they consider were doing something wrong.

4.3.4 Theme 3: Respondents' challenges in ASRH service provision

The respondents were asked about midwives' challenges in practices of adolescent sexual reproductive health care service provision. The respondents identified challenge: midwives' knowledge and skill gap; lack of management support; shortages of midwives and resultant high workload; due to workload less attention to adolescent girls'; midwives' conflicting feelings and beliefs about adolescent girls' termination of pregnancy services and adolescent girls' health care mixed with adults' services.

According to respondents,

“Currently most midwives do not have awareness, exposure, encouragement and interest to work in adolescent health. In supplement some midwives think it is more workload to link adolescents within health facilities.” (P2)

“Most services provided by midwives start during pregnancy, not in pre-pregnancy for adolescent girls.” (P4)

There was a shortage of health care providers as well as a lack of resources. When the clinics are extremely busy or when there is an emergency in the clinic, sexual reproductive health services are rendered inoperable for the day. Sexual and reproductive services necessitate the use of skills and training in areas such as the insertion of intrauterine devices (IUDs) and contraceptive implants (Jonas et al 2018).

“Health managers do not know that adolescents’ SRH provision is midwives’ core competency. After graduation regional health bureau assigns and tells midwives to go to delivery rooms; most midwives were assigned like that. Even currently there is resistance for midwives to provide sexual reproductive health care services for adolescent girls.” (P5)

Midwives were less likely to be included in primary care reform that furthered recognition of the role of midwives as primary care providers (Mattison, Lavis, Hutton, Dion & Wilson 2020).

According to Pandey et al (2019), Nepal's health providers are overburdened and overworked due to administrative work and limited time to provide sexual and reproductive health services to adolescent girls. Shortages and overburdening of health care providers, supplies and medicine in health care facilities were identified as barriers.

In Karachi, Pakistan, midwives reported that institutional rules and regulations limited their full scope of practice (Saleem et al 2015:204). In Iran health providers did not have specific skills and commitment to deal with adolescents’ SRH needs (Mirzaii Najmabadi, Babazadeh, Mousavi & Shariati 2018:570). In New Zealand, Dixon, Guilliland, Pallant, Sidebotham, Fenwick, McAra-Couper and Gilkison (2017) reported lack of management support as a key issue contributing to midwives leaving the profession.

Regarding shortage of midwives and high workload, respondents stated,

“When adolescent girls come to the out-patient department for any case, health providers working in the outpatient department requested midwives to provide AGSRH care. Midwives were requested working in SRH care when a shortage of other staff. Adolescent girls’ sexual and reproductive health care services are one of the main jobs of midwives, although it was experienced as extra work.”
(P12)

According to Dixon et al (2017), one of the major factors contributing to midwives leaving the profession has been identified as a lack of management support. Adolescent girls who provide sexual and reproductive health services to women and girls in New Zealand's Aotearoa region rely on the presence of a supportive manager.

According to a study conducted in Tanzania, Bremnes, Wiig, Abeid and Darj (2018:3), midwives experienced a loss of motivation and a lack of support from their superiors, which contributed to their feelings of demoralisation at work.

“Midwives in hospital-limited practices on adolescent girls, except pregnant and pregnancy-related care.” (P4)

This was comparable with study done in Spain; midwives do not see girls/women during contraception and other sexual and reproductive health services. Women make use of midwifery services mainly during pregnancies. Midwives notice that girls/women underutilisation of sexual and reproductive services (Otero-Garcia, Goicolea, Gea-Sanchez & Sanz-Barbero 2013).

“It was a difficult time for midwives with high workload and relationship between midwives and adolescent clients was not good. Girls/women also developed negative perceptions about midwives.” (P12)

Shortages of midwives and a lack of skill and training in intrauterine and implant procedures have a negative impact on the provision of SRH services (Jonas et al 2018:5). In their UK study, McCance and Cameron (2014:181) discovered that participant midwives felt out of date because new contraceptive methods had emerged since they qualified, and that training would be required to bring them up to a level

where they could discuss contraception.

According to respondents,

“I was mostly working on delivery ward and therefore forgot whether I took training on adolescent health during pre-service or not. Even other midwives think that way, midwives’ competencies and our work is different. Midwives were educated/ trained and licensed on seven midwifery competencies, but were providing only one competency: labour and delivery.” (P2)

The respondents indicated challenges in adolescent abortion care. According to respondents,

“In pre-service education, comprehensive abortion care was included in the midwifery curriculum. Yet, service provision of comprehensive abortion care depended on the midwifery students’ interest and gender. Universities have more male midwifery students and are more likely to provide comprehensive abortion care while health science colleges have more female midwifery students were found to be conservative.” (P9 and P7)

A study has shown that a majority of SRH nurses are against providing termination of pregnancy services to adolescents, regardless of their professional responsibility to render the services required of them (Jonas et al 2018:4).

“Even during community practice, BSc male student midwives were more interested in and practised comprehensive abortion care, while female student midwives were more interested and practised maternal child health services.” (P6)

In adolescent girls’ services provision during weekends and night male midwives provided most abortion care. However, adolescent girls want and feel comfortable with female midwives.” (P9)

“Midwives’ involvement in the provision of comprehensive abortion care depends on their interest. We do not recommend even if it is safe abortion; if girls get an abortion, they may have problems in the next pregnancy. Even our teachers are

not interested in the provision of comprehensive abortion care education.” (P7 and P5)

Midwives practice needs interest and respect, but the ministry of education assigns students based on academic results. Most universities were assigned students without their interest and in universities more male than female students were joining the midwifery department. According to respondents,

“Most male student midwives want to work as managers not as clinical care providers. I have experience of a male midwifery student who stayed in the department without interest for three years with no clinical experience. Then I tried to approach him by providing counselling and convinced him about midwifery job description and its importance. Finally, I took him in the practical area and he started practising in the clinical area. There is a lot like this.” (P6)

Becoming a midwife was the only available opportunity and not necessarily the desired profession, how they wanted to get a professional job and secure their own income. This study is similar to one done in Ghana on the motivating factors for choosing midwifery as a profession (Oppong-Darko et al 2017).

“Student midwives in adolescent girls’ health services, there was limited clinical practice and a need for midwives’ clinical supervision/mentors in health facilities.” (P5)

“There is a shortage of experienced/senior midwives before retirement and a need for more work in mentoring, attitude change and continuous follow-up for junior midwives.” (P1)

“Guidelines are a principal need for midwives’ instructors and student midwives after graduation as a reference, especially when they are working in rural areas.” (P7)

“Midwives needed continuous education and further training on communication skills, contraceptive services, comprehensive abortion care and STI/HIV, and counselling.” (P5)

Tarr-Attia et al (2019:7) found that midwives in Liberia required continuous education, communication skills, on-going training/refresher training, and methods of training in adolescent counselling and services, and STI/HIV.

4.3.5 Theme 4: Suggestions for improving ASRH services provision by midwives

The findings under suggestions for improving adolescent girls' sexual and reproductive health services provision by midwives were presented under the following sub-theme:

4.3.5.1 *Extending the hours of health services for adolescent girls'*

Sexual reproductive health care services should be available for adolescent girls' appropriate time accordingly (24h/7 day). Midwives should be assigned in adolescent sexual and reproductive health services provision integration/unit. Midwives' services should be integrated such as contraception counselling and services more on intrauterine contraceptive device and Implant insertion during postnatal and post abortion care. Furthermore, linking their work from primary up to high school, colleges, universities, youth centres and religious organisation.

“Federal Ministry of Health and Regional Health Bureau including all hospitals managers, health centres, college community, should assign midwives on adolescent sexual reproductive health care services” (P5 Health Science College Midwife Instructor)

According to Alyahya, Khader, Batieha and Asad (2019), services can be accessed at any time. Some of the reasons given by researchers include convenient working hours and good communication skills, and female health providers who are always available with short wait times in public health care facilities. Hakansson et al (2018) describe youth-friendly clinics with flexible hours and adequate equipment and supplies are critical for addressing the sexual and reproductive health concerns of adolescent girls. When they arrive at these clinics, they should be made to feel welcome

Midwives should be available and provide health education and counselling services. When adolescent girls come to the health facilities in any case midwives should first provide health education and counselling services.

“Participant counsels that, midwives should know more on adolescent girls’ health and work on prevention and management. Currently adolescents are not afraid; girls and boys come together for receiving health care services.” (P12 Health Science College Midwife Instructor)

Burrowes et al (2017:9) describe midwives’ communication and counselling skills could be improved so that they can better explain procedures in advance, as well as educate communities about midwifery services.

Midwives play an important role in providing sexual and reproductive health services in a variety of settings and at all times. Midwifery staff should be involved in routine family planning and adolescent sexual and reproductive health services as part of the initial service package (Beek, McFadden & Dawson 2019).

Midwives should develop skills and interested on adolescent girls’ health services provision including weekend. On duty hours should be increased the number of midwives for improving services for adolescent girls.” (P9 University Midwife)

4.3.5.2 Work on the media for adolescents’ health

There is a need to work on the media,

“To reach out adolescent girls and parents. In addition, encouragement of higher officials on adolescent sexual reproductive health services provision within and outside health facilities.” (P3)

In Ethiopia, television and radio are the most popular sources of information for adolescents about sexually transmitted infections (STIs). According to a study conducted in Ethiopia, the majority of high school students used radio/television as a source of information about STI transmission methods and treatments (Demis, Adera & Workeneh 2017).

Adolescent sexual and reproductive health services need effective strategies to increase demand and acceptance via the mass media, according to Denno et al (2015). Multiple sources of media were used in information dissemination. Extensive mass media communication was also used.

4.3.5.3 *Work on available separate department for adolescents' health*

Midwives should receive regular on-going training in capacity building, communication and counselling skills, contraceptive services, comprehensive abortion care and sexually transmitted infections/human immunodeficiency virus. Midwives should be skilled, proficient and available and provide health education and counselling services in separate rooms in health facilities. According to respondents,

“There should be a separate department for adolescent health programmes at different levels, at FMoH each level. Adolescent sexual reproductive health care services area should be prepared like antenatal care, delivery, post-natal care, and child health care services. In addition, recreational material like TV should be available.” (P3)

According to Denno et al's (2015), youth friendliness clinics should be established in public facilities to improve waiting times, privacy, confidentiality, affordability, and non-judgmental attitudes. Jonas et al (2018) describe clinic hours should be extended, and a separate room for adolescent girls to access reproductive health services in a youth-friendly environment should be created. This would increase adolescent girls' access to and utilisation of services.

4.3.5.4 *Midwifery curriculum revision*

Curriculum revision and place for practice are needed. Midwifery institutions should separate adolescent sexual reproductive health in the curriculum, both in theory and practice, with 2 credit hours in reproductive health. According to a respondent,

“Guidance curriculum on adolescent's sexual reproductive health for midwifery students, provide 32 hours but it needs improvement and more hours needed for practices by revising the curriculum, modification is possible.” (P9)

The WHO (2017b: 45) recommends that sustainable training and retention of health care providers should be addressed, curricula revised and on-going in-service training provided.

4.3.5.5 Support and supervision for midwives

Midwives should be empowered and get support from management, supportive supervision and mentorship from senior midwives. According to respondents,

“Midwives should get support from management and senior midwives coaching and mentoring junior midwives on adolescent health care services.” (P1)

In addition, midwives should be encouraged and provide educational opportunities for female diploma midwives. According to respondents,

“In health centres most were female and experienced. Female midwives should have support and provide services for adolescent girls including abortion care according to the law.” (P10)

“During planning time midwives indicated that their work needs included adolescent girls’ health. Student midwives should know how to protect themselves and others. Midwives’ instructors should provide advice on prevention and not to expose students.” (P7)

In Australia, Cummins, Denney-Wilson and Homer (2015:438) found that new graduate midwives valued the support provided by experienced midwives, which sustained and reassured them.

4.3.5.6 Availability of guidelines in health facilities

Midwives should be knowledgeable and have guidelines on AGSRH service provision.

Currently even though the guidelines are available not reach to providers as expected. Midwives should get guideline on adolescent sexual reproductive health care services. Guideline is an important principle it should be available and

in use; it should be available in skill lab for student midwives and the midwives' instructors and students after their graduation." (P4, P7)

4.3.5.7 *Midwives association protect midwives' profession*

Midwives should be empowered and get support from midwives' association. Midwives *should have* professional interest to provide health care services for adolescent girls and women.

"Midwives' association should protect the midwives' profession, professional support and follow up." (P12)

To develop strong affiliation with the midwifery profession and identification with professional philosophy, research into the professionalization of midwifery in Slovenia recommends that midwifery associations be strong political actors to promote and systemise midwifery posts, midwives develop an alliance with women, and midwives develop a clear scope of practice. Clients who are empowered and satisfied may also be able to negotiate for autonomous midwifery (Mivšek, Hundley, Van Teijlingen, Pahor, & Hlebec 2021:37). Midwifery associations play a critical role in strengthening their profession across political, health, and educational systems. Building strong associations is critical to elevating the status of midwives, improving gender equity, and lowering mortality and morbidity. Support evidence-based investments in midwifery associations so that they can lead the country's responses to the gendered impacts of crises on SRHR and, more broadly, address gender-related inequities in sexual and reproductive health rights (Mattison, Bourret, Hebert, Leshabari, Kabeya, Achiga, Robinson & Darling 2021:12).

4.3.5.8 *Commitment by midwives*

Midwives should take the motivation to work on the scope of their competences. They should provide pre pregnancy care and giving equal attention for healthy adolescent sexual reproductive health care services both during weekend and night duty. Midwives, who are practicing in neonatal care, should continue to support family on adolescent girls' health care.

“Midwives were proud of the challenges faced and had commitment. Midwives should have a lot of work; time has changed adolescent girls come for pre-pregnancy care and they need better follow up. Adolescent girls sexual and reproductive health services provision should be under midwives. Midwifery school should strengthen adolescent girls a health service is one part during midwives training.” (P12 Health Science College Midwife Instructor)

Midwives must be flexible, fully committed, and have a genuine interest in others in order to fully provide care. Taking the time to talk with girls/women, evaluating care behaviour, and providing continuity of care ensures the quality of care (Fontein-Kuipers et al 2016).

Midwives’ instructors should educate midwives students about the continuum of care and adolescent health problems.

“Hospital midwives should be provided comprehensive abortion care services. Student midwives should expose for the practice on comprehensive abortion care.” (P4 Health Science College Midwife Instructor)

Midwives in Ghana are acutely aware of the high rate of mortality among young pregnant women. This is due to a lack of access to health care services. Midwives strive to improve the health of girls and women. They valued the fact that their profession as educated midwives allowed them to care for girls and women (Oppong-Darko et al 2017).

4.3.5.9 Training need for midwives

Midwives should receive training in areas such as information and counselling, contraception, comprehensive abortion care, and sexually transmitted infections/human immunodeficiency virus. To improve the availability of ASRH services in government health care facilities.

Nepal relies heavily on short-term methods such as condoms and oral contraceptives, with implants and intrauterine contraception devices being used infrequently. Require

midwives to receive skilled birth attendant training in addition to medical abortion to ensure the safety and well-being of women and babies (Andersen et al 2016).

4.4 INTEGRATION OF RESULTS

Based on the theoretical framework, the integration of quantitative and qualitative results was presented under the following subheadings: socio-demographic status of midwives, work experience, competence of midwives, working environment, and development of midwives in sexual reproductive health care services in the study area.

4.4.1 Socio-demographic of midwives

According to socio-demographic data, 74.3% of midwives were females and 88.7%, were between the ages of 20 and 29.

“The majority of midwives in health centres are female and young (eight out of ten are female) (P10). This is an excellent opportunity for adolescent girls, but it depends on individual midwives’ attitude. More male BSc degree midwives provided comprehensive abortion care services to adolescent.” (P9).

“Comprehensive abortion care is in the midwifery curriculum. Student midwives in BSc (more males) practiced comprehensive abortion care on real clients. In Health Science College, student midwives (more females) demonstrate in simulation but not in real clients. University instructors were provided comprehensive abortion care.” (P9, P7 and P6)

Educational status of midwives, 63.7% was diploma holders in midwives, 36.3% degree in midwives. According to the comparison on sex and education majority, 79.3% were females in diploma holder.

“In health science colleges, almost all midwives’ students are female. However, in university majority of midwives student are male.” (P6 P7)

4.4.2 Work experience of midwives

The following midwives' work experience with adolescent girls' sexual and reproductive health services was presented:

4.4.2.1 Midwives provided reproductive health care services

Midwives provide sexual and reproductive health care for adolescent girls. 15.4% information and counselling, 22.7% comprehensive abortion care, 36.4% diagnosis and treatment for sexually transmitted infections and human immune-deficiency virus 40.2% of contraceptive and counselling services were provided. While the majority of midwives provided SRH services, 90.1% of them also provided intrapartum care.

The sexual reproductive health care services provided to adolescent girls were mixed with those provided to adults. Almost all midwives work in antenatal, intrapartum, and postnatal care, as well as contraception counselling for adolescent girls and women in need. The majority of adolescent girls present to midwives with complications during antenatal, intrapartum, and postnatal care. Furthermore, midwives were providing contraceptive pills to married adolescent girls without any judgment during the postnatal period.

“Currently, the number of midwives has increased, however, midwives still working on antenatal, delivery and postnatal (Maternal health) care services. Even during midwife's education, midwifery instructors less attention was given on unmarried adolescent girls on sexual reproductive health care services. More attention on maternal health care during antenatal, intrapartum and postnatal care.” (P5)

4.4.2.2 Midwives provided reproductive health care services over the weekend and at night

Of midwives, 5.4% provided information and counselling services to adolescent girls, 12.4% diagnosis and treatment of sexually transmitted infections and human immunodeficiency virus, 14.8% comprehensive abortion care, and 18.4% contraceptive

services, while the majority provided SRH care services, including 90.1% intrapartum care over the weekend and at night.

“On weekends and nights, only a limited number of SRH services are available. Almost all midwives worked weekdays and nights and provided labour and delivery care. In addition, when girls visit the outpatient department for any reason, health providers contact midwives to provide services for adolescent girls and women. Except for bleeding and labouring girls, it was difficult to provide services to adolescent girls in general.” (P Midwives)

“Midwives are available 24 hours a day, seven days a week, and can provide sexual reproductive health care to adolescent girls. Midwives in hospitals were providing post-abortion care 24 hours a day, seven days a week; cases of septic abortion were common from Friday night to Sunday night. During the weekend and at night, a few midwives work with adolescent girls on contraception, sexually transmitted infections, and human immunodeficiency virus. On weekends and during duty hours, most adolescent girls want comprehensive abortion care, contraception, information on sexually transmitted infections, and human immunodeficiency virus services.” (P Midwives)

“Because of the limited number of midwives assigned, health facilities are frequently overburdened with labour and delivery during duty hours. As a result, in order to provide quality services, the number of midwives who specialise in adolescent health should be increased.” (P9)

4.4.2.3 Midwives carried out procedures related to reproductive health care services

Midwives inserted 23.8% of intrauterine devices and 30.2% of implants; 12.0% of abortion medication and 16.1% of manual vacuum aspiration; and 37.0% of sexually transmitted infections and human immunodeficiency virus care and treatment.

“Midwives were providing intrauterine devices and implant contraceptive including during postnatal and post-abortion care. Currently in hospitals, almost all midwives perform medication-induced abortion and manual vacuum aspiration, including second trimester abortion.” (P9)

4.4.2.4 Midwives positive intention to provide reproductive health care services

Of midwives, 90.8% have a positive intention to provide information and counselling services for adolescent girls, 93.4% contraceptive services, 44.1% comprehensive abortion care, and 60.0% diagnosis and treatment for sexually transmitted infections and human immune-deficiency virus.

“Midwives should provide health care services for adolescent girls and women at each level during four reproductive health cycles and beyond: pre-pregnancy, pregnancy, intrapartum and postnatal care up to contraceptive counselling and services.” (P1)

“Midwives can provide counselling and contraceptive services. Instead of link to family planning room midwives can provide advices and services on contraceptive services. Midwives can also provide contraception counselling and provision during postnatal and post abortion.” (P9)

“Almost all midwives have interest to provide contraceptive services and prevention part of human immune deficiency virus for adolescent before pregnancy; some limited in comprehensive abortion care not interest, recommended comprehensive abortion care not interested on safe abortion care education.” (P5)

“Midwives should take motive and work on according to their education, within the seven competences and they should provide adolescent sexual reproductive health care services both during weekend and night duty. Midwives, who are perfect in neonatal care, should continue to support family during adolescent health care. They should work on pre pregnancy care for all girls according to their need.” (P Midwives)

4.4.3 Midwives' competency

Regarding midwives' confidence in their ability to provide sexual reproductive health care services to adolescent girls. Midwives, 19.1% were confident in their ability to provide adolescent girls with sexual reproductive health care services, 54.2% provided contraceptive services, 27.6% provided comprehensive abortion care, and 50.0%

provided diagnosis and treatment for sexually transmitted infections and human immunodeficiency virus care.

“Adolescent girls need all health services, from knowledgeable, competent and friendly provider; midwives should be role models. If adolescent girls are satisfied with our services, they can bring their friends to the service centre. Midwives should be competent; confident and have strong communication skills, knowledge and more practice on clinical skills. Midwives have good background knowledge it is useful for midwives’ practical work in clinical experience.” (P Midwives)

“Midwives’ education and work is different learn seven competency provided one competency-labour and delivery. Most midwives did not work on adolescent sexual reproductive health services because of these may have knowledge and competency gap to provide services for adolescent girls.” (P2)

4.4.4 Midwives working environment

The following describes the working environment of midwives on adolescent girls' sexual reproductive health.

4.4.4.1 Type of health facility currently working

The majority, 97.0% of midwives in health centres, provided adolescent sexual reproductive health care services, compared to 3.0% in hospitals.

“Most health science college midwives’ students after graduation assigned in health centre and provided adolescent sexual reproductive health care services.” (P5)

“Midwives who work at health centre level were providing a better health care services for adolescent girls’ independently and well updated since the practice in hospital is limited. Most midwives in health centre providing sexual reproductive health care services for adolescent girls.” (P8)

4.4.4.2 Midwives shift/weekend, night, and holiday duty work

The majority of the midwives, 92.1% worked shifts/weekend, night, and holiday duty to provide adolescent sexual reproductive health care services.

“Arranging proper time and place at health facilities is important. Midwives are working 24 hours a day and 7 days a week and can support adolescent girls by any means and provide contraceptive services, comprehensive abortion care, sexually transmitted infections and human immune deficiency virus. Services should be available any time for adolescent girls including weekends and night duty.” (P Midwives)

4.4.4.3 Methods of contraception that have been available in the last six months

When it came to the availability and provision of contraceptive methods, 75.1% had implanted contraceptives, 73.0% had intrauterine devices, and 58.0% had emergency contraceptives.

“Management support should have for midwives on availability of contraceptive in delivery room long-acting contraceptive (intrauterine contraceptive device and implant) and emergency contraceptive, including during weekend.” (P1)

4.4.4.4 Number of midwives on night/weekend duty per day

The majority of health centres (89.1%) had two midwives on duty, while hospitals (3.1%) had six midwives on duty per day.

“Limited number of midwives assigned on night /weekend duty per day, number of midwives, who can work on adolescent sexual reproductive health, should be increased.” (P9)

4.4.5 Development of midwives

The development of midwives in the provision of sexual reproductive health services to adolescent girls is presented below.

4.4.5.1 Guideline available on adolescent SRH care services

There is a guideline available on 51.0% family planning services, 33.0% comprehensive abortion care, and 71.1% standard of midwives' care practice provided adolescent sexual reproductive health care services.

“Currently even though the guidelines are available not reach to providers as expected. Midwives should get guideline on adolescent sexual reproductive health care services. Guideline is an important principle it should be available and in use; it should be available in skill lab for student midwives and the midwives' instructors and students after their graduation” (P4, P7)

The availability of guidelines and their dissemination are critical for updating clinical health workers' knowledge and self-efficacy in order to improve the delivery of sexual and reproductive health care services care services (Zemedu, Teshome, Tadesse, Bekele, Keyes, Bailey & Ruano 2019:6).

4.4.5.2 Technical support or supervision from external body

Of the midwives, 35.0% had received technical support or supervision from an external body in the previous three months, 27.0% had received it in the previous year, and 20.0% had received it a long time ago.

“Supportive supervisions for midwives are important tool; midwives need support and supportive supervision from senior midwives and management.” (P1, P5)

Midwives who received supportive supervision are more likely to provide high-quality health care to girls and women (Hagos et al 2020:5).

4.4.5.3 In-service training during the last 12 months

In terms of in-service training, 22.0% of midwives received training in adolescent sexual and reproductive health services, 29.0% in family planning services, 16.1% in comprehensive abortion care, 22.1% in the diagnosis and treatment of sexually transmitted infections, and 42.1% in human immunodeficiency virus care services.

Midwives should have in-service training on adolescent communication and counselling and continuous follow-up, contraceptive counselling and services, comprehensive abortion care and sexually transmitted infections and human immunodeficiency virus. There was a gap of properly updated training and methods of training for midwives. Midwives once trained on comprehensive abortion care should be assigned in comprehensive abortion care unit and provide safe abortion care services.

4.5 SUMMARY

The quantitative and qualitative analyses and findings were discussed in this chapter. Adolescent sexual reproductive health care services should be outlined in a guideline for midwives. A guideline is an important principle that should be available and put into practice. Guidelines for midwives' instructors, student midwives, and students after graduation should be available in the skill lab. Limited guidelines are available for midwives on family planning services, comprehensive abortion care, and adolescent sexual reproductive health care. After graduation, guidelines should be available in the skill lab for student midwives, midwives' instructors, and students. Chapter 5 discusses the quantitative and qualitative study results in relation to the literature review.

CHAPTER 5

DISCUSSION OF FINDINGS

5.1 INTRODUCTION

Chapter 4 the quantitative and qualitative analyses and findings were discussed. This chapter summarises the quantitative and qualitative study results in relation to the literature review. The quantitative results are presented first, followed by the qualitative findings.

5.2 QUANTITATIVE FINDINGS

A structured, self-administered English version questionnaire was used to collect quantitative data from participants (Creswell 2011:171-177).

The findings are presented in the following subheadings, according to the theoretical framework: respondents' socio-demographic profile; work experience; competence; work environment; and development of SRH care services for adolescent girls in the study area.

5.2.1 Respondents' socio-demographic profile

In this study, 533 midwives completed the questionnaires, with 89% working at the 48 HC and 11% working at the two hospitals. 74.3% (n=396) of respondents were females, while 25.7% (n=137) were males. The ages of the respondents ranged from 21 to 54 years, with a mean age of 26.5 years (+ 3.5 years SD), 88.7% (n=473) were 20-29 years old, and 3.8% (n=19) were over 35 years old; 67.7% (n=361) were unmarried, and 32.3% (n=172) were married. Of the females only 31.8% (n=126) had a BSc in midwifery.

The findings of this study are consistent with previous findings from Addis Ababa, Ethiopia, where 69.2% were females, 83.7% were under the age of 29, with a mean age of 25.9 years, and 70.6% held a diploma in midwifery (Bekru et al 2017:4). In another

study conducted in Addis Ababa, Ethiopia, 61.8% of the respondents were females, 70.6% were between the ages of 19 and 29, 60.3% were unmarried, and 84.6% held a diploma in midwifery (Yaekob, Shimelis, Henok & Lamaro 2015:235). According to a study conducted in Arba Minch, Ethiopia, all youth friendly service providers were discovered to be females (Mulugeta et al 2019:3). According to a study on pre-service education in Ethiopia, 75% of females were enrolled in diploma programs (Yigzaw et al 2015). Another study on task analysis in Ethiopia discovered that 80.4% of midwives were females, 62.3% were younger than 25 years old, and 81.9% had a diploma qualification (Carr 2016:183).

According to Filby et al (2016:9), barriers to quality midwifery treatment in low- and middle-income countries include a lack of investment in quality midwifery education, lax or absent control, poor facility management, and poor working conditions. The FMOH, EPHI and AMDD (2017c: 175) discovered that the average age of midwives was 26 years in an assessment of emergency obstetric and newborn care in Ethiopia.

5.2.2 Respondents' work experience

The respondents' work experience covered adolescent girls' SRH care provision; AGSRH care services provision during weekend/night duty; procedures service provision; positive intention to provide AGSRH care services, and confidence/competency in provision of AGSRH care services.

5.2.2.1 Midwives provided reproductive health care services

Regarding AGSRH care services provision, of the respondents, 15.4% provided information and counselling services; 40.2% provided contraceptive services; 22.7% provided comprehensive abortion care; 36.4% provided diagnosis and treatment for STIs and HIV; 74.7% provided antenatal care; 90.6% provided intrapartum care, and 81.2% provided post-natal care. Midwives' practices on adolescent girls' sexual reproductive health care provision can be improved by using a continuum of care model. Midwives can practice in any setting, including the home, community, health centres, and hospitals. According to midwives' core competence, midwives are providers of sexual and reproductive health services (ICM 2015)

Midwife-led continuity-of-care models, in which a known midwife or small group of known midwives supports a woman throughout the antenatal, intrapartum, and postnatal continuum, are recommended for pregnant women in settings with midwifery programs, according to WHO recommendations (WHO 2016d:XV). Furthermore, counselling is a core competency for midwives, and this task is an essential component of providing abortion or post-abortion care (WHO 2018b: 56).

In Ethiopia, 95% of midwives counsel women on contraception, 93% provided antenatal care, 98% provided intrapartum care, and 38% administered antiretroviral to prevent mother-to-child transmission (FMOH, EPHI & AMDD 2016:179). Eighty-two% of those midwives were capable of performing midwifery practices on a daily basis Carr (2016:184). Safe abortion services should be readily available and affordable to all adolescent girls/women in need, to the full extent of the law. Midwives, according to the WHO, should provide abortion care. Abortion care should be available at the primary-care level, with referral systems in place for any higher-level care (WHO 2018b: 39). Girl and woman health at each stage of life affects health at other stages and also has cumulative effects for the next generation. This requires health workforce like midwives supported and use the available opportunity to provide good-quality care everywhere and every time (Every Woman Every Child 2015:11).

An adolescent health facility is a health facility that provides a package of information, counselling, diagnostic, treatment, and care services that meet the needs of all adolescents. According to the global standard on adolescent health (Standard 3), an appropriate package of services is provided in the facility (Nair, Baltag, Bose, Bosch-Pinto, Lambrechts & Mathai, 2015:293). Ethiopia's MoH standard and minimum service package on adolescent girls' approval, includes contraception counselling and service; comprehensive abortion care; STIs/HIV testing; counselling and treatment; antenatal care, and intrapartum care and postnatal care. It also included adolescent nutrition, violence including GBV and harmful traditional practices (FMoH 2017a). In accordance with ethical, legal, and professional guidelines, midwives' roles and responsibilities include education and counselling, prenatal care, family planning, abortion care, manual vacuum aspiration and medication abortions, antenatal care, labour and delivery, and postnatal care for the mother and baby (FMoH 2014a).

5.2.2.2 Midwives provided reproductive health care services during weekend/duty

Regarding AGSRH care provision during weekend/night duty, of the respondents, 5.4% provided information and counselling services; 18.4% provided contraceptive services; 14.8% provided comprehensive abortion care; 12.4% provided diagnosis and treatment for STIs and HIV; 16.0% provided antenatal care; 90.6% provided childbirth care, and 87.6% provided post-natal care. The WHO (2015c: 6) recommends that comprehensive abortion care should be available 24 hours a day, 7 days a week. Unsafe abortion and associated morbidity and mortality in adolescent girls and women are avoidable/preventable. This can be possible by the provision of proper abortion care, including weekend and duty hours. An adolescent health facility has convenient operating hours, a welcoming and clean environment, and maintains privacy and confidentiality. It has the equipment, medicines, supplies, and technology needed to ensure effective service provision to adolescent girls (Nair et al 2015).

Ethiopia's MoH standard and minimum services package on adolescent and youth health in facility characteristics states that all health facilities are with convenient working hours, flexible appointment procedures, and the possibility of consultation with or without an appointment. Service providers must offer consultations during all hours, preferably 24 hours/7 days (FMoH 2017a: 11).

5.2.2.3 Midwives performed procedures on reproductive health care services

Regarding the AGSRH procedure service provision of the respondents, 23.8% inserted intrauterine devices; 30.2% inserted implants; 16.1% performed manual vacuum aspiration; 12.1% administered abortion medication, and 37.0% provided STI/HIV care and treatment.

There is no difference in the number of complete abortions when midwives provide abortion care-medical abortion and manual vacuum aspirator. When midwives perform medical abortions, more women are satisfied with the provider (WHO 2015b: 12, 29). There is evidence for the safety and effectiveness and for women's satisfaction with the overall abortion experience provided by midwives. More women are satisfied with the provider when midwives provide abortion care. The option appears feasible and is

already being implemented in several countries, including in low-resource settings (WHO 2015b: 33, 37). Ethiopia's MoH has approved that midwives are authorised to perform abortion procedures using medical abortion and manual vacuum aspirator. In order to effectively carry out their responsibilities, training curricula on abortion care should enable midwives to competently perform the abortion procedures (FMoH 2014b: 26).

More than half of Ethiopian midwives never performed manual vacuum aspiration; a study has shown (Yigzaw et al 2015) manual vacuum aspiration was the least learned and performed. In pre-serves midwifery education, 47% of students were never taught how to perform the technique (Carr 2016:185). Pre-and in-service training should be tailored for female providers in order to raise provider awareness levels. More midlevel providers should be able to perform manual vacuum aspiration (Taddele, Getachew, Taye, Getnet, Defar, Teklie, Gonfa, Humnessa, Teshome, Akale & Mormu 2019:4).

5.2.2.4 Midwives positive intention to provide reproductive health care services

Regarding the intention to provide AGSRH care services, of the respondents, 90.8% indicated a positive intention to provide AGSRH information and counselling services; 93.4% indicated contraceptive services; 44.9% indicated comprehensive abortion care, and 60.4% indicated diagnosis and treatment for STIs and HIV.

The more confident midwives are in providing family planning services to adolescents, the more likely they are to do so. In South Africa, a study showed a strong correlation between family planning self-efficacy and the intention to provide this service (Jonas et al 2016:6). Adolescent girls have been given an independent place and health interventions are important. Modern contraception and good quality care for girls and women would result in a reduction in unintended pregnancies by 70 per cent. Maternal deaths and transmission of HIV from mothers to new-borns would be nearly eliminated (Every Woman, Every Child 2015:19). The findings of the respondents' positive intentions and confidence in AGSRH care service provision agreed with Jonas et al's (2016:6) finding in South Africa that the more confident midwives are in providing family planning services to adolescents, the more likely they are to provide the services to adolescents.

5.2.3 Midwives' competency

Regarding the respondents' confidence/competency in AGSRH care services provision. Midwives were confident in their ability to provide sexual reproductive health care services to adolescent girls. 54.2% of those polled said they provided contraception, 27.6% said they provided comprehensive abortion care, and 50.0% said they provided care for sexually transmitted infections and the human immunodeficiency virus. High-quality midwives are essential to ensure high-quality care services for adolescent girls and women, according to the International Confederation of Midwives. It is critical to promote midwifery as a valuable career option for young people and to implement a youth-focused service delivery model (ICM 2017a: 4-18).

In toting, the International Confederation of Midwives' essential competencies for basic midwifery practice shows that midwives have the competency in the provision of care in social, epidemiologic, and cultural contexts. Midwives provide pre-pregnancy care and family planning; care during pregnancy, intrapartum care, postpartum period and care of the newborn (ICM 2010). WHO (2016d: 54) standards explain that midwives have appropriate competence to meet the requirements of their performance. Effective case management systems are in place to ensure midwives demonstrate appropriate competence. Midwives did not fully practice their competence in adolescent girls' sexual and reproductive health care services within their scope.

Health care providers must demonstrate the technical competence required to provide effective health services to adolescent girls. They must respect, protect, and fulfil adolescent girls' rights to information, privacy, confidentiality, non-discrimination, non-judgmental attitude, and respect (Nair et al 2015).

5.2.4 Respondents' working environment

The respondents' working environment covered: type of health facility currently working at; their shift/duty work; availability of contraceptive methods in the last 6 months, availability of contraceptive methods at night/weekend; number of midwives on night/weekend duty, and if and how they would like to see the working situation Improvements.

5.2.4.1 Type of health facility currently working

Of the respondents' majority, 97.0% of health centres' midwives provided adolescent girls' sexual reproductive health care services compared with 3.0% of hospitals. Health centre midwives providing adolescent sexual reproductive health care services were 6.3 times more likely to be compared with hospitals. According to a study in Ethiopia, most providers of sexual reproductive health services were midwives with either a diploma or a BSc, 96.0% were working in public/government-owned facilities, and 91.0% were working in health centres (Taddele et al 2019:3).

5.2.4.2 Shift/duty work

The majority, 92.1%, of the respondents worked day, night and weekend shifts. This study's findings are consistent with other studies in Ethiopian shift/duty, with 93.1% of midwives working at night, on weekends, or on duty in health facilities. And also, midwives were often the only staff on-site during the evening, night, or weekends/holidays (FMOH, EPHI & AMDD 2016:162).

5.2.4.3 Number of midwives on night /weekend duty per day

Regarding the number of midwives on night/weekend duty, the respondents at the health centres indicated that 2 midwives were on night/weekend duty at each of their facilities, and the respondents at the hospitals indicated that 6 midwives were on night/weekend duty at each of the hospitals. The availability of midwives around the clock is essential for adolescent girls' sexual and reproductive health services. A health facility staffing policy is in place, reviewed regularly and updated as necessary. It specifies the number, types, and necessary competence of staff to ensure an adequate number and skill mix of health care staff for the volume of work, 24 hours a day, 7 days a week (WHO 2016d: 53).

5.2.4.4 Availability of contraceptives methods in the last 6 months

Regarding the availability of contraceptive methods in the last 6 months, the majority of the respondents (75.1%) had available implants, 73.0% IUDs, and 58.0% of the respondents had emergency contraceptives and provided adolescent sexual reproductive health care services. Most of the respondents indicated that implants and emergency contraceptives had been available at night/weekends. According to Dawson et al (2016), emergency contraceptives are offered over the counter in many countries, and women are able to decide for themselves whether they need an emergency contraceptive. Still, adolescent girls and women need more information from health care providers.

When asked if and how they would like to see the working situation improved, the majority of respondents did not identify any specific areas for improvement. Several respondents, however, stated that they would like to see capacity building and training, as well as less workload by having more staff.

5.2.5 Respondents' development

The respondents' development covered: available guidelines on AGSRH care; technical support or supervision received from an external body in the last 3 months; and in-service training received during the last 12 months on providing adolescent girls' SRH care.

5.2.5.1 Available guideline on adolescent sexual reproductive health care services

The respondents were asked what guidelines were available on AGSRH care at their facilities. Many respondents indicated that guidelines, 51.0% had available guideline on family planning services, 33.0% comprehensive abortion care, and 71.1% available standard of midwives' care practices were available. Available guidelines and dissemination are critical for updating clinical health workers' knowledge and self-efficacy in order to improve maternal and newborn care services delivery (Zemedu et al 2019:6).

5.2.5.2 Respondents' technical support or supervision

Regarding technical support or supervision received from an external body in the last three or twelve months. Respondents indicated that 35% had received technical support or supervision in the last three months, 27% in the last twelve months, and 20.0% had a long time ago, while 17% had not received it. The majority of support provided to service providers in developing countries was in the form of encouragement, instruction, observation, and coaching, as well as resolving supply or service delivery issues. This study's findings were consistent with those of a similar study conducted in Nepal (Andersen et al 2016).

5.2.5.3 In-service training during the last 12 months

Regarding the respondents' in-service training during the last 12 months on providing AGSRH care services. 9.8% had received in-service training on adolescent girls' SRH services; 23.6% had received family planning services; 11.3% had comprehensive abortion care; 16.1% diagnosis and treatment of sexual transmitted infections; 35.6% diagnosis and treatment of human immune deficiency virus; 40.7% had received basic emergency obstetric and new-born care training; and 12.0% had received training related to adolescent sexual and reproductive health care services, while the majority indicated that they had not.

Some Ethiopian health centres do not provide post-abortion care due to a shortage of trained health care professionals. There are a small number of health workers who have received training in a variety of services, including 8.7% for adolescent and youth-friendly services, 2.5% for post-abortion care, and 16% for family planning; 28.7% have HIV; and 18.7% have sexually transmitted infections (Mulugeta et al 2019:4). Improving health worker performance necessitates more than one-time training, and countries with enabling environments must ensure frontline workers are aware of existing laws and policies. An international population and development conference has called for immediate action to improve the lives of girls, women, and children in developing countries (Chandra-Mouli et al 2019:S1).

Midwives believe that contraception education would be an important facilitator. A study on health care providers in South Africa found that nurses expressed limitations with

certain specific sexual reproductive health skills, such as the insertion of intrauterine devices and contraceptive implants (Jonas et al 2018:9; Mccance & Cameron 2014:4).

Midwives in Ethiopia were aware that abortion was legal and that midwives were authorised to provide abortion care. There was strong support for allowing midwives, with 83% providing abortion services and 89% participating in relevant training (Holcombe, Berhe & Cherie 2015:83, 84, 87). The Lancet commission on adolescent health and wellbeing shows that adolescents have many unmet needs for health care. Health care providers need attitudes, knowledge, and skills that foster engagement with adolescents. Universal health coverage requires accessible packages of care matched to local need and acceptable to adolescents and young adults (Patton et al 2016:2425).

Senior midwives and management should provide coaching, mentoring, and supportive supervision to junior midwives in adolescent health care services. To create an enabling environment, encouragement, instruction, observation, coaching, and resolving supply or service delivery issues were required (Andersen et al 2016:184). Adolescents have many unmet health care needs and face barriers such as inexperience and lack of knowledge about health care access. Health care providers must have attitudes, knowledge, and skills that promote adolescent engagement. Universal health coverage necessitates accessible care packages tailored to local needs (Patton et al 2016:2426).

5.3 QUALITATIVE FINDINGS

The third objective was to explore the provision of SRH services for adolescent girls by respondents. The researcher wished to develop guidelines for midwives' practices to improve SRH outcomes for adolescent girls. In this study, qualitative data were gathered through face-to-face interviews using a semi-structured interview guide.

Data were collected from 12 experienced respondents in face-to-face interviews. The respondents shared their work experience, views, challenges, and suggestions on how to improve ASRH services provision. Four themes emerged from the data:

- Experience in adolescent girls' SRH services.
- Opinions and views.
- Challenges in the practice of AGSRH service provision.

- Suggestions to improve midwives' practices in AGSRH service provision.

The results are presented under the following sub-headings:

Respondents' socio-demographic profile

Theme 1: Respondents' experience in AGSRH services provision

Theme 2: Respondents' opinions and views

Theme 3: Respondents' challenges in practices of AGSRH service provision

Theme 4: Respondents' suggestions for the improvement of practice in AGSRH care services provision

5.3.1 Respondents' socio-demographic profile

The respondents ranged in age from 32 to 60 years old, with a mean age of 47.3 years; had a BSc or Master's degree in Midwifery; had between 10 and 40 years' working experience, and worked in the health centres and hospitals, health science colleges, universities and the Addis Ababa Administrative Regional Health Bureau.

5.3.2 Respondents' experience in AGSRH services provision

The respondents' experience in AGSRH service provision included health education and counselling; contraceptive counselling and provision; comprehensive abortion care; STI/HIV treatment, antenatal, intrapartum and PNC. According to respondents,

"I was providing mass health education in schools on the topics of puberty, how to prevent unintended pregnancy and its complications, and prevention of STIs/HIV. And also, provide guidance and advice if any problem happened, contact health centre." (P8)

"Most of the health education provided in school was focused on pregnancy prevention, the consequences of sex before marriage, and sexually-transmitted infections/human immunodeficiency virus prevention." (P12)

Respondents counselled adolescent girls on various methods, provided dual protection with condoms to prevent pregnancy and STIS/HIV, and provided contraceptive services of their choice. Some of the respondents indicated that it was better than before and adolescent girls came to health facilities for contraceptive services and started using long-acting contraceptive methods. According to respondents,

“Midwives continuously provide health education on short- and long-acting contraception counselling. Still, contraceptives services must be non-judgmentally provided for married adolescents’ girls.” (P4)

“Midwives provided contraception counselling and services including long-acting methods. Midwives are to insert intrauterine contraceptive devices and implants since they are the only trained providers.” (P9)

In the UK, McCance and Cameron (2014:182) found that midwives provided teenagers with targeted contraceptive advice. A study in Ethiopia found that most midwives were willing to provide contraception counselling and services to unmarried adolescent girls who requested contraceptives with confidentiality (Burrowes et al 2017:263).

A study on the personal beliefs, professional responsibilities and attitudes of Ethiopian midwives towards the provision of abortion services after legal reform found that participants understood that abortion had been liberalised and that midwives had been authorised to provide abortion care. Participants agreed that midwives should be allowed to provide abortion care, expressed an interest in receiving additional abortion care training, and expressed a willingness to provide abortion services in the facility where they worked (Holcombe et al 2015:83, 84, 87).

In regard to the respondents’ experience in abortion care complications and deaths, respondents stated that hospitals had a septic room for post-abortion care and hospital midwives provided post-abortion care including counselling on post-abortion contraceptive services. Most abortion clients were young students who were not married, but some married women also came. According to respondents,

“Midwives provided counselling for abortion clients to give birth not attempt to have an abortion. Nevertheless, they come to health facilities with septic

incomplete abortion cases. Post-abortion cases were high from Friday night up to Sunday night. Midwives provided post-abortion care day and night.” (P6)

“Midwives provided comprehensive abortion care, including second trimester abortion by medically induced abortion care. Second trimester abortions and repeat cases were more common among adolescent girls.” (P9)

“At that time abortion care services were not provided in health centres. After liberalisation of the abortion law, midwives provided abortion care at health centres according to the law.” (P11)

The respondents’ experience included working in delivery rooms and postnatal wards, managing labour and delivery for women and adolescents, working on rotation in antenatal, intrapartum and postnatal care, and providing services for adolescent girls mainly due to complications from labour and delivery.

The respondents’ experience in STI/HIV services included providing counselling and STI/HIV testing for pregnant girls during antenatal care. In health centres, midwives provided syndromic management of STIs

According to respondents,

“Adolescent girls are one of the target groups and also included guideline prevention of PMTCT the first prong. There were cases of adolescent girls at the age of 15 and who were orphans and positive since their parents were also positive for human immune deficiency virus, counselled and put on treatments.” (P3)

In Cape Town, South Africa, health care providers provided STI/HIV services for adolescent girls to reduce the high infection rates (Jonas et al 2018:7).

5.3.3 Respondents’ opinions and views

The respondents were asked their views on midwives’ provision of contraceptive methods including long-acting and emergency contraceptives. Previously midwives provided health care services for women including postnatal contraceptive counselling

and services. Adolescent girls' underutilisation of contraceptive services led to unintended pregnancy, termination of pregnancy and consequences.

The Ethiopian abortion law and guideline allow midwives to provide comprehensive abortion care for adolescent girls including at weekends and nights. According to a respondent,

"I am very happy with Ethiopian abortion law. I saw many adolescent girls and women who died due to unsafe abortion. Most illegal abortion cases were high school and university students. So, midwives should provide comprehensive abortion care for adolescent girls to save them from unsafe abortion and their lives." (P12)

5.3.4 Respondents' challenges

Respondents were asked about the challenges that midwives face in AGSRH practices. Respondents identified several difficulties midwives face when providing SRH services to adolescent girls. The respondents mentioned midwives' knowledge and skill gaps, a lack of management support, a shortage of midwives and the resulting high workload, less attention to AGSRH service provision due to workload, adolescent girls' SRH services mixed with adults' services, and midwives' conflicting feelings and beliefs about adolescent girls' termination of pregnancy services.

According to respondents,

"Currently most midwives do not have awareness, exposure, encouragement and interest to work in adolescent health. In supplement some midwives think it is more workload to link adolescents within health facilities." (P2)

"Health managers do not know that adolescents' SRH services provision is part of midwives' core competency. After graduation the regional health bureau assigns and tells midwives to go to delivery rooms; most midwives were assigned like that. Even currently there is resistance by midwives to provide AGSRH care services." (P5)

The respondents indicated challenges in adolescent abortion care. According to respondents,

“In pre-service education, comprehensive abortion care was included in the midwifery curriculum. Yet, service provision of comprehensive abortion care depended on the midwifery students’ interest and gender. Universities have more male midwifery students and are more likely to provide comprehensive abortion care while health science colleges have more female midwifery students who were found to be conservative.” (P9 and P7)

“Even during community practice, BSc male student midwives were more interested in and practised comprehensive abortion care, while female student midwives were more interested and practised maternal child health services.” (P6)

“In adolescent girls’ services provision during weekends and night male midwives provided most abortion care. However, adolescent girls want and feel comfortable with female midwives.” (P9)

Midwives practice needs interest and respect, but the Ministry of Education assigns students based on academic results. Most universities were assigned students without their interest and in universities more male than female students were joining the midwifery department. According to respondents,

“Most male student midwives want to work as managers not as clinical care providers. I have experience of a male midwifery student who stayed in the department without interest for three years with no clinical experience. Then I tried to approach him by providing counselling and convinced him about midwifery job description and its importance. Finally, I took him in the practical area and he started practising in the clinical area. There is a lot like this.” (P6)

“Student midwives in adolescent girls’ health services, there was limited clinical practice and a need for midwives’ clinical supervision/mentors in health facilities.” (P5)

“There is a shortage of experienced/senior midwives before retirement and a need for more work in mentoring, attitude change and continuous follow-up for junior midwives.” (P1)

“Guidelines are a principal need for midwives’ instructors and student midwives after graduation as a reference, especially when they are working in rural areas.” (P7)

“Midwives need to receive continuous education and further training in communication skills, contraceptive services, comprehensive abortion care and STI/HIV, and counselling.” (P5)

5.3.5 Respondents’ suggestions for improvement of AGSRH service provision

The respondents made several suggestions for improving AGSRH service provision. Respondents suggested separate SRH services for adolescent girls and adult women; midwifery curriculum revision; regular on going, in-service training; compulsory availability of service provision guidelines in health facilities, and support and supervision for midwives.

According to the respondents, midwives should receive regular on-going training in capacity building, communication and counselling skills, contraceptive services, comprehensive abortion care and sexually transmitted infections/human immunodeficiency virus. Midwives should be skilled, proficient and available and provide health education and counselling services in separate rooms in health facilities. According to respondents.

“Midwives should develop skills and interest in adolescent girls’ health services provision. The number of midwives on duty should be increased to improve services for adolescent girls.” (P9)

Curriculum revision and place for practice are needed. Midwifery institutions should separate adolescent girls’ SRH in the curriculum, both in theory and practice, with 2 credit hours in reproductive health. According to a respondent,

“Guidance curriculum on adolescent’s sexual reproductive health for midwifery students, provide 32 hours but it needs improvement and more hours needed for practices by revising the curriculum, modification is possible.” (P9)

Midwives should be empowered and get support from management, supportive supervision, mentorship from senior midwives and midwives’ associations. According to respondents.

“Midwives should get support from management and senior midwives coaching and mentoring junior midwives on adolescent health care services.” (P1)

“Midwives’ association should protect the midwives’ profession, professional support and follow up.” (P12)

Midwives should be knowledgeable and have guidelines on AGSRH service provision. In addition, midwives should be encouraged and female diploma midwives should be given educational opportunities.

5.4 SUMMARY

This is a discussion of the findings of the study on adolescent sexual and reproductive health care services for girls in Ethiopia. This study's findings were compared to previous studies conducted in Ethiopia and other countries. The study's findings were compared to international and national midwifery strategies, guidelines, standards, competency, and recommendations. Chapter 6 discussed the technical and procedural guidelines for midwives to follow in order to provide sexual reproductive health care to adolescent girls throughout their lives.

CHAPTER 6

TECHNICAL AND PROCEDURAL GUIDELINES FOR MIDWIVES ON ADOLESCENT GIRLS' SEXUAL AND REPRODUCTIVE HEALTH CARE SERVICES

6.1 INTRODUCTION

Ethiopia's MoH hopes to reduce adolescent pregnancy rates from 12% to 3% while increasing contraceptive prevalence (CPR) and promoting full-time, 24-hour/7-day service provision. Increasing the number of midwives was one of the implementation strategies. Ethiopia's midwifery workforce has steadily increased from 980 in 2005 to 16,087 in 2019, with 1,708 in Addis Ababa. Despite an increase in midwives, their potential contribution to the SRH of adolescent girls has yet to be realised. Technical and procedural guidelines for providing adolescent girls with sexual reproductive health care throughout their lives are required. Ethiopian midwives should be involved in the development of evidence-based practice guidelines and protocols. This highlighted the significance of developing guidelines aimed specifically at improving midwives' performance in AGSRH service delivery (FMoH 2014a: 10, FMoH 2016a: 100; FMoH 2017a: 1; FMoH 2017b).

The development of guidelines to be followed throughout the continuum-of-care for adolescent girls by midwives in Ethiopia was a definitive end point of this thesis. Guidelines are important tools that should be readily and permanently available for use by staff in all health care facilities and hospitals. This study's technical and procedural guidelines for midwives on adolescent girls' sexual and reproductive health care services should greatly assist midwives and contribute to better AGSRH outcomes.

The objectives of the study were to:

- Determine the existing practices of midwives in adolescent girls' sexual reproductive health care service in the study area.
- Identify the factors affecting midwives' practices in providing adolescent girls' sexual reproductive health care service in the study area.

- Explore midwives' services provision in adolescent girls' sexual and reproductive health.
- Develop guidelines on midwives' practices to improve adolescent girls' sexual reproductive health outcomes.

According to the theoretical framework, the results of the quantitative analysis (Phase 1) were presented in Chapter 4. This was followed by Phase 2, which included the presentation and discussion of the findings from the semi-structured interviews with midwives and described. Furthermore, integrated results are presented in Chapter 4. In Chapter 5, the study's findings were discussed in light of the relevant supporting literature that had been reviewed.

The third phase of the study, Chapter 6, summarised the findings of the first two phases of the research study, explained the process of developing guidelines to be followed throughout the continuum of care provided by midwives to adolescent girls, and now presents the final guidelines.

6.2 SUMMARY OF FINDINGS FROM THE TWO PHASES OF STUDY

The findings of the two phases of the research study were condensed in Chapter 6, which is Phase 3 of the study. The guidelines were developed based on the findings of the study and relevant aspects of the reviewed literature, the researchers' insights. The study supervisor, senior midwives and expert on adolescent sexual and reproductive health to ensure feasibility and applicability reviewed the draft guidelines. The researcher incorporated the experts' feedback and finalized the development of the guidelines. The finalized guidelines are divided into seven major topics.

A summary of findings is presented according to theoretical framework under the following subheading:

- Respondents' socio-demographic profile
- Respondents' work experience
- Respondents' competency
- Respondents' working environment
- Respondents' development

6.2.1 Respondents' socio-demographic profile

According to the findings of this study, the majority of midwives are female, young, unmarried, and have a midwifery diploma. The majority of midwives in health centres are female and young, according to the responses of the most experienced midwives in this study. In addition, there are more female student midwives at Health Science College. Similar findings were found in numerous other studies, which revealed that the vast majority of midwives are females, young, and have a diploma in midwifery studies, (Bekru et al 2017:4; Yaekob, Shimelis, Henok & Lamaro 2015:235; Mulugeta et al 2019:3; Yigzaw et al 2015; Carr 2016:183; FMOH, EPHI & AMDD 2016:175; Jonas et al 2016:6). This reflects the fact that the vast majority of midwives are women who are solely concerned with women (McConville & Portela 2016:9). As a result of these findings, current midwives have a fantastic opportunity to serve adolescent girls of similar gender and age. However, only a few midwives offer sexual and reproductive health services to adolescent girls.

6.2.2 Respondents' work experience

The majority of midwives in this study served for less than six years, with only a few serving for more than seven years, and more provided sexual and reproductive health services to adolescent girls. As shown below, the respondents' work experiences included providing sexual and reproductive health care services to adolescent girls, including weekend and night duty; and procedures service provision.

6.2.2.1 Midwives provided SRH services including over the weekend and at night

Almost all midwives provided maternal and child health services, as well as sexual reproductive health care to adolescent girls who were mixed in with adult clients and had complications. Few midwives, however, provided information and counselling, comprehensive abortion care, diagnosis and treatment of sexually transmitted infections and human immunodeficiency virus, as well as contraceptive and counselling services for adolescent girls, including over the weekend and night duty. A few of the midwives inserted intrauterine devices and implants, performed manual vacuum aspiration,

administered abortion medication, and provided STI/HIV care and treatment to adolescent girls. There is evidence that midwives are safe and effective. The number of complete abortions does not differ when midwives provide abortion care medical abortion or manual vacuum aspirator. More women are happy with the care of a midwife than with that of a non-midwife (Carr 2016:185; FMoH 2014b:26; WHO 2015b:12, 29). In addition, the WHO (2015c: 6) recommends that SRH services be available 24 hours a day, seven days a week.

6.2.3 Respondents' competency

Less than half of midwives were confident in their ability to provide adolescent girls with sexual reproductive health care services. This included contraception, abortion care, and STI/HIV diagnosis and treatment. Experienced midwives back this up. Midwives learn seven competencies, but only one is provided in labour and delivery. In this study midwives are not fully practicing their competence on adolescent girls sexual and reproductive health care services. As a result, they lost their ability to help adolescent girls. Investment in competent midwives is essential, according to the ICM (2017a: 4, 18), to ensure high-quality midwifery care services across the continuum to all adolescent girls and women. WHO (2016d: 54) standards explain that midwives have appropriate competence to meet the requirements of their performance. Effective case management systems are in place to ensure midwives demonstrate appropriate competence in providing care. On providers' competencies, midwives must demonstrate the technical competence required to provide effective health services to adolescent girls (Nair et al 2015).

6.2.4 Respondents' working environment

The following topics were discussed in respondents' workplaces: the type of health facility where they currently work; their shift/duty work; and the number of midwives on night/weekend duty.

6.2.4.1 Type of health facility currently working

The majority of midwives in health centres provide adolescent sexual and reproductive health care. Experienced midwives support this; most midwives in health centres are up to date and can provide sexual reproductive health care services to adolescent girls on their own. According to a study conducted in Ethiopia, midwives working in health centres provide the majority of sexual reproductive health services for girls and women (Taddele et al 2019:3).

6.2.4.2 Midwives shift/weekend, night, and holiday duty work

The majority of the midwives in the current study worked night and weekend shifts, and interviewed midwives from all over the state. Midwives are available 24 hours a day, seven days a week and can provide health care to adolescent girls. They should provide comprehensive abortion care, contraception, and treatment for sexually transmitted infections and human immunodeficiency viruses. The operating clinic hours are inconvenient for adolescent girls and should be extended. In a study in Ethiopia, the majority of midwives working nights, weekends, and duty in health facilities found that they were often the only staff on-site during the evenings, nights, or weekends/holidays (FMOH, EPHI & AMDD 2016:162).

6.2.4.3 Number of midwives on night /weekend duty per day

The majority of health centres had two midwives on duty in the current study, while hospitals had six midwives on duty, less workload by having more staff. Furthermore, because there are only a limited number of midwives assigned to night/weekend duty per day, the number of midwives on duty should be increased in order to provide sexual and reproductive health services to adolescent girls. According to WHO (2016d:53), the availability of midwives around the clock is essential for adolescent girls' sexual and reproductive health services. A health facility staffing policy is in place to ensure an adequate number and skill mix of health care staff for the volume of work, 24 hours a day, 7 days a week

6.2.5 Respondents' development

The development of the respondents included the following topics: available guidelines on adolescent sexual and reproductive health care services; technical support or supervision received from an external body; and in-service training received.

6.2.5.1 *Guideline available on adolescent SRH care services*

Less than half of the participants in the study had access to a family planning guideline and comprehensive abortion care. In this study, interviewed midwives recommended that midwives obtain guidelines on adolescent sexual reproductive health care services. The guidelines should be available in the skill lab for student midwives, instructors and students after graduation. According to an Ethiopian study, available guidelines and dissemination are critical for updating midwives' knowledge level and self-confidence in their skills, which leads to them better serving adolescents (Zemedu et al 2019:6).

6.2.5.2 *Technical support or supervision from external body*

According to the current study, one third of midwives who received technical support in the last three months. The midwives felt that senior midwives and management should provide coaching, mentoring, and supportive supervision to junior midwives in adolescent health care services. This study's findings were consistent with those of a study in Nepal. The majority of support provided to service providers in developing countries was in the form of instruction, observation, and coaching, as well as resolving supply or service delivery issues (Andersen et al 2016).

6.2.5.3 *In-service training during the last 12 months*

In the current study, few midwives received in-service training on adolescent sexual and reproductive health care services; family planning services; comprehensive abortion care; diagnosis and treatment of sexual transmitted infections; and diagnosis and treatment of human immune deficiency virus. Midwives expressed that, need training for midwives on adolescent sexual reproductive health services, contraceptive services, comprehensive abortion care and sexually transmitted infections supports this. Training needs include updating, communication, and counselling skills. There was a gap

between on-the-job training and adolescent health training methods. Mulugeta et al (2019:4) noted there is inadequate health worker training for adolescents and young people. Health care providers need attitudes, knowledge and skills that foster engagement with adolescents while maintaining a level of engagement with families (Patton et al 2016:2425).

6.3 PROCESS OF GUIDELINES DEVELOPMENT

The process of developing guidelines adheres to the key steps recommended by WHO (2014a:8). To draft the guidelines, the researcher used the findings from studies in Phases 1, 2, and 3, as well as an extensive review of relevant literature and related guidelines. A group of senior midwives, experts' on adolescent sexual and reproductive health, and other health professionals first reviewed the draft document to reach agreement on the content and determine its feasibility in the Ethiopian context. The supervisor then reviewed the draft guidelines document.

The second draft guidelines document was then presented to a group of health professionals comprised of the Ethiopian Ministry of Health (MoH)/Sexual and Reproductive, Maternal, Newborn Adolescent Health and Nutrition (SRMNCAH-N) directorate and Women and Youth directorate; the Ethiopian Midwives Association; senior nurses; adolescent sexual and reproductive health experts; physicians on child health, obstetrician and gynaecologist in order to reach consensus. The researcher incorporated the experts' feedback and finalized the development of the guidelines. The finalised guidelines to implement an integrated approach to AGSRH care services provided by midwives.

The finalised guidelines are divided into seven major topics: health education and counselling services; contraceptive counselling and services; comprehensive abortion care; prevention and treatment of sexually transmitted infections and human immunodeficiency virus (STIs/HIV); maternal and newborn health care services (antenatal, intrapartum, postnatal, and new-born care); adolescent nutrition; and gender-based violence.

6.4 BASIS FOR THE DEVELOPMENT OF THE GUIDELINES

The study found that the main determinants of midwives' practice on adolescent girls' sexual and reproductive health services were: the type of health facility currently working; the level of confidence in information and counselling provision; the level of confidence in contraceptive service provision; the availability of SRH guidelines; the availability of contraceptive implants; and the availability of trained midwives in SRH services. In Phase 1, this was accomplished through the use of a quantitative findings was done in Chapter 4.

Quality health worker training and adolescent-responsive facilities are features of the most effective health systems. Midwives require attitudes, knowledge, and skills that promote adolescent engagement while maintaining a level of engagement with families. It is suggested that management and senior midwives provide junior midwives with regular coaching, mentoring, and supportive supervision on adolescent girls' health care services. Midwives should have up-to-date knowledge and in-service refresher training to improve midwife-client communication, relationships, and service provision for adolescent girls. Adolescent girls' sexual and reproductive health care guidelines are important tools for midwives, and they should be easily accessible and permanent in all health care facilities and hospitals. This was accomplished in Phase 2 by employing qualitative findings was presented in Chapter 4.

The guidelines were developed through Phase 1 and two findings of the current study, as well as relevant aspects of literature review and discussions was done in Chapter 5, the theoretical framework of the study and the researcher's insight; the adapted evolving theory of professionalism in midwifery as the conceptual framework was used to categorise the study's findings. These guidelines are meant to enable midwives to provide sexual and reproductive health care to adolescent girls.

6.5 VALIDATION AND EVALUATION OF THE GUIDELINES

The guidelines have been validated and evaluated in the following ways:

6.5.1 Purpose

The purpose of the validation and evaluation of the guidelines was to confirm that the guidelines were of a good, acceptable, and attainable nature.

6.5.2 Evaluation tool

The interim guidelines' evaluation criteria were distributed to experts to evaluate the draft guidelines. A criterion is a standard or principle that is used in evaluation as the foundation for evaluative judgment. Clarity and presentation, specificity, reliability, effectiveness, validity, achievability, relevance, and applicability are thus criteria (OECD 2021:36).

A Likert scale with four evaluation options (strongly disagree to disagree, agree, and strongly agree) is used. The scale's key is as follows: 1 strong disagreement, 2 disagreements, 3 agreements, and 4 strong agreements. The evaluators were instructed to use the key to assess and determine whether or not the criteria for each technique had been met. Assessors were asked to provide written comments and feedback on each approach when requested.

6.5.3 Experts

A group of experts in midwifery, adolescent sexual and reproductive health, maternal and child health, and other fields took part.

6.5.4 Outcome of the validation and evaluation

The evaluators stated that it is preferable to summarize the intervention based on guidelines, and they also emphasised the intergeneration of ASRH services based on midwives' scoping and competency within the continuum-of-care health services providers. They also advocated for the development of teamwork and a sense of ownership. As a result, recommendations, forwards, and other comments were incorporated into the final guidelines.

6.6 GUIDELINES TO IMPROVE MIDWIVES PRACTICE ON ADOLESCENT GIRLS SEXUAL AND REPRODUCTIVE HEALTH SERVICES IN ETHIOPIA

The availability of guidelines on sexual and reproductive health and standards for midwives' care practices is a significant enabling factor in the provision of sexual and reproductive health care services to adolescent girls by midwives. Despite, increase the number of midwives (MoH 2020:120), their potential contribution to the SRH services for adolescent girls has not been realised. This indicated the need for guidelines aimed specifically at improving midwives' performance in AGSRH service delivery in public hospitals and health centres.

6.6.1 Introduction

Sexual and reproductive health is a dynamic continuum with changing needs throughout the lifespan. Available sexual health interventions are difficult to obtain, and adolescent girls' sexual and reproductive health needs are not always recognised (WHO 2017a: 6). In Ethiopia, the National Adolescent and Youth Strategy, 2016-2020 risky sexual practices, child marriage, early childbearing, unintended pregnancy, unsafe abortion, and STIs/HIV are identified as major SRH problems of adolescent girls (FMOH 2016b: 7). In addition, less than half of health care facilities offered adolescent sexual and reproductive health services (EPHI, FMOH & AMDD 2017c: 122).

There is an unmet need; intrauterine devices were the most effective long-acting family planning method used, but their use has remained stagnant since 2000, falling from 2% in 2016 to 1.5% in 2019 (EPHI, FMOH & ICF 2019:38; CSA & ICF 2016:16; CSA & ICF 2000:55). Intrauterine devices and implants were the least commonly used contraception methods by sexually active adolescent girls (CSA & ICF 2016:16). To address this issue, the MoH developed national training manuals, standards, and minimum service delivery packages. However, for the continuum of care to be effective, technical and procedural guidelines on the provision of sexual reproductive health care services to adolescent girls across the lifecycle are required (FMOH 2017a: 1).

6.6.2 Continuum-of-care model

The continuum of care is distinguished by two characteristics (ICM 2015:9). The first dimension of the continuum care within life cycle is time. The second dimension of the care continuum is setting. Midwives have evidence-based essential competencies in care delivery, preventive measures, and the promotion of girls' and women's health. Midwives provide counselling and education, family planning services, comprehensive abortion care, STI/HIV diagnosis and treatment, antenatal, childbirth, and postpartum care, neonatal care, and care throughout the life cycle in any setting (ICM 2015:9)(see Figure 6.1).



Figure 6.1 The continuum of care model, a framework for midwives' practices

Source: ICM (2015:10)

6.6.3 Scope of the guidelines

The technical and procedural guidelines are primarily aimed at midwives who work in public health centres and hospitals, with the goal of improving midwives' practices in providing sexual and reproductive health care services to adolescent girls. Furthermore, it assists policymakers and health management in proper planning and decision-making. This will be used as a guide for midwifery students by the department of midwifery education institutions, and adolescent health care services will be implemented in health care facilities. Guidelines are recommendations designed to help

health care providers, recipients, and other stakeholders make informed decisions. (In 2019, FMoH made SRH services for adolescent a priority intervention in the Ethiopian Essential Health Services package as part of the achievement of UHC (MoH 2019b: 27; WHO 2017b:8).

6.6.4 Purpose of the guidelines

The purpose of the technical and procedural guidelines is to provide guidance for midwives and improve their technical competency and confidence in discussing and providing adolescent girls' sexual and reproductive health care services. The guidelines focus on adolescent girls' sexual and reproductive health promotion, disease prevention and clinical management in health facilities.

6.6.5 Objectives of the guidelines

The objectives are to:

- Enhance midwives' technical competency on the scope of midwives' practices.
- Assist midwives to provide quality AGSRH practice and service provision.
- Develop midwives' practice in adolescent girls' nutrition and gender-based violence service.
- Generate evidence on adolescent girls' health
- Serve as a tool for monitoring and evaluating service delivery.

6.7 ADOLESCENT SEXUAL AND REPRODUCTIVE HEALTH SERVICE

Midwives who have been trained and authorised can provide comprehensive sexual and reproductive health information and services across the entire continuum of care, including adolescent sexual and reproductive health services, family planning counselling and services, abortion care, HIV prevention and treatment, sexually transmitted infections, and maternal childcare for girls/women.

ICM and UNFPA (2015:7) state midwives contribute to improving sexual, reproductive, maternal, newborn, child, and adolescent health (SRMNCAH) equal access to quality health care for girls and women through a three-year strategic plan (2021-2023) (ICM

2021:5). In accordance with this, the developed guidelines cover seven major areas for adolescent girls' SRH care services, which are as follows:

- Health education and counselling
- Contraception counselling and services
- Comprehensive abortion care
- Prevention and treatment STI/HIV
- Maternal and neonatal care
- Adolescent nutrition counselling
- Gender-based violence treatment and counselling

6.7.1 Health education and counselling

Health facilities should provide age-appropriate preventive or curative care counselling. Encourage adolescent clients to know the physical, psychological and social aspects of SRH care. Accurate communication, education and counselling services can address gaps in health behaviours to make well-informed choices (WHO 2017c: 7). One of the core competencies of midwives for adolescent girls is information and counselling (ICM 2019:13). However, 15.4% of midwives in this study provided information and counselling on sexual and reproductive health care services to adolescent girls.

6.7.1.1 *Effective communication with adolescent clients*

According to the FMoH (2017b:64), communicate effectively with adolescent clients:

- Use simple language and ask factual questions (about intimate relationships and their beliefs).
- Be specific (ask about last sexual encounter to assess need for emergency contraception).
- Encourage the client to speak about peers, family.
- Assess cognitive capacity and observe non-verbal signs.

6.7.1.2 *Physical and pubertal development*

According to the FMoH (2017b:26), determine the client's physical and development:

- Be reassuring and non-judgmental and give her an opportunity to talk confidentially about psychological and biological changes.
- Ask about family and peer relationships to locate the client on the developmental continuum and facilitate individualised counselling.
- Ask about her intention to have sex or whether close friends are sexually active.
- If the client has already had a baby, discuss the added difficulty of developmental milestones prior to assuming adult responsibilities.

6.7.1.3 *Menarche and menstrual management*

One of the defining events of puberty in girls is menarche. Therefore, in the early stage of adolescence girls should be prepared for menstruation. Adolescent girls' health literacy must include menarche and menstruation management so that they are well informed before reaching menarche. Adolescent girls in rural and impoverished urban communities, for example, are less likely to use sanitary pads and may lack access to water and toilets at school (FMoH 2017b: 63). According to the FMoH (2014a: 19) standard of midwifery care practice in Ethiopia, adolescent girls experiencing menstrual irregularities should be seen by a midwife.

6.7.1.4 *Life skills education*

Communication as well as negotiation skills; self-reflection, decision-making, and problem-solving abilities adolescent girls should have. These abilities enable them to make responsible decisions to abstain or postpone the age of first intercourse in order to avoid unintended/unplanned pregnancies, STI/HIV, and their unintended consequences. Midwives should be responsive, reassuring, and sensitive to their clients' needs, and they should provide information that encourages them to take charge (FMoH 2017b: 61; WHO 2017a: 11).

6.7.1.5 Consultation with adolescent clients

Health consultation with adolescent clients should ensure privacy and confidentiality and involve them in decision-making. Midwives ought to conduct psychosocial assessment, and determine parents' level of involvement. Effective collection of information increases awareness of the adolescent client's life context (FMoH 2017b: 64).

6.7.1.5.1 Psychosocial consultation

Midwives should start the psychosocial assessment of their adolescent clients with non-threatening, open-ended, non-judgmental questions before moving on to more sensitive topics like sexual health. The presenting, complaint or reason for the visit should be established in order to progress and determine treatment.

6.7.1.5.2 Sexual health consultation

Midwives should speak about sexual health in a comprehensive way with clients coming to the health facilities.

According to the FMoH (2017b: 41), a client should be asked about:

- Any concerns about physical/sexual development?
- Ever had sex or sexually active now?
- Age at first sex?
- Ever been pregnant?

6.7.1.5.3 Sexual and reproductive health assessment

The FMoH (2017b: 63) proposes that a client be asked about:

- History of menstruation and periods (pain, amount of bleeding and timing)
- Knowledge about sexual health and body development
- Sexual activity (peers or self)

- Contraception, abortion, pregnancy and childbirth
- STIs/HIV

6.7.1.5.4 Sexual development and first sexual experience

According to FMoH (2017b: 65), a client should be asked the following questions to gain insight into the client's sexual health, including parental behaviours, social pressure, and cultural norms:

- Describe your sexual intimacy including kissing, petting, heavy petting.
- When was the first time you had a sexual feeling.

6.7.1.5.5 First intercourse

According to FMoH (2017b: 65), a midwife should ask the client:

- Tell me about your initial penetrative encounter.
- What, where, why, when, who, how (context).

6.7.1.5.6 Sexual behaviour

The FMoH (2017b: 65) advises that be asked about:

- Relationships and sexual activity from the past to the present
- Have you had more than one sexual partner?
- How do you generally protect yourself against pregnancy and STIs/HIV?
- Sexual pressure (e.g. take responsibility for own behaviour, sexual history - number of partners, quality of relationship).

6.7.1.5.7 Protective practice

The midwife should ask the client:

- What methods of protection against pregnancy and STIs/HIV have you used?

- Have you practised abstinence (context) what, why, when and how?
- Did you or your partner decide to use or not use abstinence?

6.7.1.5.8 *Sexual risk taking*

Clients must be asked:

- To what extent do you consider the risks associated with sex?
- Have you ever requested a test from a partner? Why is this so? What's the harm?
- Do you believe you are in danger? Why is this so? What's the harm?
- Have you ever paid someone to have sex with you?
- Have you ever been compensated for sex? (For example: develop critical thinking skills, avoid exploitative or manipulative relationships).

6.7.1.5.9 *Advise adolescent clients*

According to Chandra-Mouli, Camacho and Michaud (2013), clients should be advised on:

- Abstinence and prevention of child marriage.
- Pregnancy prevention before the age of 20.
- Prevention of unsafe abortion.

6.7.2 Contraceptive counselling and services

Qualified providers should provide counselling and services to adolescent girls (WHO 2011a: 4) by improving adolescent girls access and offering post-abortion contraception in order to reduce the likelihood of adolescent girls having second pregnancies. Health providers must promote adolescent-friendly contraceptive counselling and services, as well as to increase service use by adolescent girls (FMoH 2017a: 32, 34). One of the core competencies of midwives is to provide contraceptive counselling and services (ICM 2019:13-21). However, 40.2% of midwives in this study provided contraceptive counselling and services to adolescent girls. During the weekend and at night, 18.4% of midwives provided contraceptive counselling and services.

6.7.2.1 Contraceptive method mix

Contraceptive method mix is central to quality contraceptive services (MoH 2019c:48). Midwives should provide unbiased counselling to promote and enhance voluntary and informed method mix, including long acting and short acting contraceptive methods.

6.7.2.1.1 Contraceptive counselling

Contraceptive counselling is most effective when it is tailored to the specific needs of the client. Clients must be allowed time to reflect and ask questions about contraception methods (WHO 2018a: 370).

6.7.2.1.2 Contraceptive method-mix in Ethiopia

Contraceptive method mix including long acting reversible contraceptives should be explained (MoH 2019c) by telling clients that method mix consists of the following:

- Intrauterine contraceptive devices (IUD)
- Implants contraceptive
- Injectable contraceptive
- Male and female condoms.
- Emergency contraceptives
- Oral contraceptives (OCP)
- Others as updated by the National FMHACA

6.7.2.2 Implants provision

The use of implants results in less than one pregnancy for every 100 women. Inserting and removing them necessitates the use of a specially trained provider. A client cannot initiate or terminate implants on her own. Once the implants are in place, the client is not required to do much. Bleeding changes are common, but they are not dangerous. Implants are safe and appropriate for both girls and women. Almost all unmarried clients can safely and effectively use implants (WHO 2018a: 131-154).

Providing implants

The pregnancy checklist must be used before beginning hormonal methods such as implants with a client who is not pregnant. Inquire about the client's known medical conditions (WHO 2018a: 138).

When to start

Clients should be informed that they could start using implants at any time of the month, either immediately or after taking emergency contraception pills. Implants can be inserted on the same day if a client is not pregnant and has taken emergency contraception pills; however, a client must have a backup method in place for the first 7 days (WHO 2018a: 138).

6.7.2.2.1 Giving advice on the side effects

Counselling the clients and explaining the side effects such as changes in their bleeding patterns, headaches, abdominal pains, and breast tenderness is necessary.

6.7.2.2.2 Implant insertion

Health care providers should inform the adolescent client about the insertion procedure. Midwives must inform clients about implant placement (WHO 2018a: 142). In this study, 30.2% of midwives inserted implants.

Insertion procedure

- The provider follows proper infection-prevention protocols.
- The provider makes a mark on the skin on the inner side of the client's upper arm where the implant will be inserted (the arm she uses less often).
- The client should receive a local anesthetic injection under her arm's skin to relieve pain while the implant is being inserted, and the site should be closed with an adhesive bandage.
- The client should be expressly invited to return at any time.

- Each client must be given an implant reminder card with the following written information on a reminder card for each client and explained it:

<p>Card for Implant Reminder</p> <p>The client's name is.</p> <p>Implant _____</p> <p>Insertion date and site (which arm) _____</p> <p>Remove or replace by month _____</p> <p>If you have any problems or questions, please contact ____ or go to _____.</p>

6.7.2.2.3 *Removing implants*

Client should be informed of the removal process (WHO 2018a: 145).

Removal procedure

The provider employs effective infection control procedures. The removal procedure must be to the client followed by a local anaesthetic injection under the client's arm skin before the procedure. An adhesive bandage is used to close the wound.

6.7.2.3 *Intrauterine device (IUD)*

The TCu-380A intrauterine device and levonorgestrel intrauterine device are used (WHO 2018a: 155-210).

An intrauterine device (IUD):

- Is one of the most effective long-term pregnancy protections; 10 to 12 years and is immediately reversible.
- Less than 1 pregnancy per 100 women using an intrauterine device.

- Bleeding changes are common.
- Not a protection against sexually transmitted infections and HIV.

Changes in bleeding patterns can have negative consequences. Changes in bleeding patterns and increased cramping are two of the side effects.

Known health risks uncommon

- Anaemia may occur if a client already has low iron blood stores prior to insertion and the intrauterine device causes heavier monthly bleeding.
- If the client has Chlamydia or gonorrhoea at the time of intrauterine device insertion, pelvic inflammatory disease may occur.

Assess clients for risk of sexually transmitted infections

Screen clients for the possibility of sexually transmitted infections. A pelvic examination is used to assess a client's risk of sexually transmitted infections.

Inform the client that if she has gonorrhoea or Chlamydia, she should not have an intrauterine device implanted then, and assist her in choosing alternative contraceptive methods. Any client who suspects client may have a sexually transmitted infection should seek medical attention and be treated as soon as possible.

When to start intrauterine device

When should an intrauterine device be implanted? If the client is not pregnant, she can do it whenever she wants after the pregnancy has been ruled out. If the intrauterine device is implanted within 48 hours of birth, including via caesarean section, or if they had an abortion or miscarriage in the following weeks, there is no need for a backup method.

6.7.2.3.1 Intrauterine device insertion

The insertion must be explained procedure to the client (WHO 2018a: 167). In the current study, 23.8% of midwives inserted intrauterine devices.

Infection, expulsion, and perforation can all be avoided with proper insertion technique. The providers use the following procedure:

- Perform a pelvic examination to determine uterine position and eligibility.
- Perform a bimanual examination before inserting
- Uses an antiseptic to clean the cervix and vagina.
- Inserts the tenaculum slowly through the speculum, closing it just enough to keep the cervix and uterus in place.
- Passes the uterine sound gently and slowly through the cervix to determine the depth and position of the uterus.
- Places the IUD into the inserter while both are still sterilised packaging.
- Cuts the IUDs strings, with about 3 centimetres left protruding from the cervix.
- The client rests after the insertion. Client stays on the examination table until she is ready to dress.

Give instructions

A client must what to expect and length of pregnancy protection:

- Advise the client about the intrauterine device and schedule an appointment for three to six weeks later.
- No client should be denied an intrauterine device because subsequent care would be difficult or impossible.
- Each client a must be IUD reminder cared with the following written information on a reminder card for each client and explained it.

IUD reminder card

- Client's name _____
- Type of IUD _____
- Date of inserted _____
- Removal or replaced by Month _____ Year _____
- If you have any problems or questions contact _____ or go to _____

6.7.2.3.2 Removal of intrauterine device

Typically, removing an intrauterine device is simple and clear. If a client is having trouble tolerating side effects, ask if she would prefer to try to solve the problem on her own or have the intrauterine device removed immediately. Removal may be easier during monthly bleeding, when the cervix is naturally softened. In cases of uterine perforation or difficult removal, refer the patient to an experienced clinician (WHO 2018a: 171). Midwives must not refuse or delay if a client requests that her intrauterine device be removed for any reason, whether personal or medical. Midwives must understand and agree that she should not be pushed or coerced into continuing to use the intrauterine device.

- Explain what will happen during removal of the intrauterine device before removing it.
- If a client is having difficulty tolerating side effects, first discuss the issues she is experiencing (managing any problems).
- Inquire whether she would prefer to try to manage the problem or have the intrauterine device removed right away.

Removal procedure of intrauterine device

To view the intrauterine device strings, a speculum is inserted, and narrow forceps are used to gently pull the intrauterine device strings until the device is completely removed from the cervix.

- The midwife inserts a speculum to see the cervix and intrauterine device strings and carefully cleans the cervix and vagina with an antiseptic solution such as iodine.
- The midwife gently pulls the intrauterine device strings with narrow forceps until the intrauterine device is completely out of the cervix.

Switching from an intrauterine device to another method

- When switching from a copper-bearing intrauterine device or a hormonal intrauterine device to another method, the client is protected from pregnancy without interruption.
- Abstinence, male and female condoms, spermicides, and withdrawal are all options as backup methods. Inform her that spermicides and withdrawal are the least effective methods of contraception. Give her condoms if possible.

6.7.2.3.3 *Levonorgestrel intrauterine device*

Long-term pregnancy protection is very effective for 5 years, is reversible, has lighter and fewer days of bleeding, and is infrequent or irregular.

- Also known as hormonal intrauterine device.
- Works by preventing sperm from fertilising an egg.

6.7.2.3.3.1 *Side effects*

Provide information about the most common side effects. Changes in her monthly bleeding pattern are the most common side effects, if the problems persist or she has additional concerns, she can return for help.

6.7.2.4 *Contraceptive service delivery modalities*

All health facilities should provide contraceptive counselling and services to adolescent girls (MoH 2019c: 33):

Service delivery modalities consist of facility-based services (public and private), non-governmental organisations; youth centre clinics, outreach-based community services, outreach/mobile health team approaches, school health services, workplace services and social franchising.

6.7.2.5 *Increased use of contraceptives by adolescent girls*

Midwives should advocate for and provide contraception services to adolescent girls in order to avoid unwanted pregnancy (Chandra-Mouli et al 2013:519).

6.7.2.5.1 *Counselling for contraceptive method choices for adolescent girls*

Proper education and counselling during method selection can assist adolescents in making well-informed, voluntary decisions (MoH 2019c: 41).

The following issues should be addressed through counselling:

- The method's effectiveness
- Information on STI/HIV prevention
- The method's most common side effects
- The method's potential health risks and benefits
- Dual protection and how to do it
- Information on resuming fertility after discontinuing a fertility treatment
- The location where the method can be obtained

6.7.2.6 *Contraceptives services for adolescent girls*

Healthy adolescents are medically eligible to use any of the current contraception methods. Age alone is not a medical reason to deny adolescent girls any method. Many of the method-specific eligibility criteria that apply to older clients also apply to adolescents (MoH 2019c). Adolescent girls who are not sexually active should get information and education on contraceptive methods and services.

Since casual and forced sex is prevalent among adolescent girls, emergency contraceptives and condoms should be available in advance. Adolescent girls can safely use all contraceptive methods and their specific attributes should be discussed during counselling. Unmarried adolescent girls may have more than one sexual partner, which put them at risk of contracting STIs/HIV. Hence dual use of contraceptive methods should be emphasised in counselling sessions.

6.7.2.7 *Quality of contraceptive service for adolescent girls*

Confidential and respectful interpersonal communication is essential for quality contraceptive service for adolescent girls. Procedures must be performed with technical competence and skill, and different contraceptive methods must be available. Midwives must know and use family planning guidelines, protocols and checklists. Adolescent girls need to have access to and be comfortable using the contraceptives services, and know where to obtain services (MoH 2019c:47). Adolescent girls who are not sexually active should be educated to delay first sex and given information about contraceptive methods and services (MoH 2019c).

6.7.2.8 *Integration of contraception counselling and provision of contraceptive service*

Contraceptive information and services should be routinely integrated as part of sexual and reproductive health services, such as antenatal, postpartum, abortion, and post-abortion care, as well as HIV testing, treatment, and care provided in the health care setting. Mobile outreach services are used to improve access to contraceptive information and services for people who live in remote areas. Integration of contraceptive commodities, supplies, and equipment covering a wide range of methods within the essential medicine supply chain, including emergency contraception (WHO 2014:2).

Midwives providing counselling on contraception might encounter adolescent clients who are coming for contraception counselling and provision and other SRH services. Midwives through different units in health facilities should be able to educate and counsel adolescent clients on contraceptives including post-partum and post-abortion contraceptive methods, and pregnancy tests.

6.7.2.9 Dual protection provided by available contraceptive methods

Information about infection prevention should be particularly emphasised for individuals who may be at increased risk, and in areas of known high prevalence of HIV and other STIs. HIV counselling and testing should be available in the facility, or by referral to other facilities. Dual protection, or the use of one method such as condoms, or a combination of methods, to protect against both pregnancy and STIs should be promoted (WHO 2012:52).

Midwives should strongly advise all sexually active adolescent clients to use dual protection so that they are aware of the importance of avoiding pregnancy and STIs/HIV. The dual use method is another method for protecting against pregnancy and STIs/HIV at the same time. This entails combining a contraceptive method, such as an implant, intrauterine device, or injectables, with condoms (FMoH 2017a).

6.7.2.10 Competencies of contraceptive service providers

More adolescent girls will have access to contraceptive methods as more health care providers are authorised and trained to provide them. Specific competency-based training and on-going educational support enhance contraceptive counselling and services. Counselling, education, and technical skills involved in inserting and removing IUDs or implants are all part of the training (WHO 2018a: 373).

6.7.2.11 Infection prevention in the health facilities

In family planning clinics, use universal precautions for infection prevention (WHO 2018a: 376). Infection-prevention procedures are simple, effective, and low-cost. When employees do not properly wash their hands before leaving the clinic, infectious organisms can spread from health facilities to communities. In family planning clinics, universal precautions to prevent infection must be followed.

Wash hands

The single most important infection-prevention procedure is hand washing. Before and after examining or treating each client, midwives must wash their hands. Rub hands for

at least 20 seconds with clean water and plain soap. Make sure to clean in between fingers and under fingernails. Hands should be washed before putting on gloves, after removing gloves, and whenever they become dirty. On arrival at work, after using the restroom or latrine, and when leaving, wash hands. Dry your hands with a paper towel or a clean, dry cloth towel that no one else is using, or let them air dry. If clean water and soap are not available, a hand sanitiser containing at least 80% alcohol can help to reduce the number of germs on one's hands. Sanitisers do not eliminate all types of germs and might not remove harmful chemicals (WHO 2018:376).

6.7.3 Comprehensive abortion care

According to the ICM, Competency 7: Midwives provide a variety of individualised, culturally sensitive abortion-related care services for women who require or are experiencing pregnancy termination or loss, in accordance with applicable laws and regulations and national protocols (Fullerton, Thompson & Severino 2011:404). Updated competencies of midwives, according to ICM (2019:16), provide care in unintended or mistimed pregnancies. During and after abortion, care and support (both physical and psychological) are required. Options for legal abortion, eligibility and accessibility to medical and surgical abortion services, and abortion-inducing medications Midwives offer family planning options that are suitable for the post-abortion period. According to ICM (2019:16), midwives should confirm pregnancy and determine gestational age; if there is an unknown gestation and/or symptoms of ectopic pregnancy, an ultrasound should be performed. Counsel the woman on the pros and cons of carrying the pregnancy to term or terminating it, and respect her ultimate decision. Provide legal guidelines, eligibility requirements, and abortion services access. Provide information on abortion procedures, potential complications, pain management, and when to seek assistance. Provide abortion as well as post-abortion care. Confirm the removal of conception products and begin using a contraceptive method as soon as possible.

Midwives, according to ICM (2019:16), should prescribe, dispense, furnish, or administer drugs in appropriate dosages to induce medication abortion. Perform manual uterine vacuum aspiration up to 12 weeks of pregnancy. Comprehensive abortion care refers to the provision of safe abortion and post-abortion care. According to FMOH (2014a:19), the standard of midwifery care practice, midwives provider of abortion care

services in Ethiopia. One of the primary responsibilities of midwives is to provide comprehensive abortion care (ICM 2019:16). However, in this study, 22.7% of midwives provided comprehensive abortion care to adolescent girls, 14.8% of midwives provided comprehensive abortion care on weekends and at night. Midwives performed procedures. 12.0% performed abortion medication, and 16.1% performed manual vacuum aspiration. Almost all midwives now perform medication-induced abortions and manual vacuum aspiration, including second trimester abortions, in hospitals.

6.7.3.1 Legal provisions for safe abortion services

Adolescent clients seeking safe abortion services should be identified, informed, educated, and enabled by midwives (WHO 2011b: 7) Midwives not only know what is expected of them, but they also educate and inform their clients. Midwives should help adolescent clients obtain safe abortion services by informing them and identifying and removing barriers to safe abortion services for adolescent girls (WHO 2011b: 7).

When caring for adolescent girls, general considerations should be taken into account. Adolescents who become pregnant unintentionally may feel embarrassed or ashamed. When their parents are present, adolescents are hesitant to disclose sensitive information. Midwives can help to reduce the stigma surrounding the issue by normalising it and treating adolescent clients with dignity and compassion. Provide information about the implications of each treatment option and assist them in selecting the one that is best suited to their needs. Answer questions as completely and honestly as possible, assist them in making a decision, and respect their decision (WHO 2018b: 40).

6.7.3.2 Clinical interview and examination

When conducting a clinical interview and examination with an adolescent client, ensure privacy (for both visual and audio), confidentiality, and respect; and begin the interview with the least sensitive and threatening issues. Rather than directly asking about their own activities, inquire about those of their peers and friends. If someone accompanies the clients, they decide whether they want the person to be present. Explain the nature and purpose of the examination and obtain the client's permission (WHO 2018b: 40). Adolescent client's privacy must be ensured, the nature and purpose of the

examinations to be performed explained and client's consent be obtained (WHO 2018b: 40, 41).

6.7.3.3 Article 551 of the penal code

According to the FMoH (2014b: 11-14), technical and procedural guidelines of article 551 of Ethiopia's penal code allows for pregnancy termination under the following conditions:

- (1) A recognised medical institution within the period permitted by the profession is not punishable where:
 - A pregnancy is a result of rape or incest.
 - The continuation of the pregnancy endangers the life/health of the mother or the child.
 - The foetus has an incurable and serious deformity.
 - The pregnant girl/woman has a physical or mental deficiency or her minority is physically as well as mentally unfit to bring up the child.
- (2) In case of grave and imminent danger, which can be averted by an immediate intervention, an act of terminating pregnancy in accordance with the provision of Article 75 of this code is not punishable.

6.7.3.3.1 Timing and place for terminating pregnancy

In terms of Article 551,

- All public and private health centres/primary clinics can perform abortions on women who are less than 12 weeks pregnant.
- Primary, general, and specialised hospitals, as well as MCH specialised centres, can perform abortions on women between 13 and 24 weeks pregnancy.
- Article 551 allows for the termination of a pregnancy between the ages of 24 and 28 weeks with specialised hospital care.

In accordance with Article 551, sub-article 1-A, where the pregnancy is the result of rape or incest pregnancy termination shall be carried out based on the disclosure by the girl/woman, noted in the medical record.

6.7.3.4 *Abortion care services*

Abortion care services for girls/women have three key elements: choice, access and quality (FMoH 2014b:9).

Abortion care services include providing information on safe abortion procedures (options), legal requirements, and pre- and post-abortion counselling and services, and post abortion contraceptive options.

6.7.3.4.1 *Counselling*

According to the FMoH (2014b: 15), the information and counselling to be provided to girls/women should include:

- What will be done during and after the procedure?
- Advantage and disadvantages.
- Risks associated with the methods of termination of pregnancy both short- and long-term.
- Resumption of menses.
- Follow-up care.

6.7.3.4.2 *Procedures to be performed*

According to the FMoH (2014b: 15), the following technical and procedural guidelines for providing care to women who have an unintended or mistimed pregnancy are:

- Confirm pregnancy and gestational age; refer for ultrasound if unknown gestation and/or symptoms of ectopic pregnancy.
- Provide information on legal requirements, eligibility, and access to abortion services. Determine contraindications to medication or aspiration methods based on

obstetric, medical, and social history.

- Provide options for continuing or terminating the pregnancy, and respect the client's ultimate decision.
- Provide information on abortion procedures, potential complications, pain management, and when to seek help.
- Provide abortion care and post-abortion care services upon request including post abortion contraceptive.
- Confirm expulsion of products of conception from history, ultrasound, or levels of HCG. Review options for contraception and initiate immediate use of method. Explore psychological response to abortion (ICM 2019:16).

6.7.3.4.3 Informed decision making

Regarding informed decision-making, all women undergoing pregnancy termination should, after having received counselling, consent to the procedure of termination in writing. The health care institution and the health worker that provides the services has an ethical obligation not to disclose the information provided by the women unless permitted by the client or ordered by a court of law (FMoH 2014b: 15).

6.7.3.4.4 Pain control in a safe abortion setting

Explain pain control include to the client. Options of pain control:

- Non pharmacologic methods
- Pharmacologic methods
- Non-steroidal anti-inflammatory drugs

6.7.3.4.5 Abortion services by level of care

All health institutions should provide termination of pregnancy by utilising of the recommended methods depending on the gestational age of the foetus. In organising abortion care services, program planners and facility managers should take the following issues into consideration (FMoH 2014b:26):

- Organising emergency abortion services to provide lifesaving procedures on a 24 hours basis.

6.7.3.5 Medical abortion

The use of drugs to end a pregnancy is known as medical abortion. Mifepristone, followed by misoprostol, are the recommended methods for medical abortion (WHO 2018b: 24).

6.7.3.5.1 Dosages and routes of administration

Mifepristone should always be taken orally. The recommended dose is 200 mg. Misoprostol should be taken 1 to 2 days after taking mifepristone. Misoprostol 800 µg is the recommended dose for vaginal, buccal, or sublingual administration. Misoprostol 400 µg is the recommended dose for oral administration (WHO 2018b: 24).

6.7.3.5.2 Induced abortion at <12 weeks

For medical management of induced abortion at <12 weeks of gestation the use of 200 mg mifepristone administered orally, followed 1–2 days later by 800 µg misoprostol administered vaginally, sublingually or buccally is recommended. The minimum recommended interval between use of mifepristone and misoprostol is 24 hours. For the misoprostol-only regimen, the use of 800-µg misoprostol administered vaginally, sublingually or buccally is recommended (WHO 2018:24).

6.7.3.5.3 Induced abortion at ≥ 12 weeks

For medical management of induced abortion at >12 weeks of gestation the use of 200 mg mifepristone administered orally, followed 1–2 days later by repeat doses of 400 µg misoprostol administered vaginally, sublingually or buccally every 3 hours is recommended. The minimum recommended interval between use of mifepristone and misoprostol is 24 hours. For the misoprostol-only regimen repeats doses of 400-µg misoprostol administered vaginally, sublingually or buccally every 3 hours is recommended (WHO 2018:25).

6.7.3.5.4 *Post-abortion contraception*

The World Health Organization recommends post-abortion contraception (WHO 2018b: 31-33).

Clients can begin hormonal contraception at the time of surgical abortion or as early as the first pill of a medical abortion regimen (WHO 2018b: 32).

When it is reasonably certain that the client is no longer pregnant after a medical abortion, an intrauterine device (IUD) placement is recommended (WHO 2018b: 33).

Following-up

A routine follow-up visit after an uncomplicated surgical abortion or medical abortion with mifepristone followed by misoprostol is not medically necessary. Clients should be informed, however, that additional services are available to them if needed or desired (WHO 2018b: 33).

6.7.3.5.5 *Incomplete abortion*

According to the WHO (2018b: 16-17):

- For clients with incomplete abortion, either vacuum aspiration or misoprostol treatment is recommended if uterine size at the time of treatment is equivalent to a pregnancy of gestational age >13 weeks or 13 weeks.
- The use of 600-µg misoprostol administered orally or 400-µg misoprostol administered sublingually is recommended for the treatment of incomplete abortion at 13 weeks uterine size.
- It is recommended that incomplete abortions be managed medically at 13 weeks of gestation.

6.7.3.5.6 *Intrauterine foetal demise*

According to the WHO (2018:21),

- For medical management of intrauterine foetal demise at ≥ 14 to ≤ 28 weeks of gestation, the use of 200 mg mifepristone administered orally, followed 1–2 days later by repeat doses of 400 μg misoprostol administered sublingually or vaginally every 4–6 hours are recommended. The minimum recommended interval between use of mifepristone and misoprostol is 24 hours.
- For the misoprostol-only regimen, the use of repeat doses of 400 μg misoprostol administered sublingually every 4–6 hours are recommended.
- Where sublingual misoprostol is not used, the use of repeat doses of 400 μg misoprostol administered vaginally every 4–6 hours is recommended.

6.7.3.5.7 Contraindications of medication abortion

Before administration of either drug clinical conditions and contraindications should be ruled out:

- History of allergy to prostaglandins, including misoprostol.
- Rule out the above clinical conditions before administering either of the two drugs.

6.7.3.6 Surgical abortion

According to the WHO (2015c: 2), the recommended method for surgical abortion is vacuum aspiration. Manual or electrical vacuum aspiration is the preferred surgical method for terminating a pregnancy.

Manual vacuum aspiration is a procedure used to evacuate the uterus using plastic materials such as a cannula and an aspirator (WHO 2015c: 40).

- Midlevel health providers like midwives can do it in all facilities.
- The procedure is done at OPD level.
- It is done up to gestational age 12 weeks.

6.7.3.6.1 *Procedure*

The procedure

- Ensure that an assistant is present.
- Communicate with and reassure the client of quality care.
- Administer prophylactic antibiotics.
- Observe steps to ensure that conceptus tissue is evacuated completely.
- Inspect the evacuated tissue for floating villi.

Post-procedure

- Follow stability of vital signs; do abdominal examination and pelvic examination.
- Give discharge instructions and post-procedure counselling, as appropriate.
- Provide the chosen method of contraception immediately after abortion.
- Sexually transmitted disease screening and sexual health counselling should be done.
- Give follow-up appointment 7-10 days' post-procedure.

6.7.3.6.2 *Subsequent management*

Providing post-abortion contraceptive

- Establish rapport and assess the client's needs.
- Ask if the client desires to delay or prevent future pregnancy.
- Explain characteristics of available methods.
- Help the client choose the method: all modern contraceptive methods can be used.
- Screen for any precautions for using a particular contraceptive method.

Timing of post-abortion contraception

Clients served with surgical abortion care

All modern contraception methods can be used immediately after safe induced abortion or uncomplicated post-abortion care services.

Clients served with medical abortion

Hormonal methods such as implants, pills, and injectables can be started on the day of the first pill of a medical abortion. When it is reasonably certain that a client is no longer pregnant or has completed the abortion, IUCD insertion can be performed (WHO 2018b: 31).

6.7.3.7 Classification of abortion

There are different ways of classifying abortion (FMoH 2014b:9).

6.7.3.7.1 Based on gestational age

- First trimester abortion (is less than 12 weeks of gestation).
- Second trimester abortion (is greater than 12 weeks up to 28 weeks of gestation).

6.7.3.7.2 Based on care related to termination of pregnancy

According to FMoH (2014b: 9),

- Safe abortion care is a comprehensive termination of pregnancy that is provided to clients in accordance with the law.
- Post-abortion care is a comprehensive service that treats clients who present to a health care facility after an abortion has occurred spontaneously or as a result of an attempted termination.

6.7.3.8 Elements of post-abortion care

Post-abortion care has five essential elements:

- **Community-service provider partnership** involving the local community and actors and includes resource mobilisation, social and economic issues at the community level.
- **Counselling** where clients are provided with accurate and complete information on RH issues including FP, VCT, gender-based violence and other concerns and queries.
- **Emergency treatment** of incomplete abortions and the complications
- **Family Planning services** including informed choice as well as method-mix.
- **Linkage** with other SRH services and screening of reproductive tract cancers.

6.7.3.9 Recognising and refer complications

Recognise and accept the need for intervention if complications arise. Women may be referred to a specialist to manage complications (FMoH 2014b: 24).

6.7.3.10 Essential basic supplies for surgical abortion

Surgical abortions necessitate the use of basic supplies. Supplies, instruments, and equipment are required in health care facilities. Ethiopian technical and procedural guidelines of abortion care are described in the FMoH (2014b: 10-29).

6.7.4 Sexually-transmitted infections prevention, control, and treatment

Many STIs can occur without noticeable symptoms (WHO 2018d: 329). The most effective combination preventions for sexually transmitted infections are behavioural, biomedical and structural approaches.

Sexually-transmitted infections can be controlled through providing information and services such as individual counselling and the required treatment, improving health care-seeking behaviour, early identification and treatment, and appropriate case management (FMoH 2017a:26). One of the primary responsibilities of midwives is to

provide sexually transmitted infections prevention, counselling and treatment (ICM 2019:13). However, in this study, 36.4% of midwives provided diagnosis and treatment for sexually transmitted infections to adolescent girls. 12.4% of midwives provided diagnosis and treatment of sexually transmitted infections.

6.7.4.1 Sexually-transmitted infections in adolescent clients

Sexually transmitted infections are a known risk factor for the development of cervical cancer as well as infertility later in life. However, if adequate antibiotics are available and standardised treatment protocols are followed, they can be avoided and cured (FMoH 2017a: 122).

6.7.4.2 Approaches to STIs management and comprehensive care package

Early identification of sexually transmitted infections (Chlamydia and gonorrhoea) is not always possible. However, early identification is important both to avoid passing the infection on and to avoid serious long-term health consequences, such as cervical cancer, and congenital syphilis (WHO 2018a: 333).

There are three diagnostic approaches to the management of sexually-transmitted infections (STIs) (FMoH 2017b: 125).

- Etiologic: A diagnosis is based on laboratory test results that identify the specific organism causing the infection.
- Clinical: Based on the client's history, signs, and symptoms, the provider makes a diagnosis (or educated guess) about which organism is causing infection.
- Syndromic: Diagnosis and treatment based on groups of symptoms or syndromes rather than specific STIs. All possible STIs that can cause those symptoms are treated at the same time.

6.7.4.3 Practical considerations when managing STIs among adolescent clients

It is crucial to maintain clients' confidentiality, show them respect and remain non-judgmental. Midwives should provide health information, counselling and services (FMoH 2017b: 126).

According to FMoH (2017b: 126), practical considerations include:

- Establishing good rapport, and carry out history taking and physical examination in a sensitive manner. Arrive at the right diagnosis: risk assessment.
- Communicating the diagnosis and its implications, link to HIV counselling and testing services, discuss treatment options and provide treatment.
- Arranging follow-up visits, promote safer sex for the prevention of recurrence, and provide risk reduction counselling, notifying and managing partners.

Full course of treatment

Tailor clients' treatment regimen to make it easier for them to complete their treatment. Midwives should use the opportunity to determine each client's need for other services, such as contraceptive services, that are provided at the health facility (FMoH 2017b:124, 126).

6.7.4.4 *Prevention and management of STIs*

To prevent STIs, midwives should discuss behavioural interventions, risk-reduction counselling, and barrier contraception methods such as condoms (FMoH 2017b: 126).

Choosing a dual protection strategy

Strategies for dual protection (WHO 2018a: 336) include delaying sex by abstaining for a longer period of time or by refraining from sexual activity. Maintaining a mutually dependable relationship. With each sex act, using a condom correctly.

6.7.4.5 *Risk of cervical cancer and prevention*

Risk of cervical cancer

Some factors make clients more likely to be infected by human papillomavirus such as having multiple sexual partners at the same time or over the years; women living with

HIV; and having other STIs such as herpes simplex, Chlamydia, and gonorrhoea are all risk factors for cervical cancer for clients (WHO 2018a: 340).

Vaccine available for prevention

Two vaccines (Gardasil and Cervarix) protect against cervical cancer, pre-cancer, and genital warts. Both vaccines are most effective when administered to girls before they become sexually active (WHO 2018a: 341).

Screening for and treatment of cervical cancer

There are three approaches that are recommended. Preventive care should be provided at the same time as diagnostic services (WHO 2018a: 341).

6.7.4.6 *Infertility*

Primary and secondary infertility are the most common types of infertility globally (WHO 2018a: 364).

Causes

Sexually transmitted infections are a leading cause of infertility. Gonorrhoea and Chlamydia can infect the fallopian tubes, uterus, and ovaries if left untreated (WHO 2018a:365).

Infertility prevention

Clients have to be educated on how to avoid STIs/HIV and treat cases and identified cases be treated (WHO 2018a: 366). Infertility can be prevented in many cases. Advise clients on how to avoid STIs/HIV and encourage them to seek treatment as soon as they suspect they have an STI or have been exposed to one. Treat clients who exhibit STI symptoms because treating these infections can help to prevent infertility (WHO 2018a: 366).

6.7.5 HIV prevention, control, and treatment services

Human immune-deficiency virus is abbreviated as HIV. Clients should be counselled on how to lower their risk of HIV infection, as well as HIV prevention and treatment, as well as pre-exposure prophylaxis (WHO 2018a: 332).

Counsel clients on reducing risk through HIV counselling and testing, and promote dual protection methods routinely (WHO 2018a: 332). One of the primary responsibilities of midwives is to provide HIV (ICM 2019:13). However, in this study, 36.4% of midwives provided diagnosis and treatment for HIV counselling and testing to adolescent girls. 12.4% of midwives provided diagnosis and treatment of sexually transmitted infections. A few midwives work on sexually transmitted infections and human immunodeficiency virus for adolescent girls on weekends and at night.

6.7.5.1 Modes of transmission of HIV

HIV is found in many body fluids but transmission takes place through blood, seminal fluid, vaginal and cervical secretions, and breast milk (FMoH 2017b: 128). The following are the primary modes of HIV transmission:

- HIV is transmitted by modes people who and have had sexual encounters have become infected (80-90%).
- Contact with infected blood, bodily fluids, tissues, or organs can transmit HIV.
- Mother-to-child transmission occurs during pregnancy (5-10%), labour and delivery (10-15%), and through breast milk (5-10%). (5-20%).

6.7.5.2 Adolescent clients' vulnerability to HIV

Several social and contextual risk factors, gender norms, relationships between different age groups, cultural norms, and economic status all contribute to adolescent girls' vulnerability to HIV (FMoH 2017b: 129).

According to FMoH (2017b: 113), there should be special considerations in adolescent HIV testing and counselling.

- The possibility of HIV in clients should not be dismissed.
- Health care providers must make the most during the first meeting with clients.
- Beneficial disclosure must be encouraged.
- The opportunity presented by a negative HIV test should be used advantageously.
- Future counselling of clients and their sexual partners must be encouraged.

Mature minors

Mature minors refer to adolescent girls who know their HIV status, protect themselves and their partners against related risks.

Access to quality care and treatment services (FMoH 2017b: 208)

- Clients under the age of 15 should be tested with the knowledge and consent of their parents or guardians.
- Girls under the age of 15 who are married, pregnant, commercial sex workers, or street teenagers are examples of exceptional groups.
- The level of readiness for HIV testing must be determined.
- Clients aged 15 and above whom request CHTC should be deemed mature enough to provide full informed consent.

6.7.5.2.1 Challenges related to HIV/AIDS in adolescent clients

Adolescent girls face several HIV/AIDS-related challenges which, according to FMoH (2017b: 130), which include:

- Inadequate understanding of HIV transmission and prevention.
- Inadequate access to health care and information.
- There is a scarcity of adolescent-friendly health services.
- Issues related to disclosure of their own status to others.
- Single family or being the head of the household, having to look after younger siblings because of death or illness of parents.
- Stigma and discrimination.

6.7.5.3 *Combination prevention intervention for HIV/AIDS*

There is no single method for HIV prevention. At various points, combinations of HIV prevention strategies are likely to be most effective. Using a variety of intervention strategies (FMoH 2017b: 131) can be helpful (see Table 6.1).

Table 6.1 Behavioural, biomedical and structural interventions

Behavioural interventions	Biomedical interventions	Structural interventions
Delay of onset of sexual intercourse	Ensure adolescent girls have access to HCT, PMTCT, STIs management services, male and female condoms, PEP, VMMC, ART.	Address the critical social, legal, political, and environmental enablers that contribute to the spread of HIV
Reduce sexual partners		
Provide increased comprehensive information on HIV/AIDS		

Source: (FMoH 2017d: 131)

6.7.5.4 *Approach to care and treatment of adolescents living with HIV (ALHIV)*

In order to provide effective services for adolescent girls living with HIV (ALHIV), health facilities should (FMoH 2017b: 131):

- Be integrated as one-stop shopping.
- Emphasise care and treatment; and maintaining care.
- Provide complete assessment of care.
- Provide ART.
- Facilitate adherence and psychosocial counselling and support.
- Carry out nutritional assessment and counselling
- Encourage psychotherapy, play therapy, family therapy, and support groups.
- Be empowering; encourage clients to take responsibility for their own health care, treatment, and for living positively.

6.7.5.5 Adherence of adolescents LHIV

Adherence refers to the ability of adolescent clients to adhere to or continue HIV care/ART. It includes everything from taking medications in the prescribed amount, at the prescribed time, and in the prescribed manner to adhering to a care plan, attending scheduled clinic appointments, and collecting medicines on time. Caregivers need to identify factors that affect adherence, such as health service, individual client and community and cultural factors (FMoH 2017b: 132).

6.7.5.6 Improving PMTCT services for adolescent clients living with HIV

Adolescent clients (15-19 years) on PMTCT program are threatened by the double burden of HIV and pregnancy (FMoH 2017b: 133).

HIV-positive pregnant adolescent clients

An HIV-positive pregnant client needs extra post-test counselling and support (FMoH 2017b: 133).

Improve PMTCT services for ALHIV PMTCT services

- Preventing early defaulting among adolescent pregnant clients.
- Providing enough preparation priors to start of treatment and community engagement is crucial.
- Promoting formation of family support groups within facilities for psychosocial support.
- Providing targeted interventions for mothers who are most likely to be LTFU.
- Reducing the transition points for pregnant and postpartum services.

6.7.6 Antenatal, intrapartum and postnatal care services

Pregnancy, childbirth, and the first six weeks after childbirth are critical times for maternal and newborn survival. Antenatal, intrapartum, and postnatal care services serve as a foundation for other critical health care functions (WHO 2018a: 345). One of the primary responsibilities of midwives is to provide *intrapartum care* (ICM 2019:17). In

this study, 90.1% of midwives provided intrapartum care to adolescent girls. Almost all midwives provide antenatal, intrapartum, and postpartum care for adolescent girls and women in need. The majority of midwives provided health care services to adolescent girls who had complications during their intrapartum care. During the postnatal period, almost all midwives offer contraception counselling and contraceptive pills to married adolescent girls without judgment. Currently, the number of midwives has increased, however, midwives are still working on antenatal, delivery and postnatal care.

6.7.6.1 Antenatal, intrapartum and postnatal care services

Family planning includes antenatal, childbirth and complications, and postnatal services (WHO 2018a: 346-349).

Antenatal care

Pregnant clients should be encouraged to start ANC within 12 weeks. Family planning counselling should start during antenatal care (WHO 2018a: 346).

Postnatal care

Postnatal care should be continued within 6 weeks, breastfeeding should be continued for 6 months, and an immunisation schedule should be followed (WHO 2018a: 349).

6.7.6.2 Pregnancy during adolescence

According to FMoH (2017b: 107), several factors affect safe adolescent pregnancy and childbirth, including:

- Lack of access: Limited SRH information and services are available.
- Child-marriage: Girls that are pressured to have children upon marriage to prove fertility.
- Early initiation of sex: Sexual activity among adolescent girls is increasing.
- Sexual coercion: Girls are assaulted, coerced into having sex and pregnancies.
- Socio-economic factors: Sexual exploitation often results in early pregnancy.

6.7.6.3 Adolescent pregnancy and intrapartum risks

Pregnancy and intrapartum in adolescence pose a greater risk to the health of both mother and baby than in adult women. This is due to biology and the social environment. Maternal mortality is increased by young maternal age and insufficient access to health care services. Babies born to adolescent mothers are also at a higher risk of low birth weight, as well as higher rates of morbidity and mortality (FMoH 2017b: 107). Table 6.2 summarises pregnancy complications and risks in adolescents.

Table 6.2 Adolescent pregnancy complications and risks

Pregnancy	Labour delivery	Post-partum	Risks to the foetus and newborn
<ul style="list-style-type: none"> • Pregnancy-induced hypertension • Anaemia • STIs/HIV: mother-to-child transmission 	<ul style="list-style-type: none"> • Pre-term birth • Obstructed labour/fistula • Pre-eclampsia 	<ul style="list-style-type: none"> • Anaemia • Postpartum depression 	<ul style="list-style-type: none"> • Low birth weight • Perinatal and neonatal mortality • Inadequate breast-feeding and childcare

Source: FMoH (2017d: 108)

6.7.6.4 Increased use of skilled care during ANC, SBA, and PNC for adolescents

To improve maternal and infant outcomes among adolescents, the WHO (2011a: 99) recommends expanding the availability and access to basic emergency obstetric care (BEmOC) and comprehensive emergency obstetric care (CEmOC) to all populations, including adolescents (FMoH 2017b: 111).

Midwives should provide information and services on skilled antenatal, intrapartum, and postnatal care to all pregnant adolescent clients. Midwives should provide early pregnancy and ANC diagnosis, as well as effective labour, birth (intrapartum), and postpartum care, to reduce problems (ICM 2019:4).

6.7.6.4.1 Skilled care during pregnancy

Promoting birth and emergency preparedness through the use of skilled antenatal care strategies for pregnant adolescents is effective in improving pregnancy-related

outcomes in adolescents (WHO 2011a: 91).

To maximise health during pregnancy, midwives should provide quality antenatal care to adolescent clients, including early detection and treatment of or referral for selected complications (ICM 2019:14).

6.7.6.4.2 Antenatal care for adolescent clients

Contacts with the health care system on a regular basis provide a valuable opportunity for the detection and treatment of problems. Antenatal visits are also an excellent opportunity to screen for STIs, such as syphilis, and to provide necessary treatment when necessary (FMoH 2017b: 113).

According to FMoH (2017b: 113), antenatal care includes:

- The client's life situation, including marital status and socioeconomic status, as well as the resources available to her.
- The options she has in terms of pregnancy and the support she requires.
- Her access to health care services for routine antenatal care as well as in the event of an emergency.
- Recommendations for health care delivery.
- Information on the increased risk of contracting HIV and passing it on to her infant, as well as encouragement to seek HIV counselling and testing.

6.7.6.4.3 Management of labour and delivery

During labour and delivery, midwives should provide high-quality, culturally sensitive care. They should also handle emergency situations in order to protect the health of their clients and their newborn infants (FMoH 2017b: 114). According to WHO (2020c:2) labour care guide; midwives are skilled health professionals who provide direct labour and childbirth care in all settings.

According to ICM (2019:17), physiologic labour and delivery should be promoted by:

- Providing respectful one-to-one care to client.
- Evaluating the client's physical and behavioural reactions to labour.
- Offering encouragement and support throughout the labour and delivery process. Encourage movement and upright postures, and provide fluids.
- Evaluating maternal-fetal status, vital signs, contractions, and cervical dilatation on a regular basis.
- Utilising labour progress graphics to detect complications, labour delays, and foetal compromise.
- Avoiding unnecessary routine interventions such as amniotomy, electronic foetal monitoring, closed glottis pushing, and episiotomy.

Management of labour and delivery for adolescent clients

NEVER LEAVE HER ALONE for labour and delivery care for adolescent clients. Providing emergency management as covered in emergency skills training programs such as BEmONC (FMoH 2017b: 114).

6.7.6.4.4 Postpartum care

Breastfeeding; physical check-ups for mother and infant at 48 hours, 7 days, 6 weeks, and 6 months; contraceptive methods counselling and provision within 48 hours or at 6 weeks; HIV counselling, testing/retesting for HIVPCR testing for infants at 6 weeks; counselling and provision of immunisations up to 6 months; and counselling on danger signs are all part of post-natal care services (FMoH 2017b: 115).

Provide postpartum care for adolescent clients

This is a crucial period to give the adolescent mother a second chance to plan her future. Married adolescent clients should be supported with childcare, family planning, and socio-economic planning. Midwives should visit and care for adolescent clients and their newborns (FMoH 2017b: 115).

Postpartum contraception counselling and services for adolescent clients

Provide counselling for adolescent clients on contraceptive method choices. Many too-early repeat pregnancies are unplanned and are the result of insufficient or non-existent contraceptive efforts (ICM 2019:21). The postpartum period is an excellent time to take concrete steps to avoid unplanned repeat pregnancies (FMoH 2017b: 116).

Adolescent mother's nutrition

Adolescent mothers who are lactating require adequate nutrition to meet their own bodily needs as well as the need for breast milk production (FMoH 2017b: 116).

Promote and support breastfeeding

Breastfeeding should be encouraged and supported. Breastfeeding the newborn exclusively should start within the first hour. Breastfeeding is strongly advised during the first six months of life, after which time other foods can be introduced into the breastfeeding regimen (ICM 2019:20). Breastfeeding is especially difficult for adolescent clients. They frequently believe that breastfeeding is too restricting to their movements (FMoH 2017b: 116).

6.7.6.4.5 Care of the newborn

Midwives should facilitate newborn baby care for the newborn immediately following birth, as well as for the first week to two months of age and beyond, as well as during routine postnatal care. Midwives should provide comprehensive, high-quality care for the essentially healthy infant (ICM 2019:18).

Immediate postpartum care for the newborn

Midwives, according to the ICM (2019:18), should:

- Create a safe, warm environment for the mother and newborn.
- Allow for skin-to-skin contact and evaluate the normal transition to the extra-uterine environment.

- Use standardised methods to assess the immediate newborn condition (APGAR or other) in the first minutes of life and refer if necessary.
- Encourage the use of exclusive breastfeeding and attachment (bonding) in the first hour of life.
- Perform a thorough physical examination of the newborn in the presence of the mother/family; explain findings and expected changes, such as the colour of the extremities and the shape of the head. Refer to a specialist if anything out of the ordinary is noticed.

Provide information

- Provide information about frequent breast-feeding, immunisation, and close monitoring of umbilical cord care, voiding, and stooling.
- Involve partner/support people in newborn care.
- Provide newborn prophylaxis, such as prevention of ophthalmic infection and haemorrhagic disease.

6.7.7 Gender-based violence services

Gender-based violence is a problem that must be addressed. Many women and girls are victims of violence. Midwives and other service providers should identify and assist GVB-affected women and girls (WHO 2018a: 360).

6.7.7.1 *Response and support for prevention of violence against adolescents*

Health care interventions to combat GBV include response and support services for preventing adolescent violence, early detection of GBV through clinical inquiry, first-line support and response, and treatment and care for intimate partner violence and sexual assault (WHO 2017d: 7). In cases of sexual violence, HIV post-exposure prophylaxis as well as emergency contraception should be offered (WHO 2017d: 5).

The consequences of GBV depend on the type and severity of the incidence. The WHO (2017d: 4) recommends the following: health care providers offer non-judgmental care and validate response, make available comprehensive and integrated care, publicise

the availability of services, reduce stigma related to sexual abuse, advocate with policy-makers, prioritise and strengthen referrals.

6.7.7.2 Gender-based violence (GBV) prevention, support and care

The consequences of GBV depend on the type and severity of the incidence. Violence can lead to a range of health problems, including unwanted pregnancy, HIV and other STIs. Health managers and policy-makers should create an enabling service-delivery environment and support health care providers in carrying out their tasks and responsibilities related to caring for adolescents who have been sexually abused (WHO 2017d: 4)

WHO's (2017d: 2) recommendation and good practice statement in adolescent-centered care/first line support, Health care providers should provide first-line support that is gender sensitive and adolescent centred, in response to disclosure of sexual abuse. This includes:

- Listening respectfully and empathetically to the information that is provided; offering a non-judgmental and validating response.
- Providing emotional and practical support by facilitating access to psychosocial services.
- Providing age-appropriate information about what will be done to provide with need care.
- Prioritizing immediate medical needs and first-line support.
- Minimising the need to go to multiple points of care within the health facility.

6.7.7.3 Health system response to GBV

The health sector is the first point of contact for survivors and a critical entry point in the referral pathway to other sectors. The health sector must be sensitive to GBV regardless of the type or setting of the violence (FMoH 2017b: 143).

Survivors of GBV have varying needs based on their personal circumstances, the severity of the violence, and the consequences. Regardless of the type or setting of the violence, health care providers should keep the following standards and principles in

mind: The services are based on a gendered understanding of violence against women and are centered on the victims' human rights and safety. Services are based on an integrated approach that considers the relationship between victims, perpetrators, adolescents, and their wider social environment. Services aim to prevent secondary victimisation. Services address the specific needs of vulnerable people, and services are made available (FMoH 2017b: 143).

Health care providers should be able to identify GBV survivors, perform appropriate medical examinations, and provide medical care. This process should always be documented. In every contact with GBV survivors, risk assessment and safety planning should also be part of the management with possible referral to other services needed. Furthermore, the health sector, in collaboration with other sectors, can make a significant contribution to preventing and responding to GBV at various stages of the violence cycle: Efforts to prevent violence from occurring in the first place are referred to as primary prevention. Secondary prevention focuses on identifying survivors early (via emergency department screenings and reproductive, maternal, and child services). Tertiary prevention: serves to mitigate the negative consequences of previously occurring violence (FMoH 2017b: 143).

Multi-sectoral response to GBV

Though survivors of GBV often go to health facilities seeking firsthand help, this does not limit the response to GBV to a sector. It must be a multi-sectoral response addressing the social, psychological, economic, and legal aspects associated with GBV (FMoH 2017b: 144).

Referral to social, economic, and legal support: Because women/girls seek care at some point, health care providers are in a good position to refer survivors to other services that will address their immediate needs while preventing future incidents of violence (FMoH 2017b: 144).

Ethical behaviour in GBV management: Any intervention aimed at preventing or addressing GBV should include precautions beyond routine risk assessment to ensure no harm is done. This includes adhering to ethical guidelines such as respect for persons, non-maleficence (minimising harm), beneficence (maximizing benefits), and

justice in order to protect the safety of both service providers and survivors. The three main principles that guide those working to prevent and respond to violence against women are as follows (FMoH 2017b: 144):

- **Respect:** the survivors' wishes, rights, and dignity, as well as the best interests of the adolescents.
- **Confidentiality:** at all times, except when the survivor or service provider is in imminent danger of jeopardizing her or his well-being, safety, and security.
- **Safety and security:** Ensure the survivors and those assisting them physical safety. The sensitive nature of gathering GBV data necessitates extra precautions beyond routine risk assessments to ensure no harm is done.

Interventions should include the following components:

Determine whether the intervention has the potential to raise GBV: Investigate pre-existing gender vulnerabilities such as gender discrimination, gender-based exclusion, unequal gender norms, or institutional weakness. Determine how the interaction of these factors, in conjunction with the intervention, may contribute to increased VAWG. Determine and incorporate elements to prevent or reduce this risk (FMoH 2017b: 144).

6.7.8 Adolescent nutrition services

To promote optimal feeding and care practices, the MoH established the National Nutrition Programme II (NNP II) and the National Guideline on Adolescent, Maternal, Infant, and Young Child Nutrition (AMIYCN) in 2016 (CSA & ICF 2016:190). Adolescence, like the first thousand days, provides a second window of opportunity for growth. Protein, iron, and other micronutrients are required to support adolescent growth and meet the body's increased demand for iron during menstruation. The most common form of malnutrition among Ethiopian adolescent girls is iron deficiency anemia (FMoH 2017b: 9).

Adolescent nutrition energy requirements

Adolescent energy needs are influenced by activity level, basal metabolic rate (BMR), and increased needs to support pubertal growth and development. The amount of lean

body mass is proportional to the basal metabolic rate (FMoH 2017b: 186). The amount of protein required for maintenance of existing lean body mass and accrual of additional lean body mass during the adolescent growth spurt influences the protein needs of adolescents (FMoH 2017b: 186).

6.7.8.1 Adolescent nutrition food pyramid

The food pyramid tells us how much of each group of food should be eaten. The energy giving foods are the ones that need to be eaten the most, then the fruit and vegetables to help build immunity and provide micro-nutrients and then protein and animal source food to facilitate growth and provide micro-nutrients. Finally, fats and oil and sugars should be eaten in smaller amounts (FMoH 2017b: 187).

The food pyramid shows how much of each food group should be consumed. It indicates that the most energy-giving foods should be consumed; fruits and vegetables help build immunity and provide micronutrients, and protein and animal source foods promote growth and provide micronutrients. Fats, oils, and sugars should be consumed in moderation. A food pyramid is a graphical representation of the recommended number of servings from each of the basic food groups to consume each day (FMoH 2017b: 187) (see Figure 6.2).

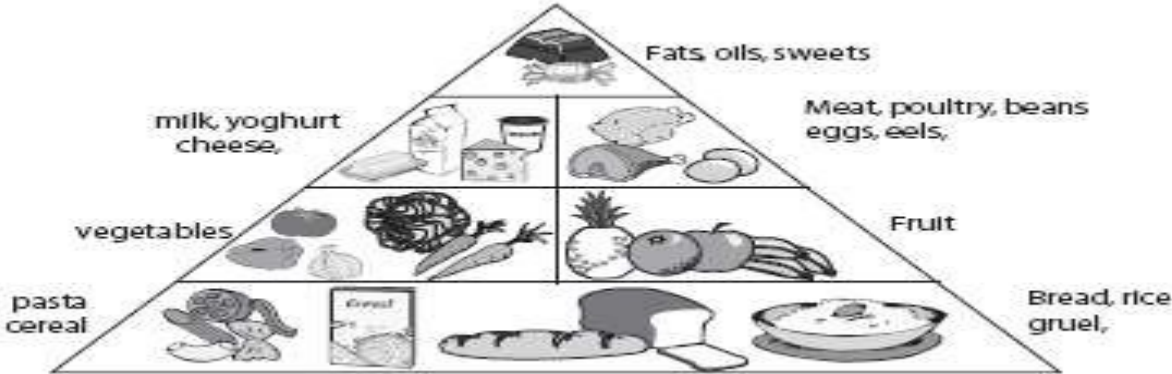


Figure 6.2 Food pyramid
Source: FMoH (2017b: 187)

6.7.8.2 *Micronutrient deficiencies*

Low haemoglobin levels in the blood indicate iron deficiency anaemia. Adolescent girls are especially vulnerable to iron deficiency because their bodies require more iron since blood loss occurs during menstruation (FMoH 2017b: 189).

6.7.8.3 *Nutrition intervention for adolescent girls*

The primary goals of nutrition intervention are to promote normal physical and emotional development, as well as to prevent nutrient deficiencies and excesses. Adolescence provides a window of opportunity for nutrition intervention. An integrated service approach should be considered to make the interventions effective and sustainable. Comprehensive and integrated programs directed at multiple-risk behaviours are more likely to be successful than separated short-term interventions (FMoH 2017b: 192).

Nutrition assessment and counselling

Nutrition assessment is a tool used to identify those adolescents who are at risk of under/over-weight/obese; micronutrient deficiency; and to assess related risk factors. The screening for adequacy of dietary intake and nutritional status of adolescent and youth should be conducted periodically and as required (FMoH 2017b: 192).

Table 6.1 BMI for age cutoff, WHO 2000 growth reference 5-19 years

BMI (kg/m)	Classification
≥ 95th percentile	Obesity
85th to < 95th percentile	Overweight
15th to < 85th percentile	Healthy Weight
< 15th percentile	Underweight/ Thinness

Source: FMoH (2017b:193)

BMI = Weight in Kg/height in mt

Steps for calculating and interpreting BMI-for-age (FMoH 2017b:193):

- Step 1: Take precise weight and height measurements.
- Step 2: Choose an appropriate growth chart (based on the age and gender of the

child being weighed and measured).

- Step 3: Make a record of the data.
- Step 4: Determine your BMI
- Step 5: Make a measurement chart.
- Step 6: Analyse the data that has been plotted.

6.7.8.3.1 Promotion of healthy eating and physical activity

FMoH (2017b: 197) recommends that adolescents:

- Eat food from all of the food groups each day to meet the nutritional requirements.
- Eat a variety of nutrient-dense foods, including fruits and vegetables, while limiting other foods such as sweets and fats.
- Have regular meals and healthy snacks.
- Get at least 30 minutes of physical activity every day.

Physical activity promotion

To promote health, psychological well-being, and a healthy body weight, engaging in regular physical activity and reducing sedentary activities are recommended (FMoH 2017b: 197).

To reduce the risk of chronic disease in adulthood, adolescents and youth should engage in at least 30 minutes of moderate-intensity physical activity at work or at home on most days of the week, in addition to usual activity. Physical activity of a higher intensity or duration will provide greater health benefits for the majority of people. To help manage body weight and prevent gradual, unhealthy body weight gain in adulthood, engaging in 60 minutes of moderate- to vigorous-intensity activity on most days of the week while not exceeding caloric intake is ideal.

6.7.9 Monitoring and evaluation

Monitoring is the systematic collection of data to assess a program's progress (FMoH 2016:37).

6.7.9.1 *Mentoring and supportive supervision*

Mentoring and coaching can aid in the acceleration of improvement processes in clinical practice and health care systems. All interventions required a strategy that combined local adaptation, active participation of local leadership and other stakeholders, and the development of local capacity. Lessons learned emphasise mentoring as a strategy for strengthening health systems, but caution must be exercised to ensure that local contexts are effectively assessed. Clinical mentorship is a system of practical training and consultation that promotes mentees' ongoing professional development in order to provide sustainable high-quality clinical care. Clinical mentoring should be viewed as part of the ongoing professional (Manzi, Hirschhorn, Sherr, Chirwa, Baynes & Awoonor-Williams 2017:14).

Supportive supervision has the potential to improve the quality of health care and management, as well as the skills and performance of health workers. In many low-income countries, supervisory mechanisms are underutilised, irregular, unsupportive, and demotivating. A shift that builds capacity for internal supportive supervision at lower levels of service delivery, particularly in health facilities, will reduce logistical and logistical implementation challenges. The quality of supportive supervision is more important than the frequency; human interactions based on trust, confidentiality, and empathy; and an emphasis on task assistance are all important (Avortri, Nabukalu & Nabyonga-Orem 2019:e001151).

6.7.9.2 *Record keeping and reporting*

Health care providers should maintain proper records. Each service should be age disaggregated and show service utilisation by adolescent clients. Service delivery outlets should document and report service provision to the nearest health structure (FMoH 2017a: 74).

6.7.9.3 Health care provider assessments

The FMOH (2017a: 89) requires assessments of health care service providers, including the number of health care service providers trained in the provision of various services (see Table 6.4 for a list of services).

Indicators

Numbers of midwives in provision of the following AGSRH services

Table 6.2 Health care providers' provision of AGSRH services

<ul style="list-style-type: none">• Information and counselling services for adolescent girls• Contraceptive counselling and services by methods• Comprehensive abortion care including post-abortion contraceptive• Sexually-transmitted infections and HIV testing and counselling	<ul style="list-style-type: none">• Antenatal care for adolescent girls• Childbirth care for adolescent girls• Postnatal care for adolescent girls• Diagnosis and care for survivors of sexual violence for adolescent girls• Adolescent nutrition including anamia• Adolescent anamia
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Source: FMOH (2017:89)

The number of midwives trained in and the provision of services listed in Table 6.4 must be documented.

The number of midwives who were aware of the guidelines for sexual reproductive health services for adolescent girls was small (FMOH 2017a: 65), particularly:

- Adolescents SRH care services
- Contraception counselling/services
- Guidelines for comprehensive abortion care
- Sexually transmitted infections
- HIV testing and counselling
- Adolescent sexual violence, GBV
- Adolescent nutrition

Table 6.8 Summary of intervention guidelines

Guidelines	Intervention
Health education and counselling	<ul style="list-style-type: none"> • Effective communication with adolescent clients • Physical and pubertal development • Menarche and menstrual management • Life skills education • Consultation with adolescent clients
Contraceptive counselling and provision	<ul style="list-style-type: none"> • Contraceptive method mix • Implants provision • Intrauterine device (IUD) • Levonorgestrel intrauterine device • Contraceptive service delivery modalities • Increased use of contraceptives by adolescent girls • Contraceptives services for adolescent girls • Quality of contraceptive service for adolescent girls • Integration of contraception counselling and provision • Dual protection provided by available contraceptive methods • Contraceptive providers • Infection prevention in family planning clinics
Comprehensive abortion care	<ul style="list-style-type: none"> • Clinical interview and examination • Legal provisions for safe abortion services for adolescent girls • Article 551 of the penal code • Health care providers • Abortion services for adolescent clients • Abortion care services • Perform abortion care procedures • Abortion services by level of care • Medical abortion • Surgical abortion • Classification of abortion • Elements of post-abortion care, • Post-abortion FP services • Recognizing and refer complications • Essential basic supplies for surgical abortion
Prevention, control and treatment of STI services	<ul style="list-style-type: none"> • Sexually-transmitted infections in adolescent clients • Approaches to STIs management and comprehensive care package • Practical considerations when managing STIs among adolescent clients • Prevention and management of STIs • Risk of cervical cancer and prevention • Causes of Infertility and prevention
Prevention, control and treatment of HIV services	<ul style="list-style-type: none"> • Modes of transmission of HIV/AIDS • Adolescent clients' vulnerability to HIV • Combination prevention intervention for HIV/AIDS • Approach to care and treatment of adolescents living with HIV (ALHIV) • Adherence of adolescents LHIV

Guidelines	Intervention
	<ul style="list-style-type: none"> • Improve PMTCT services for adolescent clients living with HIV
Antenatal, intrapartum and postnatal care services	<ul style="list-style-type: none"> • Antenatal, intrapartum and postnatal care services • Pregnancy during adolescence • Adolescent pregnancy and intrapartum risks • Increase use of skilled care during ANC, SBA and PNC among adolescents • Skilled care during pregnancy • Antenatal care for adolescent clients • Management of labour and delivery • Postpartum care • Care of the newborn
Gender-based violence services	<ul style="list-style-type: none"> • Response and support services for prevention of violence against adolescents • Gender-based violence prevention, support and care (GBV) • Health system response to GBV • Multi-sectoral response to GBV • Referral to social, economic and legal support • Ethical conduct in GBV management • Assess whether the intervention may increase GBV • Psychological and mental health interventions in short term and long term • HIV post-exposure prophylaxis treatment and adherence • Pregnancy prevention and management among girls who have been sexually abused
Adolescent nutrition services	<ul style="list-style-type: none"> • Adolescent nutrition requirements • Adolescent nutrition food pyramid • Micronutrient deficiencies • Nutrition assessment and counselling • Nutrition intervention for adolescent girls • Promotion of healthy eating and physical activity
Monitoring and evaluation	<ul style="list-style-type: none"> • Supportive supervision and clinical mentoring • Record keeping and reporting • Health care provider assessments • Indicators in AGSRH services

6.9 SUMMARY

The results were discussed in the preceding chapter. This chapter discussed the technical and procedural guidelines for midwives on adolescent girls' sexual and reproductive health care services developed to improve adolescent clients' sexual and reproductive health outcomes in Ethiopia. The guidelines placed a premium on information and counselling, contraception, comprehensive abortion care, STI/HIV prevention and treatment, antenatal, intrapartum, and postnatal care, adolescent

nutrition, and gender-based violence. Policymakers, health care managers, and midwifery educators can use this set of guidelines as a resource in their efforts to improve adolescent girls' sexual and reproductive health services in the country. Chapter 7 presents the study's findings and limitations, as well as recommendations.

CHAPTER 7

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

7.1 INTRODUCTION

Chapter 6 discussed the technical and procedural guidelines for midwives in adolescent girls' care that were developed to improve the implementation of midwives' practice in adolescent girls' SRH care and the outcomes of adolescent girls' clients in Addis Ababa, Ethiopia. This chapter presents the study's major conclusions and key findings, as well as its limitations, and makes recommendations for the MoH, health facility managers, and midwives, as well as future research. Finally, make conclusions.

7.2 PURPOSE AND OBJECTIVES OF THE STUDY

The purpose of the study was to develop guidelines for midwives to improve adolescent girls' SRH outcomes in public health facilities of Addis Ababa, Ethiopia. In order to achieve the purpose, the objectives of the study in the study area were to:

- Determine the existing practices of midwives in AGSRH service.
- Identify the factors affecting midwives' practices in providing AGSRH care service.
- Explore midwives' services provision in adolescent girls' SRH health services.
- Develop guidelines on midwives' practices to improve AGSRH outcomes.

7.3 RESEARCH DESIGN AND METHODOLOGY

The mixed methods research design method was used to collect, analyse, and synthesise quantitative and qualitative data in a single study. The research was carried out in Addis Ababa, Ethiopia. The validity and reliability of a study are used to assess its quality. The researchers obtained permission to conduct the research from the University of South Africa and the Addis Ababa regional health bureau, and they provided ethical approval and an ethical clearance letter for the study conducted in Addis Ababa, Ethiopia.

7.3.1 Phase 1

Phase 1. Quantitative, a facility-based cross-sectional study was conducted using a self-administered questionnaire to address objective 1 and objective 2 of the study. Stratified random sampling techniques were used to select hospitals and health centre. All midwives from selected hospitals and health centres participated in this study. Data were collected from midwives at a specific point in time in their respective health facilities Data was entered using Epi Info version-7. The data was analysed using STATA 14 version 14. The data findings are analysed using descriptive and inferential statistics.

7.3.2 Phase 2

In order to address objective 3, research was carried out in this phase using a qualitative descriptive design. The participants were chosen using purposive sampling from experienced midwives in Addis Ababa. The researcher chose interview with a semi-structured interview guide. Individual face-to-face interviews were conducted with midwives at their respective workplaces in a quiet environment to maintain confidentiality, privacy, and convenience. For data coding and analysis, as well as content analysis, Atlas.ti version-8 was used. The quality of data as measured by strategies is referred to as trustworthiness. These responses were aided by midwives' previous experience providing sexual and reproductive health services to adolescent girls.

7.3.3 Phase 3

Phase 3 addresses objective 4, which is to determine how and what guidelines would best address midwives' practices in order to improve adolescent girls' sexual and reproductive health outcomes. The key steps are followed in the development of guidelines, with the researcher taking into account the findings from the studies in Phases 1, 2, and 3, as well as an extensive review of relevant literature and related guidelines. The supervisor then reviewed the draft guidelines document. A group of experts then provided feedback on the second draft guidelines document. The researcher considered the feedback and finalised the guidelines for implementing an integrated approach to AGSRH care services provided by midwives.

7.4 SUMMARY OF FINDINGS

The findings presented are based on the objectives under the sub-headings of: objective 1 which determined the existing practices of midwives in adolescent girls' sexual reproductive health care services in the study area. Objective 2 identified the factors affecting midwives' practices in providing adolescent girls' sexual reproductive health care services in the study area. Objective 3 explored the role of midwives in adolescent girls' sexual and reproductive health. Objective 4 developed guidelines on midwives' practices to improve AGSRH outcomes.

7.4.1 Determined the existing practices of midwives services in ASRH

Midwives' current practices, fewer midwives were providing contraceptive services, diagnosis and treatment for sexually transmitted infections and human immunodeficiency virus, comprehensive abortion care, and information and counselling services for adolescent girls, including on weekends and at night. But the vast majority of midwives provided intrapartum care, postpartum care, and antenatal care. The majority of health centre midwives provide sexual reproductive health care to adolescent girls.

7.4.2 Identified the factors affecting midwives practices in providing ASRH services

In terms of socio-demographic data, the majority of respondents were females under the age have 29, unmarried, and diploma holders. Male (more BSc) midwives, aged more than 30 years, and married, on the other hand, were more likely to provide adolescent sexual reproductive health care services.

In terms of work experiences, most midwives' first place of employment as a midwife was at a health centre, and most health centre midwives are more likely to provide sexual reproductive health care services to adolescent girls.

Midwives who were confident in information and counselling; contraceptive counselling and services; comprehensive abortion care; STI/HIV diagnosis and treatment; and

antenatal care services were more likely to provide sexual reproductive health care services to adolescent girls.

Concerning the working environment of midwives, midwives had day, night, and weekend shifts; availability and provision of emergency contraceptive methods, implants, and intrauterine devices, including at night/weekend duty; number of midwives per duty; midwives needed capacity building and training; and less workload (more staff) were enablers in providing sexual and reproductive health care services for adolescent girls.

In terms of midwives' development, available guidelines on family planning services, comprehensive abortion care, and standards of midwives' practices; and receiving technical support or supervision from an external body were facilitators in providing sexual reproductive health care services for adolescent girls.

In terms of in-service training, those who received in-service training on adolescent sexual and reproductive health services, family planning services, comprehensive abortion care diagnosis and treatment of STI/HIV, and in-service training on adolescent sexual and reproductive health care services were more likely to provide sexual reproductive health care services to adolescent girls.

7.4.3 Explored midwives services provision in adolescent girls SRH services

The provisions for sexual reproductive health care services for adolescent girls were mixed with those for adults. Midwives spend the majority of their time providing intrapartum, postnatal, and antenatal care. This was due to a scarcity of midwives. Although the number of midwives has increased, the majority of midwives still work in intrapartum, postnatal care, and antenatal care. Midwives' education and work are distinct; midwives are trained in seven competencies but mostly provide one, intrapartum care (labour and delivery). Midwifery instructors teach midwifery students more about antenatal, delivery, and postnatal care even during their education. Almost all of the midwifery students enrolled in health science colleges were young and female. The attitude of individual midwives determines whether or not midwives provide services to adolescent girls.

Midwives are available 24 hours a day, seven days a week to provide adolescent sexual reproductive health care services, including on weekends. However, most of the time, health facilities are overburdened by labour and delivery during duty hours due to a limited number of midwives assigned to night/weekend duty per day. In addition, when girls come to the outpatient department for any reason, the health providers who work in the outpatient department contact midwives to provide services for adolescent girls and women in an emergency situation. As a result, the number of midwives who can work on adolescent sexual reproductive health care services during duty hours should be increased in order to provide quality services.

After graduation, the majority of health science midwifery students are assigned to a health centre. Health centre midwives were providing sexual reproductive health care services for adolescent girls, as well as better health care services for adolescent girls that were independent and up to date.

Aside from intrapartum care, experienced midwives are assigned to antenatal and postnatal care units, as well as other units. Concurrently, that unit provided health education on contraception, sexually transmitted infections, and human immunodeficiency virus prevention, which improved their overall experience.

Senior midwives are working in all areas of competence and should pass on their knowledge to junior midwives. Midwives should have strong communication skills, knowledge, and more clinical practice. Because the majority of midwives did not work on adolescent sexual reproductive health services, these midwives may have a knowledge and competency gap when it comes to providing services to adolescent girls.

Midwives in the delivery room should have management support regarding the availability of contraceptives such as intrauterine contraceptive devices, implants, and emergency contraceptives for adolescent girls, including on weekends. All adolescent girls' sexual reproductive health care services should be scheduled in advance and made available to adolescent girls at all times, including weekends and nights.

Even though the guidelines are available, they are not reaching providers as expected. A guideline is an important principle; it should be available, in use, and linked to other health care service guidelines. Guidelines are also necessary for the skill lab, midwifery instructors, and student midwives.

Supportive supervisions for midwives are essential; midwives require management and senior midwives' assistance with coaching, mentoring, and supportive supervision.

There was a gap in properly updated midwifery training; senior midwives should work more on midwives' attitudes, and there should be mentorship and in-service refresher training. Midwives should have up-to-date knowledge, on-the-job training, and the ability to work with adolescents in a more effective manner, because trained midwives can provide proper service at any time. Midwives must be trained in the delivery of adolescent sexual reproductive health services.

7.4.4 Developed guidelines on midwives' practices to improve AGSRH outcomes

Technical and procedural guidelines for midwives are aimed at improving their technical competence and confidence in advising and providing SRH services to adolescent girls. The MoH (2019b: 27) has designated adolescent sexual and reproductive health services as a priority intervention. This necessitates cost-effective health care delivery and competent service providers. The guidelines developed cover seven major areas: health education and counselling services; contraceptive counselling and services; comprehensive abortion care; prevention and treatment of sexually transmitted infections and human immunodeficiency virus (STIs/HIV); maternal and new-born health care services (antenatal, intrapartum, postnatal, and newborn care); adolescent nutrition, and gender-based violence.

7.5 FURTHER RESEARCH

The study's findings point to several areas for future research. Further research could look into the practices of midwives in providing sexual and reproductive health care services to adolescent girls in other regions to gain a better understanding of the issue as well as data for comparison. Further research could explore midwives practice on

adolescent girls sexual and reproductive health care services provision in other urban/ rural and Hospital/health centre to give a more profound comprehension of the issue as well as data for comparison. In addition, need midwives' educational institutes, universities and health Sciences College to explore their preparedness on adolescent sexual and reproductive health services provision by midwives, more focused on midwifery instructors. Going forward, implementation research of technical and procedural guidelines for midwives developed in this study to explore improvement of AGSRH services in the study area.

7.6 LIMITATIONS OF THE STUDY

The study was conducted in Addis Ababa, Ethiopia's capital city. It is much larger and more diverse than any other city in the country. At the time of this study, Addis Ababa had the most midwives of any city in the country, with 1,708 midwives (study area). The study was limited to hospitals and health facilities in Addis Ababa. As a result, the findings of this study may differ from those of other urban and rural health care facilities across the country.

7.7 RECOMMENDATIONS

Based on the study's findings, the researcher makes the following recommendations to the MoH, health facility managers, and midwives.

7.7.1 Ministry of Health

The MoH should do the following:

- Ensure implementation of relevant policy by regular visits to health facilities and determine problems, difficulties and shortcomings experienced by health workers.
- Ensure that copies of the abortion law are available and that staffs are aware of the services provisions.
- Examine the current working conditions for midwives to see what changes and incentives might be required.
- Examine and update the current job description of midwives.

- Revise the midwifery curriculum to include credit hours for adolescents SRH theory and practice.
- Provide educational opportunities for female diploma midwives working at health facilities.
- Pilot implementation of technical and procedural guidelines for midwives developed in this study to improve AGSRH services.

7.7.2 Health facility managers

Health facility managers should:

- Establish health services exclusively for adolescents.
- Ensure that guidelines for ASRH care services are available for staff use.
- Provide opportunities for female midwives to receive training and be assigned them to abortion care and contraception services.
- Facilitate and provide on-site capacity building/in-service training for all midwives in SRH care, communication skills, and values clarification.
- Monitor the implementation of standards in AGSRH services and facilitate pre-service training opportunities for female midwives.
- Support midwives in AGSRH services provision with on-the-job mentoring and technical support.

7.7.3 Midwives

Midwives should:

- Provide all midwifery competencies that are cost-effective and life-saving interventions.
- Work on the incorporation of outreach services with schools, youth centres, media and religious organisations to access adolescent girls.
- Educate adolescent girls on pregnancy and STI/HIV prevention, provide information and counselling services, and encourage them to inform and motivate their peers.
- Senior midwives should support junior midwives by coaching, mentoring, supportive supervision, and peer support.

7.8 CONCLUSIONS

The conclusions of the findings were presented in this chapter, as were the study's limitations, and recommendations were made to the MoH and midwives. Adolescents are frequently overlooked by the health care system because they are generally regarded as healthy. Unmet needs for SRH care services, continuity of care, and competent care providers exist among adolescent girls. Midwives are skilled frontline SRH providers for adolescent girls and women. Despite their competency, midwives' potential contribution to AGSRH services is largely unrealised. The guidelines developed in this study should help to bridge this gap.

The findings serve as the basis for the conclusions. Adolescents have many unmet health care needs and face barriers such as inexperience, a lack of knowledge about how to access health care, and a high level of confidentiality sensitivity. Health care providers must have attitudes, knowledge, and skills that promote adolescent engagement while also engaging with families. The availability of care packages that are tailored to local needs and acceptable to adolescents and young adults is required for universal health coverage. Adolescent-responsive facilities and quality health worker training are features of the most effective health systems (Patton et al 2016:2426).

Although guidelines on family planning, comprehensive abortion care, and midwifery care standards are currently available, they do not always reach providers as expected. Guidelines are important tools that should be readily and permanently available to all health care facilities and hospitals' staff. The technical and procedural guidelines for midwives on adolescent girls' SRH care developed should greatly assist midwives and contribute to improved AGSRH outcomes.

Supportive supervision for midwives is important. Management and senior midwives should provide support by means of regular coaching, mentoring and supportive supervision.

Midwives should receive on-going, up-to-date training, particularly in-service refresher courses. To improve midwife/nurse-client communication, relationships, and service provision, midwives should have up-to-date knowledge and in-service training.

LIST OF REFERENCES

- Abajobir, AA and Seme, A. 2014. Reproductive health knowledge and services utilization among rural adolescents in east Gojjam zone, Ethiopia: a community-based cross-sectional study. *BMC Health Services Research*, 14(1): 138-147.
- Abebe, M and Awoke, W. 2014. Utilization of youth reproductive health services and associated factors among high school students in Bahir Dar, Amhara Regional State, Ethiopia. *Open Journal of Epidemiology*, 04(02):69-75.
- Adera, A, Wudu, M and Yimam, Y. 2015. Assessment of knowledge, attitude and practice women of reproductive age group towards abortion care at Debre Markos Referral Hospital, Debre Markos Ethiopia. *Science Journal Public Health*,3:618-624.
- Ajah, LO, Onubogu, ES, Anozie, OB, Lawani, LO, Iyoke, CA, Onwe, EO and Ajah, MI. 2015. Adolescent reproductive health challenges among schoolgirls in southeast Nigeria: role of knowledge of menstrual pattern and contraceptive adherence. *Patient Preference and Adherence*, 9:1219-1223.
- Andersen, KL, Basnett, I, Shrestha, DR, Shrestha, MK, Shah, M and Aryal, S. 2016. Expansion of safe abortion services in Nepal through auxiliary nurse-midwife provision of medical abortion, 2011-2013. *Journal of Midwifery and Women's Health*, 61(2):177-184.
- Arbyn, M, Weiderpass, E, Bruni, L, De Sanjosé, S, Saraiya, M, Ferlay, J and Bray, F. 2020. Estimates of incidence and mortality of cervical cancer in 2018: a worldwide analysis. *The Lancet Global Health*, 8(2):e191-e203.
- Assefa, D, Shibre, T, Asher, L and Fekadu, A. 2012. Internalized stigma among patients with schizophrenia in Ethiopia: a cross-sectional facility-based study. *BMC Psychiatry*, 12(1):239.
- Assefa, EM. 2019. Knowledge, attitude and practice (KAP) of health providers towards safe abortion provision in Addis Ababa health centres. *BMC Women's Health*, 19(1):138-146.

Assefa, Y, Gelaw, YA, Hill, PS, Taye, BW and Van Damme, W. 2019. Community health extension program of Ethiopia, 2003–2018: successes and challenges toward universal coverage for primary health care services. *Globalization and Health*, 15(1):24-28.

Atuyambe, LM, Kibira, SP, Bukenya, J, Muhumuza, C, Apolot, RR and Mulogo, E. 2015. Understanding sexual and reproductive health needs of adolescents: evidence from a formative evaluation in Wakiso district, Uganda. *Reproductive Health*, 12(1):1-10.

Avortri, GS, Nabukalu, JB and Nabyonga-Orem, J. 2019. Supportive supervision to improve service delivery in low-income countries: is there a conceptual problem or a strategy problem? *BMJ Global Health*,4(Suppl 9):e001151.

Bacchus, LJ, Reiss, K, Church, K, Colombini, M, Pearson, E, Naved, R, Smith, C, Andersen, K and Free, C. 2019. Using Digital Technology for Sexual and Reproductive Health: Are Programs Adequately Considering Risk? *Global Health: Science and Practice*, 7(4):507-514.

Bain, LE, Zweekhorst, MB, Amoakoh-Coleman, M, Muftugil-Yalcin, S, Omolade, AIO, Becquet, R and De Cock Buning, T. 2019. To keep or not to keep Decision making in adolescent pregnancies in Jamestown, Ghana. *PLoS One*, 14(9):1-18.

Bakyaita, N and Mweemba, N. 2018. *Universal health coverage: A perspective of the WHO country Office in Zambia*.

Barger, MK, Hackley, B, Bharj, KK, Luyben, A. and Thompson, JB. 2019. Knowledge and use of the ICM global standards for midwifery education. *Midwifery*, 79:102534.

Barry, MJ, Hauck, YL, O'Donoghue, T and Clarke, S. 2013. Newly-graduated midwives transcending barriers: a grounded theory study. *Midwifery*, 29(12):1352-1357.

Bekele, FA, Assimamaw, NT and Ali, MS, 2021. Knowledge and Associated Factors towards Neonatal Resuscitation among Nurses and Midwives at the University of Gondar Comprehensive Specialized Hospital, Northwest Ethiopia. *International Journal of Africa Nursing Sciences*:100365.

Bekru, ET, Cherie, A and Anjulo, AA. 2017. Job satisfaction and determinant factors among midwives working at health facilities in Addis Ababa city, Ethiopia. *PloS One*, 12(2), p.e0172397.

Bharj, KK, Luyben, A, Avery, MD, Johnson, PG, Barger, MK and Bick, D. 2016. An agenda for midwifery education: advancing the State of the World's Midwifery. *Midwifery*, 33:3-6.

Binu, W, Marama, T, Gerbaba, M and Sinaga, M. 2018. Sexual and reproductive health services utilization and associated factors among secondary school students in Nekemte town, Ethiopia. *Reproductive Health*, 15(1):64.

Birhanu, BE, Kebede, DL, Kahsay, AB and Belachew, AB. 2019. Predictors of teenage pregnancy in Ethiopia: a multilevel analysis. *BMC Public Health*, 19(1):601-608.

Blum, RW, Astone, NM, Decker, MR and Mouli, VC. 2014. A conceptual framework for early adolescence: a platform for research. *International Journal of Adolescent Medicine and Health*, 26(3):321-331

Bogren, M, Ndela, B, Toko, C and Berg, M. 2020. Midwifery education, regulation and association in the Democratic Republic of Congo (DRC) – current state and challenges. *Global Health Action*, 13(1), p.1717409.

Bogren, M, Grahn, M, Kaboru, BB and Berg, M. 2020. Midwives' challenges and factors that motivate them to remain in their workplace in the Democratic Republic of Congo – an interview study. *Human Resources for Health*, 18(1):1-10.

Bourret, KM, Larocque, S, Hien, A, Hogue, C, Muray, K, Lukusa, AT and Ngabo, AM. 2020. Midwives' integration of post abortion manual vacuum aspiration in the Democratic Republic of Congo: a mixed methods case study & positive deviance assessment. *BMC Health Services Research*, 20(1):1-16.

Bowling, A. 2014. *Research methods in health: investigating health and health services*. New York: McGraw-Hill.

Bremnes, HS, Wiig, ÅK, Abeid, M and Darj, E. 2018. Challenges in day-to-day midwifery practice; a qualitative study from a regional referral hospital in Dar es Salaam, Tanzania. *Global Health Action*, 11(1):3.

Brittain, AW, Tevendale, HD, Mueller, T, Kulkarni, AD, Middleton, D, Garrison, ML, Read-Wahidi, MR and Koumans, EH. 2020. The teen access and quality initiative: improving adolescent reproductive health best practices in publicly funded health centres. *Journal of Community Health*, 45(3):615-625.

Burrowes, S, Holcombe, SJ, Jara, D, Carter, D and Smith, K. 2017. Midwives' and patients' perspectives on disrespect and abuse during labour and delivery care in Ethiopia: a qualitative study. *BMC Pregnancy and Childbirth*, 17(1):1-14.

Butler, MM, Fullerton, JT and Aman, C. 2018. Competence for basic midwifery practice: updating the ICM essential competencies. *Midwifery*, 66:168-175.

Callahan, D, 1973. The WHO definition of 'health'. *Hastings Center Studies*:77-87.

Casey, M, Cooney, A, O'Connell, R, Hegarty, JM, Brady, AM, O'Reilly, P, Kennedy, C, Heffernan, E, Fealy, G, McNamara, M and O'Connor, L. 2017. Nurses', midwives' and key stakeholders' experiences and perceptions on requirements to demonstrate the maintenance of professional competence. *Journal of Advanced Nursing*, 73(3):653-664.

Central Statistical Authority Addis Ababa [Ethiopia] and ORC Macro Calverton Maryland, USA. 2001. *Ethiopia demographic and health survey, 2000*. Addis Ababa, Ethiopia.

Central Statistical Authority Addis Ababa [Ethiopia] and ORC Macro Calverton Maryland, USA. 2006. *Ethiopia demographic and health survey, 2005*. Addis Ababa, Ethiopia.

Central Statistical Agency (CSA) Addis Ababa, Ethiopia and ICF International Calverton, Maryland, USA. 2012. *Ethiopia demographic and health survey, 2011*. Addis Ababa, Ethiopia.

Central Statistical Agency (CSA) Addis Ababa, Ethiopia and ICF International. [CSA & ICF]. 2014. *Ethiopia Mini demographic and health survey, 2014*. Addis Ababa, Ethiopia.

Central Statistical Agency (CSA) Addis Ababa, Ethiopia and ICF International. [CSA & ICF]. 2016. *Ethiopia demographic and health survey, 2016*. Addis Ababa, Ethiopia and Rockville, MD: CSA and ICF.

Chandra-Mouli, V, Camacho, AV and Michaud, PA. 2013. WHO guidelines on preventing early pregnancy and poor reproductive outcomes among adolescents in developing countries. *Journal of Adolescent Health, 52(5):517-522*.

Chandra-Mouli, V, Svanemyr, J, Amin, A, Fogstad, H, Say, L, Girard, F and Temmerman, M. 2015. Twenty years after the International Conference on Population and Development: where are we with adolescent sexual and reproductive health and rights. *Journal of Adolescent Health, 56(1):S1-S6*.

Chandra-Mouli, Ferguson, Plesons, Paul, Chalasani, Amin, Pallitto, Sommers, Avila, Biaukula, Husain, Janusonyte, Mukherji, Nergiz Phaladi, Porter, Sauvarin, Camacho-Huber, Mehra, Caffé, Michielsen, Ross, Zhukov, Bekker, Celum, Dayton, Erulkar, Travers, Svanemyr, Maksud, Digolo-Nyagah, Diop, Lhaki, Adhikari, Mahon, Hansen, Greeley, Herat and Engel. 2019. The political, research, programmatic, and social responses to adolescent sexual and reproductive health and rights in the 25 years since the International Conference on Population and Development. *Journal of Adolescent Health, 65(6S):S16-S40*.

Cleeve, A, Nalwadda, G, Zadik, T, Sterner, K and Klingberg-Allvin, M. 2019. Morality versus duty – A qualitative study exploring midwives' perspectives on post-abortion care in Uganda. *Midwifery*, 77:71-77.

Creswell, JW. 2011. *Designing and conducting mixed methods research*. 2nd edition. Los Angeles: Sage.

Cummins, AM, Denney-Wilson, E and Homer, CSE. 2015. The experiences of new graduate midwives working in midwifery continuity of care models in Australia. *Midwifery*, 31(4):438-444.

Dagne, AH and Ayalew, MM. 2020. Factors affecting research utilisation of nurses and midwives working in North Gondar and West Gojjam Zone public hospitals, Ethiopia: a cross-sectional study. *BMJ Open*, 10(11):e039586.

Dawson, A, Kililo, M, Geita, L, Mola, G, Brodie, PM, Rumsey, M, Copeland, F, Neill, A and Homer, CS. 2016. Midwifery capacity building in Papua New Guinea: key achievements and ways forward. *Women and Birth*, 29(2):180-188.

Dean, AG, Sullivan, KM and Soe, MM. 2013. OpenEpi: open-source epidemiologic statistics for public health, version. The Sample size determination gibberish and way out: 2005-2018 Neuropsychiatric Hospital, Aro, Abeokuta, Nigeria. From: <https://www.neuroaro.gov.ng/main/index.php/resources/article-blog/210-the-sample-size-determination-gibberish-and-way-out> (accessed 7 June 2018).

Demis, A, Adera, A and Workeneh, D. 2017. Determination of knowledge, attitudes and practices on prevention of sexually transmitted infections among seto semero high school students. *MOJ Public Health*, 5(5):142-153.

Denno, DM, Hoopes, AJ and Chandra-Mouli, V. 2015. Effective strategies to provide adolescent sexual and reproductive health services and to increase demand and community support. *Journal of Adolescent Health*, 56(1):S22-S41.

Dixon, L, Guilliland, K, Pallant, J, Sidebotham, M, Fenwick, J, McAra-Couper, J and Gilkison, A. 2017. The emotional wellbeing of New Zealand midwives: comparing responses for midwives in caseloading and shift work settings. *New Zealand College of Midwives Journal*, (53):5-14.

Elkhateeb, RR, Kishk, E, Sanad, A, Bahaa, H, Hagazy, AR, Shaheen, K, Moustafa, E, Fares, H, Gomaa, K and Mahran, A. 2020. The acceptability of using IUDs among Egyptian nulliparous women: a cross-sectional study. *BMC Women's Health*, 20:1-6.

Engel, DMC, Paul, M, Chalasani, S, Gonsalves, L, Ross, D.A, Chandra-Mouli, V, Cole, CB, De Carvalho Eriksson, C, Hayes, B, Philipose, A and Beadle, S. 2019. A package of sexual and reproductive health and rights interventions: what does it mean for adolescents. *Journal of Adolescent Health*, 65(6):S41-S50.

Ethiopian Midwives Association. 2012. *The State of the Ethiopia's Midwifery 2012: based on Ethiopian midwives' association database*. Addis Ababa, Ethiopia: EMA and United Nations Population Fund.

Ethiopian Midwives Association. 2020. *State of Ethiopian Midwives 2019: Distribution, Professional Satisfaction, and Challenges of Ethiopian Midwives*. Addis Ababa, Ethiopia: EMA and United Nations Population Fund.

Ethiopian Public Health Institute (EPHI), Federal Ministry of Health (FMoH) and Averting Maternal Death and Disability (AMDD). 2017. *Ethiopian Emergency Obstetric and Newborn Care (EmONC) Assessment 2016 Final Report*. Addis Ababa, Ethiopia and Columbia University New York, USA.

Ethiopian Public Health Institute and Federal Ministry of Health Addis Ababa [Ethiopia] and ICF International. 2019. *Ethiopia Mini demographic and health survey, 2019*. Addis Ababa, Ethiopia and Rockville, MD: CSA and ICF.

Fahy, KM and Parratt, JA. 2006. Birth territory: a theory for midwifery practice. *Women and Birth*, 19(2):45-50.

Federal Ministry of Health (FMoH). 2014a. *Standard of midwifery care practice in Ethiopia*. Addis Ababa: FMoH.

Federal Ministry of Health (FMoH). 2014b. *Technical and procedural guidelines for safe abortion services in Ethiopia*. 2nd edition. Addis Ababa: FMoH.

Federal Ministry of Health (FMoH). 2016a. *Health Sector Transformation Plan 2015/16 - 2019/20 (2008-2012 EFY)*. Addis Ababa: FMoH.

Federal Ministry of Health (FMoH). 2016b. *National adolescent and youth health strategy, 2016-2020*. Addis Ababa: FMoH.

Federal Ministry of Health (FMoH). 2016c. *National human resource for health strategic plan for Ethiopia 2016-2025, Addis Ababa, 2016* Addis Ababa: FMoH.

Federal Ministry of Health (FMoH). 2017a. *Adolescent and youth health services: implementation guideline, standards, and minimum service delivery package*. Addis Ababa: FMoH.

Federal Ministry of Health (FMoH). 2017b. *Adolescent and youth health for health-care service providers' participant manual*. Addis Ababa: FMoH.

Federal Ministry of Health (FMoH). 2017c. *National comprehensive and integrated prevention of mother-to-child transmission of HIV guideline*. Addis Ababa: MOH.

Filby, A, McConville, F and Portela, A. 2016. What prevents quality midwifery care? A systematic mapping of barriers in low- and middle-income countries from the provider perspective. *PLoS One*, 11(5):1-20.

Fontein-Kuipers, Y, Boele, A and Stuij, C. 2016. Midwives' perceptions of influences on their behaviour of woman-centred care: a qualitative study. *Front Women's Health*, 1(2):1-24.

Food, Medicine and Health Care Administration and Control Authority (FMHACA). 2016. *Minimum requirements for sexual and reproductive health (SRH) medium clinic*. Addis Ababa: FMOH.

Fullerton, JT, Ghérissi, A, Johnson, PG and Thompson, JB. 2011. Competence and competency: core concepts for international midwifery practice. *International Journal of Childbirth*, 1(1):4-12.

Fullerton, JT, Thompson, J, Pairman, S and Moyo, N. 2011. The International Confederation of Midwives: a global framework for midwifery education, regulation, and professional practice. *International Journal of Childbirth*, 1(3):145-158.

Fullerton, JT, Thompson, JB and Severino, R. 2011. The International Confederation of Midwives essential competencies for basic midwifery practice. An update study: 2009–2010. *Midwifery*, 27(4):399-408.

Galle, A, Van Parys, AS, Roelens, K and Keygnaert, I. 2015. Expectations and satisfaction with antenatal care among pregnant women with a focus on vulnerable groups: a descriptive study in Ghent. *BMC Women's Health*, 15(1):112-121.

Gebreyesus, H, Teweldemedhin, M, and Mamo, A. 2019. Determinants of reproductive health services utilization among rural female adolescents in Asgede-Tsimbla district Northern Ethiopia: a community based cross-sectional study. *Reproductive Health*, 16(1):1-10. 0

Gebrewahd, GT, Gebremeskel, GG and Tadesse, DB. 2020. Intimate partner violence against reproductive age women during COVID-19 pandemic in northern Ethiopia 2020: a community-based cross-sectional study. *Reproductive Health*, 17(1):1-8.

Geleto, A, Chojenta, C, Taddele, T and Loxton, D. 2020. Perceptions of midwives on the quality of emergency obstetric care at hospitals in Ethiopia: A qualitative explanatory study. *Midwifery*, 90:102-819.

Gemeda, TT, Gandile, AU and Bikamo, DS. 2017. HIV/AIDS knowledge, attitude and practice among Dilla University Students, Ethiopia. *African Journal of Reproductive Health*, 21(3):49-61.

Geraghty, S, Speelman, C and Bayes, S. 2019. Fighting a losing battle: Midwives experiences of workplace stress. *Women and Birth*, 32(3):e297-e306.

Germain, A, Sen, G, Garcia-Moreno, C and Shankar, M. 2015. Advancing sexual and reproductive health and rights in low-and middle-income countries: implications for the post-2015 global development agenda. *Global Public Health*, 10(2):137-148.

Gessesse, DN, Yirdaw, BW and Mekonen, DG. 2021. Predictors of competency on delivery care service among final year undergraduate midwifery students in higher education institutions of Ethiopia, 2019: A cross sectional study. *Clinical Epidemiology and Global Health*, 11:100730.

Goicolea, I, Christianson, M, Hurtig, AK, Marchal, B, Sebastian, M and Wiklund, M. 2016. Searching for best practices of youth-friendly services: a study protocol using qualitative comparative analysis in Sweden. *BMC Health Services Research*, 16(1):309-321.

Grindlay, K, Dako-Gyeke, P, Ngo, TD, Eva, G, Gobah, L, Reiger, ST, Chandrasekaran, S and Blanchard, K. 2018. Contraceptive use and unintended pregnancy among young women and men in Accra, Ghana. *PloS One*, 13(8):6-11.

Guetterman, TC, Feters, MD and Creswell, JW, 2015. Integrating quantitative and qualitative results in health science mixed methods research through joint displays. *The Annals of Family Medicine*, 13(6):554-561.

Gwatiringa, C. 2020. Development of mental health guidelines to be followed throughout the perinatal period in Zimbabwe (Doctoral dissertation). Unisa, Pretoria.

Habtu, Y, Kaba, M and Mekonnen, H. 2021. What do service providers in Southern Ethiopia say about barriers to using youth-friendly sexual and reproductive health services for adolescents? Qualitative study. *Reproductive Health*, 18(1):1-15.

Hagos, AA, Teka, EC and Degu, G. 2020. Utilization of Partograph and its associated factors among midwives working in public health institutions, Addis Ababa City Administration, Ethiopia, 2017. *BMC Pregnancy and Childbirth*, 20(1):1-9.

Haile, B, Shegaze, M, Feleke, T, Glagn, M and Andarge, E. 2020. Disparities in utilization of sexual and reproductive health services among high school adolescents from youth friendly service implemented and non-implemented areas of Southern Ethiopia. *Archives of Public Health*, 78(1):1-11.

Hakansson, M, Oguttu, M, Gemzell-Danielsson, K and Makenzius, M. 2018. Human rights versus societal norms: a mixed methods study among health care providers on social stigma related to adolescent abortion and contraceptive use in Kisumu, Kenya. *BMJ Global Health*, 3(2):9-14.

Halldorsdottir, S and Karlsdottir, SI. 2011. The primacy of the good midwife in midwifery services: an evolving theory of professionalism in midwifery. *Scandinavian Journal of Caring Sciences*, 25(4):806-817.

Hansson, M, Lundgren, I, Hensing, G and Carlsson, M. 2019. Veiled midwifery in the baby factory — A grounded theory study. *Women and Birth*, 32(1):80-86.

Hansson, M, Lundgren, I, Hensing, G, Dencker, A, Eriksson, M and Carlsson, M. 2021. Professional courage to create a pathway within midwives' fields of work: a grounded theory study. *BMC Health Services Research*, 21(1):1-13.

Harries and Constant. 2020. Providing safe abortion services: Experiences and perspectives of providers in South Africa. *Best Practice and Research Clinical Obstetrics and Gynaecology*, 62:79-89.

Hastings-Tolsma, M, Temane, A, Tagutanazvo, OB, Lukhele, S and Nolte, AG. 2021. Experience of midwives in providing care to labouring women in varied health care settings: A qualitative study. *Health SA Gesondheid*, 26:11.

Hennegan, J, Shannon, AK, Rubli, J, Schwab, KJ and Melendez-Torres, GJ. 2019. Women's and girls' experiences of menstruation in low-and middle-income countries: A systematic review and qualitative meta-synthesis. *PLoS Medicine*, 16(5):33.

Henry, D, Wood, S, Moshashane, N, Ramontshonyana, K, Amutah, C, Maleki, P, Howlett, C, Brooks, MJ, Mussa, A, Joel, D and Steenhoff, AP. 2021. Facilitators and Barriers to Implementation of Long-Acting Reversible Contraceptive Services for Adolescent Girls and Young Women in Gaborone, Botswana. *Journal of Pediatric and Adolescent Gynecology*:506.

Heydari, A, Mazlom, SR, Ranjbar, H and Scurlock-Evans, L. 2014. A study of Iranian nurses' and midwives' knowledge, attitudes, and implementation of evidence-based practice: The time for change has arrived. *Worldviews on Evidence-Based Nursing*, 11(5):325-331.

Hinchliffe, J. 2010. Leadership theories relevant to the role of the supervisor of midwives. *British Journal of Midwifery*, 18(9):588-593.

Holcombe, SJ, Berhe, A and Cherie, A. 2015. Personal beliefs and professional responsibilities: Ethiopian midwives' attitudes toward providing abortion services after legal reform. *Studies in Family Planning*, 46(1):73-95.

Homer, CSE, Lopes, SC, Nove, A, Michel-Schuldt, M, Mc-Conville, F, Nester T. Moyo, Bokosi, M and Ten Hoop-Bender, P. 2018. "Barriers to and strategies for addressing the availability, accessibility, acceptability and quality of the sexual, reproductive, maternal, newborn and adolescent health workforce: addressing the post-2015 agenda. *BMC Pregnancy and Childbirth*, 18(1):5-6.

Igras, SM, Macieira, M, Murphy, E and Lundgren, R. 2014. Investing in very young adolescents' sexual and reproductive health. *Global Public Health*, 9(5):555-569.
From: <https://www.internationalmidwives.org/assets/files/definitions-files/2018/06/eng-philosophy-and-model-of-midwifery-care.pdf> (accessed 7 November 2018).

International Confederation of Midwives (ICM). 2015. *Midwifery services framework guidelines for developing SRMNAH services by midwives*. The Hague: ICM.

International Confederation of Midwives (ICM). 2016. *Essential competencies for basic midwifery practice*. 2010 Revised 2013. The Hague: ICM.

International Confederation of Midwives (ICM). 2017a. *International confederation of midwives' strategy 2017-2020*. The Hague: ICM.

International Confederation of Midwives (ICM). 2017b. *Philosophy and model of midwifery care*. The Hague: ICM.

International Confederation of Midwives (ICM). 2019. *Essential competency for midwifery practice 2019*. The Hague: ICM.

International Confederation of Midwives (ICM). 2021. Strategic Plan 2021-2023. The Hague: ICM. From: <https://www.internationalmidwives.org> (accessed 12 April 2019).

International Confederation of Midwives (ICM) and UNFPA. 2015. Comprehensive midwifery programme.

Ipas. 2021. *Clinical updates in reproductive health*. N. Kapp (Ed.). Chapel Hill, NC: Ipas. From: www.ipas.org/clinicalupdates (accessed 16 July 2019).

Ivanova, O, Rai, M, Mlahagwa, W, Tumuhairwe, J, Bakuli, A, Nyakato, VN and Kemigisha, E. 2019. A cross-sectional mixed-methods study of sexual and reproductive health knowledge, experiences and access to services among refugee adolescent girls in the Nakivale refugee settlement, Uganda. *Reproductive Health* 16(1):1-11.

Javadnoori, M, Zangeneh, S, Tadayon, M and Akhoond, M. 2016. Competence of health care workers in sexual health education for female adolescents at schools. *Journal of Midwifery and Reproductive Health*, 4(2):605-612.

Jefford, E, Fahy, K and Sundin, D. 2011. Decision-making theories and their usefulness to the midwifery profession both in terms of midwifery practice and the education of midwives: decision-making and midwifery. *International Journal of Nursing Practice*, 17(3):246-253.

Jonas, K, Reddy, P, van den Borne, B, Sewpaul, R, Nyembezi, A, Naidoo, P and Crutzen, R. 2016. Predictors of nurses' and midwives' intentions to provide maternal and child health care services to adolescents in South Africa. *BMC Health Services Research*, 16(1):1-10.

Jonas, K, Crutzen, R, Van den Borne, B and Reddy, P. 2017. Health care workers' behaviours and personal determinants associated with providing adequate sexual and reproductive health care services in sub-Saharan Africa: a systematic review. *BMC Pregnancy and Childbirth*, 17(1):1-19.

Jonas, K, Crutzen, R, Krumeich, A, Roman, N, Van den Borne, B and Reddy, P. 2018. Health care workers' beliefs, motivations and behaviours affecting adequate provision of sexual and reproductive health care services to adolescents in Cape Town, South Africa: a qualitative study. *BMC Health Services Research*, 18(1):1-13.

Jones, SA, Sam, B, Bull, F, James, M, Ameh, CA and Van den Broek, NR. 2016. Strengthening pre-service training for skilled birth attendance — An evaluation of the maternal and child health aide training programme in Sierra Leone. *Nurse Education Today*, 41:24-29.

Joubert, G, Ehrlich, R, Katzenellenbogen, J and Karim, SA. 2014. *Epidemiology: a research manual for South Africa*. 3rd edition. Cape Town: Oxford University Press..

Kassa, GM, Arowojolu, AO, Odukogbe, ATA and Yalew, AW. 2019. Trends and determinants of teenage childbearing in Ethiopia: evidence from the 2000 to 2016 demographic and health surveys. *Italian Journal of Pediatrics*, 45(1):153-163.

Khavayet, F, Tahery, N, Alizadeh Ahvazi, M and Tabnak, A. 2018. A survey of job satisfaction among midwives working in hospitals. *Journal of Midwifery and Reproductive Health*, 6(1):1186-1192.

Lejibo, TT, Assegid, S, Beshir, M and Handiso, TB. 2017. Reproductive health service utilization and associated factors among female adolescents in Kachabirra District,

South Ethiopia: a community based cross-sectional study. *Am Journal Biomed Life Sciences*, 5(5):71-112.

Li, J, Lu, H and Hou, R. 2018. A review of the definition and scope of practice of midwives in five representative countries. *Frontiers of Nursing*, 5(3):165-173.

Li, Z, Patton, G, Sabet, F, Zhou, Z, Subramanian, SV and Lu, C. 2020. Contraceptive use in adolescent girls and adult women in low-and middle-income countries. *JAMA Network Open*, 3(2):4.

Lohela, TJ, Nesbitt, RC, Manu, A, Vesel, L, Okyere, E, Kirkwood, B and Gabrysch, S. 2016. Competence of health workers in emergency obstetric care: an assessment using clinical vignettes in Brong Ahafo region, Ghana. *BMJ Open*, 6(6):4-8.

Lohr, PA, Lyus, R and Prager, S. 2017. Use of intrauterine devices in nulliparous women. *Contraception*, 95(6):529-537.

Lopes, SC, Titulaer, P, Bokosi, M, Homer, CS and Ten Hoop-Bender, P. 2015. The involvement of midwives' associations in policy and planning about the midwifery workforce: A global survey. *Midwifery*, 31(11):1096-1103.

Lopes, SC, Nove, A, Ten Hoop-Bender, P, De Bernis, L, Bokosi, M, Moyo, NT and Homer, CS. 2016. A descriptive analysis of midwifery education, regulation and association in 73 countries: the baseline for a post-2015 pathway. *Human Resources for Health*, 14(1):2-41.

Map of Ethiopia and Addis Ababa. (From: https://www.researchgate.net/figure/Map-showing-Addis-Ababa-Sub-cities-Source-Shapefile-from-Ethiopian-Karta-Agency_fig1_327024130) (accessed 13 March 2017).

Manzi, A, Hirschhorn, LR, Sherr, K, Chirwa, C, Baynes, C. and Awoonor-Williams, JK. 2017. Mentorship and coaching to support strengthening health care systems: lessons learned across the five-population health implementation and training partnership projects in sub-Saharan Africa. *BMC Health Services Research*, 17(3):5-16.

Mattison, C, Bourret, K, Hebert, E, Leshabari, S, Kabeya, A, Achiga, P, Robinson, J and Darling, E. 2021. Health systems factors impacting the integration of midwifery: an evidence-informed framework on strengthening midwifery associations. *BMJ Global Health*, 6(6):e004850.

Mattison, CA, Lavis, JN, Hutton, EK, Dion, ML and Wilson, MG. 2020. Understanding the conditions that influence the roles of midwives in Ontario, Canada's health system: an embedded single-case study. *BMC Health Services Research*, 20(1):1-15.

From: https://www.researchgate.net/figure/Map-showing-Addis-Ababa-Sub-cities-Source-Shapefile-from-Ethiopian-Karta-Agency_fig1_327024130 (accessed 12 February 2017).

McCance, K and Cameron, S. 2014. Midwives' experiences and views of giving postpartum contraceptive advice and providing long-acting reversible contraception: a qualitative study. *Journal of Family Planning and Reproductive Health Care*, 40(3):177-183.

McDougall, L. 2016. Power and politics in the global health landscape: beliefs, competition and negotiation among global advocacy coalitions in the policy-making process. *International Journal of Health Policy and Management*, 5(5):309-320.

McIntosh-Scott, A, Mason, T, Mason-Whitehead, E and Coyle, D. 2016. *Key concepts in nursing and health care research*. New York: Sage.

Melkamu, E, Woldemariam, S and Haftu, A. 2020. Inter-professional collaboration of nurses and midwives with physicians and associated factors in Jimma University specialized teaching hospital, Jimma, Southwest Ethiopia, 2019: cross sectional study. *BMC Nursing*, 19(1):1-9.

M'hamdi, HI, Van Voorst, SF, Pinxten, W, Hilhorst, MT and Steegers, EA. 2017. Barriers in the uptake and delivery of preconception care: exploring the views of care providers. *Maternal and Child Health Journal*, 21(1):21-28.

Michel-Schuldt, M, McFadden, A, Renfrew, M and Homer, C. 2020. The provision of midwife-led care in low-and middle-income countries: an integrative review. *Midwifery*, 84:102659.

Ministry of Health (MoH). 2019a. *Annual health sector performance report in Ethiopia*. Addis Ababa: MoH.

Ministry of Health (MoH). 2019b. *Essential health services package of Ethiopia*. Addis Ababa: MoH.

Ministry of Health (MoH). 2019c. *National guideline for family planning services in Ethiopia*. 3rd edition. Addis Ababa: MoH.

Ministry of Health (MoH). 2020. *Annual performance report 2012 EFY (2019/2020) of Ethiopia*. Addis Ababa: MoH.

Mirzaii Najmabadi, K, Babazadeh, R, Mousavi, SA and Shariati, M. 2018. Iranian adolescent girls' challenges in accessing sexual and reproductive health information and services. *Journal of Health*, 8(5):561-574

Mivšek, PA, Hundley, V, Van Teijlingen, E, Pahor, M and Hlebec, V. 2021. Slovenian midwifery professionalization: Perception of midwives and related health professions. *European Journal of Midwifery*, 5:37.

Morris, J and Rushwan, H. 2015. Adolescent sexual and reproductive health: the global challenges. *International Journal of Gynecology and Obstetrics*, 131:S40-S42.

Muluneh, MD, Moges, G, Abebe, S, Hailu, Y, Makonnen, M and Stulz, V. 2021. Midwives' job satisfaction and intention to leave their current position in developing regions of Ethiopia. *Women and Birth*.

Munea, AM, Alene, GD and Debelew, GT. 2020. Quality of youth friendly sexual and reproductive health Services in West Gojjam Zone, Northwest Ethiopia: with special reference to the application of the Donabedian model. *BMC Health Services Research*, 20:249-254.

Munyaneza, Y and Mhlongo, EM. 2019. Challenges of women refugees in utilising reproductive health services in public health institutions in Durban, KwaZulu-Natal, South Africa. *Health SA Gesondheid*, 24:1-8.

Nair, M, Baitag, V, Bose, K, Boschi-Pinto, C, Lambrechts, T and Mathai, M. 2015. Improving the quality of health care services for adolescents, globally: a standards-driven approach. *Journal of Adolescent Health*, 57(3):288-298.

Nanda, P and Tandon, S. 2019. The Times They are A-Changin: using technology for ASRHR in the 25 years since ICPD. *Sexual and Reproductive Health Matters*, 27(1):349-351.

Ngabonzima, A, Asingizwe, D. and Kouveliotis, K. 2020. Influence of nurse and midwife managerial leadership styles on job satisfaction, intention to stay, and services provision in selected hospitals of Rwanda. *BMC Nursing*, 19(1):1-39.

Nkosi, B, Seeley, J, Ngwenya, N, Mchunu, SL, Gumede, D, Ferguson, J and Doyle, AM. 2019. Exploring adolescents and young people's candidacy for utilising health services in a rural district, South Africa. *BMC Health Services Research*, 19(1):195-207.

Normansell, R, Drennan, VM and Oakeshott, P. 2016. Exploring access and attitudes to regular sexually transmitted infection screening: the views of young, multi-ethnic, inner-city, female students. *Health Expectations*, 19(2):22-330.

Nove, A, Friberg, IK, de Bernis, L, McConville, F, Moran, AC, Najjemba, M, ten Hoop-Bender, P, Tracy, S. and Homer, CS. 2021. Potential impact of midwives in preventing and reducing maternal and neonatal mortality and stillbirths: a Lives Saved Tool modelling study. *The Lancet Global Health*, 9(1):e24-e32.

OECD. 2021. Applying evaluation criteria thoughtfully. Paris: OECD Publishing. From: <https://doi.org/10.1787/543e84ed-en> (accessed 11 November 2018).

Olika, AK, Kitila, SB, Terfa, YB and Olika, AK. 2021. Contraceptive use among sexually active female adolescents in Ethiopia: trends and determinants from national demographic and health surveys. *Reproductive Health*, 18(1):1-11.

Oppong-Darko, P, Amponsa-Achiano, K and Darj, E. 2017. I am ready and willing to provide the service ... though my religion frowns on abortion – Ghanaian Midwives' mixed attitudes to abortion services: a qualitative study. *International Journal of Environmental Research and Public Health*, 14(12):1501.

Pandey, PL, Seale, H and Razee, H. 2019. Exploring the factors impacting on access and acceptance of sexual and reproductive health services provided by adolescent-friendly health services in Nepal. *PloS One*, 14(8):7.

Patton, GC, Sawyer, SM, Santelli, JS, Ross, DA, Afifi, R, Allen, NB, Arora, M, Azzopardi, P, Baldwin, W, Bonell, C and Kakuma, R. 2016. Our future: a Lancet commission on adolescent health and wellbeing. *The Lancet*, 387(10036):2423-2478.

Paul, M, Näsström, SB, Klingberg-Allvin, M, Kiggundu, C and Larsson, EC. 2016. Health care providers balancing norms and practice: challenges and opportunities in providing contraceptive counselling to young people in Uganda – a qualitative study. *Global Health Action*:176.

Piot, P, Karim, SSA, Hecht, R, Legido-Quigley, H, Buse, K, Stover, J, Resch, S, Ryckman, T, Møgedal, S, Dybul, M and Goosby, E. 2015. Defeating AIDS – advancing global health. *The Lancet*, 386(9989):171-218.

Polit, DF and Beck, CT. 2017. *Nursing research: generating and assessing evidence for nursing practice*. 10th edition. Philadelphia, PA: Lippincott Williams & Wilkins.

Provenzano-Castro, B, Oizerovich, S and Stray-Pedersen, B. 2016. Future health care professionals' knowledge about the Argentinean abortion law. *International Journal of Medical Education*, 7:95-99.

Rafferty, R and Fairbrother, G. 2015. Factors influencing how senior nurses and midwives acquire and integrate coaching skills into routine practice: a grounded theory study, *Journal of Advanced Nursing*, 71(6):1249-1259.

Ranchoff, BL and Declercq, ER. 2020. The scope of midwifery practice regulations and the availability of the certified nurse-midwifery and certified midwifery workforce, 2012-2016. *Journal of Midwifery and Women's Health*, 65(1):119-130.

Ruiz-Rodriguez, M, Rodriguez-Villamizar, LA and Heredia-Pi, I. 2016. Technical efficiency of women's health prevention programs in Bucaramanga, Colombia: a four-stage analysis. *BMC Health Services Research*, 16(1):576-587.

Saleem, Z, Jan, R, McNyre, H, Rattani, SA and Sikandar, R. 2015. Midwives' perception about their practice in a midwifery-led care model in Karachi, Pakistan. *British Journal of Midwifery*, 23(3):200-207.

Sampurna, MT, Ratnasari, KA, Etika, R, Hulzebos, CV, Dijk, PH, Bos, AF and Sauer, PJ. 2018. Adherence to hyperbilirubinemia guidelines by midwives, general practitioners, and pediatricians in Indonesia. *PloS One*, 13(4):3.

Samuel, M, Fetters, T and Desta, D. 2016. Strengthening postabortion family planning services in Ethiopia: expanding contraceptive choice and improving access to long-acting reversible contraception. *Global Health: Science and Practice*, 4(Supplement 2):S60-S72.

Schalet, AT, Santelli, JS, Russell, ST, Halpern, CT, Miller, SA, Pickering, SS, Goldberg, SK and Hoenig, JM. 2014. *Invited commentary: broadening the evidence for adolescent sexual and reproductive health and education in the United States*. published with open access at Springerlink.com, *J Youth Adolescence* (2014) 43:1595-1610.

Shaw, SY, Metge, C, Taylor, C, Chartier, M, Charette, C, Lix, L, Santos, R, Sarkar, J, Nickel, NC, Burland, E and Chateau, D. 2016. Teen clinics: missing the mark? Comparing pregnancy and sexually transmitted infections rates among enrolled and non-enrolled adolescents. *International Journal for Equity in Health*, 15(1):95-102.

Sheferaw, ED, Bazant, E, Gibson, H, Fenta, HB, Ayalew, F, Belay, TB, Worku, MM, Kebebu, AE, Woldie, SA, Kim, YM and Van Den Akker, T. 2017. Respectful maternity care in Ethiopian public health facilities. *Reproductive Health*, 14(1):60-64.

Shitu, S, Adugna, G and Abebe, H. 2021. Occupational exposure to blood/body fluid splash and its predictors among midwives working in public health institutions at Addis Ababa city Ethiopia, 2020. Institution-based cross-sectional study. *Plos One*, 16(6):5.

Siriwardhana, C, Adikari, A, Jayaweera, K and Sumathipala, A. 2013. Ethical challenges in mental health research among internally displaced people: ethical theory and research implementation. *BMC Medical Ethics*, 14(1):1-8.

Starbird, E, Norton, M and Marcus, R. 2016. Investing in family planning: key to achieving the sustainable development goals. *Global Health: Science and Practice*, 4(2):191-210.

Starrs, AM, Ezeh, AC, Barker, G, Basu, A, Bertrand, JT, Blum, R, Coll-Seck, AM, Grover, A, Laski, L, Roa, M and Sathar, ZA. 2018. Accelerate progress – sexual and reproductive health and rights for all: report of the Guttmacher – Lancet Commission. *The Lancet*, 391(10140):2642-2692.

Sudhinaraset, M, Diamond-Smith, N, Thet, MM and Aung, T. 2016. Influence of internal migration on reproductive health in Myanmar: results from a recent cross-sectional survey. *BMC Public Health*, 16(1):246-253.

Sully, EA, Biddlecom, A and Darroch, JE. 2019. Not all inequalities are equal: differences in coverage across the continuum of reproductive health services. *BMJ Global Health*, 4(5):5.

Svanemyr, J, Amin, A, Robles, OJ and Greene, ME. 2015. Creating an enabling environment for adolescent sexual and reproductive health: a framework and promising approaches. *Journal of Adolescent Health*, 56(1):S7-S14.

Taddele, T, Getachew, T, Taye, G, Getnet, M, Defar, A, Teklie, H, Gonfa, G, Humnessa, S, Teshome, A, Akale, Z and Mormu, K. 2019. Factors associated with health care provider knowledge on abortion care in Ethiopia, a further analysis on emergency obstetric and newborn care assessment 2016 data. *BMC Health Services Research*, 19(1):1-8.

Tarannum, F, Khaliq, N and Eram, U. 2018. A community-based study on age of menarche among adolescent girls in Aligarh. *International Journal of Community Medical Public Health*, 5:395-400.

Tarr-Attia, CK, Boiwu, GH and Martínez-Pérez, G. 2019. Birds of the same feathers fly together: midwives' experiences with pregnant women and FGM/C complications - a grounded theory study in Liberia. *Reproductive Health*, 16(1):1-12.

Taylor, B, Cross-Sudworth, F, Goodwin, L, Kenyon, S and MacArthur, C. 2019. Midwives' perspectives of continuity-based working in the UK: a cross-sectional survey. *Midwifery*, 75:127-137.

Ten Hoop-Bender, P, De Bernis, L, Campbell, J, Downe, S, Fauveau, V, Fogstad, H, Homer, CSE, Kennedy, HP, Matthews, Z, McFadden, A and Renfrew, MJ. 2014. Improvement of maternal and newborn health through midwifery. *The Lancet*, 384(9949):1226-1235.

Ten Hoop-Bender, P, Lopes, STC, Nove, A, Michel-Schuldt, M, Moyo, NT, Bokosi, M, Codjia, L, Sharma, S and Homer, C. 2016. Midwifery 2030: a woman's pathway to health. What does this mean? *Midwifery*, 32:1-6.

Ten Hoop-Bender, P, Nove, A, Sochas, L, Matthews, Z, Homer, CSE and Pozo-Martin, F. 2017. The dream team for sexual, reproductive, maternal, newborn and adolescent health: an adjusted service target model to estimate the ideal mix of health care professionals to cover population need. *Human Resources for Health*, 15(1):1-52.

Tharp, AT, Carter, M, Fasula, AM, Hatfield-Timajchy, K, Jayne, PE, Latzman, NE and Kinsey, J. 2013. Advancing adolescent sexual and reproductive health by promoting healthy relationships. *Journal of Women's Health*, 22(11):911-914.

Thatte, N, Bingenheimer, JB, Ndiaye, K and Rimal, RN. 2016. Unpacking the barriers to reproductive health services in Ghana: HIV/STI testing, abortion and contraception. *African Journal of Reproductive Health*, 20(2):53-61.

Truth, AU. 2013. No Health without a workforce. *World Health Organisation (WHO) Report*:1-104.

United Nations Population Fund (UNPFA). 2014. *The State of the World's Midwifery 2014: a universal pathway: a woman's right to health*. New York: UN.

State of the World's Midwifery. 2021. New York, NY: United Nations Population Fund.

From:

https://reliefweb.int/sites/reliefweb.int/files/resources/EN_SoWMy2014_complete.pdf

(accessed 4 July 2018).

United Nations. 2015. Resolution adopted by the General Assembly on 25 September 2015.

Villalobos, A, Allen-Leigh, B, Salazar-Alberto, J, De Castro, F, Barrientos-Gutiérrez, T, Leyva-López, A and Rojas-Martínez, R. 2017. Quality of reproductive health care for adolescents: a nationally representative survey of providers in Mexico. *PLoS One*, 12(3):1-10.

Wachamo, D, Tegene, Y, Tibeso, A and Washo, A. 2020. Sexual and Reproductive Health Services Utilization and Associated Factors among College Students at West Arsi Zone in Oromia Region, Ethiopia. *The Scientific World Journal*:3.

Warren, CE, Hopkins, J, Narasimhan, M, Collins, L, Askew, I and Mayhew, SH. 2017. Health systems and the SDGs: lessons from a joint HIV and sexual and reproductive health and rights response. *Health Policy and Planning*, 32(Suppl 4):102-106.

World Health Organization (WHO). 2011a. *Guidelines on preventing early pregnancy and poor reproductive health outcomes among adolescents in developing countries*. Geneva: WHO.

World Health Organization (WHO). 2011b. *Sexual and reproductive health core competencies in primary care: attitudes, knowledge, ethics, human rights, leadership, management, teamwork, community work, education, counselling, clinical settings, service, provision*. Geneva: WHO.

World Health Organization (WHO). 2012. *Safe abortion: technical and policy guidance for health systems*. second edition. Geneva: WHO.

World Health Organization (WHO). 2013. *Global and regional estimates of violence against women: prevalence and health effects of intimate partner violence and non-partner sexual violence*. Geneva: WHO.

World Health Organization (WHO). 2014. *WHO handbook for guideline development*. 2nd edition. Geneva: WHO.

World Health Organization (WHO). 2015a. *Every woman, every child, every adolescent: achievements and prospects. Final report of the independent expert review group on information and accountability for women's and children's health*. Geneva: WHO.

World Health Organization (WHO). 2015b. *The role of health workers in providing safe abortion care and post-abortion contraception*. Geneva: World Health Organization

World Health Organization (WHO). 2015c. *Safe abortion: technical and policy guidance for health systems*. (No. WHO/RHR/15.04). Geneva: WHO.

World Health Organization (WHO). 2016a. *Global strategy for women's, children's and adolescents' health, 2016-2030*. Geneva: WHO.

World Health Organization. 2016b. *Global health sector strategy on sexually transmitted infections 2016-2021: toward ending STIs* (No. WHO/RHR/16.09). Geneva: WHO.

World Health Organization. 2016c. *Consolidated guidelines on HIV prevention, diagnosis, treatment and care for key populations*. Geneva: WHO.

World Health Organization. 2016d. *Standards for improving quality of maternal and newborn care in health facilities*. Geneva: WHO.

World Health Organization. 2016e. *WHO recommendations on antenatal care for a positive pregnancy experience*. Geneva: WHO.

World Health Organization. 2017a. *Global accelerated action for the health of adolescents (AA-HA): guidance to support country implementation*. Geneva: WHO.

World Health Organization. 2017b. *Optimizing the contributions of the nursing and midwifery workforce to achieve universal health coverage and the Sustainable Development Goals through education, research and practice*. Geneva: WHO.

World Health Organization. 2017c. *Quality of care in contraceptive information and services, based on human rights standards: A checklist for health care providers*. Geneva: WHO.

World Health Organization. 2017d. *Responding to children and adolescents who have been sexually abused: WHO clinical guidelines*. Geneva: WHO.

World Health Organization. 2018a. *Family planning: a global handbook for providers*. 3rd edition. Geneva: WHO.

World Health Organization. 2018b. *Medical management of abortion*. Geneva: WHO.

World Health Organization. 2018c. *Report on global sexually transmitted infection surveillance, 2018*. Geneva: WHO.

World Health Organization. 2018d. *WHO recommendations on adolescent sexual and reproductive health and rights*. Geneva: WHO.

World Health Organization. 2019. *WHO consolidated guidelines on self-care interventions for health: sexual and reproductive health and rights*. Geneva: WHO.

World Health Organization. 2020a. Global strategy to accelerate the elimination of cervical cancer as a public health problem. Geneva: WHO.

World Health Organization. 2020b. *Regional strategic directions for strengthening midwifery in the South-East Asia Region 2020–2024*. Geneva: WHO.

World Health Organization. 2020c. WHO labour care guide: user's manual

World Health Organization. 2021. Global strategic directions for nursing and midwifery 2021-2025.

Woog, V, Susheela, S, Alyssa, B and Jesse, P. 2015. *Adolescent women's need for and use of sexual and reproductive health services in developing countries*. New York: Guttmacher Institute:1-63. From: www.openEpi.com (accessed 18 May 2017).

Yigzaw, T, Abebe, F, Belay, L, Assaye, Y, Misganaw, E, Kidane, A, Ademie, D, van Roosmalen, J, Stekelenburg, J and Kim, YM. 2017. Quality of Midwife-provided Intrapartum Care in Amhara Regional State, Ethiopia. *BMC Pregnancy and Childbirth*, 17(1):1-12.

Yigzaw, T, Ayalew, F, Kim YM, Gelagay, M, Dejene, D, Gibson, H, Teshome, A, Broerse, J and Stekelenburg, J. 2015. How well does pre-service education prepare midwives for practice: competence assessment of midwifery students at the point of graduation in Ethiopia. *BMC Medical Education* 15(1):1-10.

Zafar, Z, Habib, H, Kols, A, Assad, F, Lu, ER. and Schuster, A. 2019. Reinvigorating postpartum intrauterine contraceptive device use in Pakistan: an observational assessment of competency-based training of health providers using low-cost simulation models. *BMC Medical Education*, 19(1):1-10.

Zemedu, TG, Teshome, A, Tadesse, Y, Bekele, A, Keyes, E, Bailey, P and Ruano, AL. 2019. Health care workers' clinical knowledge on maternal and newborn care in Ethiopia: findings from 2016 national EmONC assessment. *BMC Health Services Research*, 19(1):6.

ANNEXURES

Annexure 1: Clearance certificate from the University of South Africa Health Studies Higher Degrees Committee



RESEARCH ETHICS COMMITTEE: DEPARTMENT OF HEALTH STUDIES REC-012714-039 (NHERC)

1 February 2017

Dear Mrs AT Woldkiros

Decision: Ethics Approval

HSHDC/595/2017

Mrs AT Woldkiros

Student: 5854-400-3

Supervisor: Prof BL Dolamo

Qualification: D Cur

Joint Supervisor: -

Name: Mrs AT Woldkiros

Proposal: Midwives practices in adolescent girls' sexuality and reproductive health services.

Qualification: DPCHS04

Thank you for the application for research ethics approval from the Research Ethics Committee: Department of Health Studies, for the above mentioned research. Final approval is granted for the duration of the research period as indicated in your application.

The application was reviewed in compliance with the Unisa Policy on Research Ethics by the Research Ethics Committee: Department of Health Studies on 1 February 2017.

The proposed research may now commence with the proviso that:

- 1) The researcher/s will ensure that the research project adheres to the values and principles expressed in the UNISA Policy on Research Ethics.*
- 2) Any adverse circumstance arising in the undertaking of the research project that is relevant to the ethicality of the study, as well as changes in the methodology, should be communicated in writing to the Research Ethics Review Committee, Department of Health Studies. An amended application could be requested if there are substantial changes from the existing proposal, especially if those changes affect any of the study-related risks for the research participants.*



en Rubric

University of South Africa
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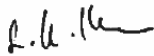
3) *The researcher will ensure that the research project adheres to any applicable national legislation, professional codes of conduct, institutional guidelines and scientific standards relevant to the specific field of study.*

4) *[Stipulate any reporting requirements if applicable].*

Note:

The reference numbers [top middle and right corner of this communiqué] should be clearly indicated on all forms of communication [e.g. Webmail, E-mail messages, letters] with the intended research participants, as well as with the Research Ethics Committee: Department of Health Studies.

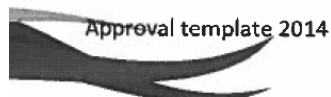
Kind regards,



Prof L Roets
CHAIRPERSON
roetsl@unisa.ac.za



Prof MM Moleki
ACADEMIC CHAIRPERSON
molekmm@unisa.ac.za



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Annexure 2: Letter of permission to do study



**በአዲስ አበባ ከተማ አስተዳደር
የጤና ቢሮ
CITY GOVERNMENT OF ADDIS ABABA
HEALTH BUREAU**

Date: Sep 29 /2016
Ref. No A/A/H/B/1538/2017

To: University of South Africa
Re: Midwives Practices in Adolescent Girls' Sexual and Reproductive Health Services in Addis Ababa. Ethiopia

Dear/Sir/Dr./Mr./s.

This letter is to notify that Aster Tsheome Woldkiros (Student number 58544003) is allowed to collect data from government health facilities under Addis Ababa City Administration Health Bureau and conduct research.

We therefore, reuest your esteemed organization to ensure the commencement and conduct of the study and wish the successful completion of the project.



With regards,

[Signature]
Girma Ashenafi Ayele(BSC, MPH)
Bureau Head

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FAX: 251-115-51-56-89

E-mail: aahb@ethionet.et P.O.BOX 30738 Addis

መልስ ሲጻፉልን የእኛ ቁጥር ይጠቀስ
In replying please quote our Ref.No.

Annexure 3: Informed consent

Title of the project: Midwives practices in adolescent Girls' sexual and reproductive health services in Addis Ababa, Ethiopia

Dear respondent my name is _____ and I am here on behalf of a registered public health Expert (student) named Sr. Aster Teshome Woldkiros who is conducting a research for her PhD degree at the at the university of South Africa (UNISA). I am collecting data for her research which focuses on Midwives practices in adolescent Girls' sexual and reproductive health services. You are selected for the study. we would very much appreciate your participation in this survey. The information you provide may not have direct benefit to you now but is extremely important to inform policy makers and program designers and stimulate formulation of appropriate measures to ensure quality in adolescent health care in Addis Abba

The national research and Ethical Committee of the Ministry of science and Technology has approved that the study can be conducted in Addis Abba at health facility level and the respective sub City level officials have been notified that such a study will be conducted .the proposed study does not involve any intrusive procedures therefore; you will not be exposed to either physical or psychological harm if you decide to participate in the research project .your name will not be documented on the questioner and the information you give will remain strictly confidential and will not be shared to any one with without your consent. Participation in this survey is voluntary and you can choose not to answer any individual question or all of the questions. However, we hope that you will participate in this survey since your views are important.

The interview will last in less than 45 minutes. you have the right not to answer any question(s) that you are not comfortable about. Do you have any questions which you wish me to clarify? If at any time you have any questions to ask contact:

Sr Aster Teshome

Semmite Area Bole sub city

Addis Abba, Ethiopia

Cell phone: +251 911 456406

E-mail aster1621@gmail.com

Are you willing to participate in the study please? Yes No

If you are willing to participate in the study, please sign here:

..... Date

Thank you for your time

Witness to consent form

I, _____certify that I witnessed the consent interview as above. The subject has stated that she/he has fully understood the purpose of the study and risks and benefits involved and that she/he has agreed to participate in the study

Witness to interview: _____

Date: _____

Annexure 4: Midwives' self-administered questionnaire

Please answer all the following questions to the best of your ability, by marking circling in the appropriate number or writing the information in the space provided.

RESEARCH TOPIC: MIDWIVES PRACTICES IN ADOLESCENT GIRLS' SEXUAL AND REPRODUCTIVE HEALTH SERVICES IN ADDIS ABABA, ETHIOPIA

001. Questionnaire numerus _____

002. Name of hospitals/ 003 Name of health centres _____

Name of health facility:Identification code.....

SECTION 1: SOCIO-DEMOGRAPHIC VARIABLES

Q. No	Questions	Alternative choice	
101	What is your gender?	Male1 Female2	
102	What is your age?	Years1	
103	What is your current marital status?	Un married.....1 Currently Married2 Divorced3 Widowed4 Others, Specify.....5	
106	What is your initial professional registration?	Midwife1 Nurse.....2	
107	What is your highest midwifery educational level?	Diploma in Nurse- midwives.....1 Diploma in midwives.....2 BSc in midwives3 MSc and above4	
108	Where was the recent midwifery school you attended?	Name of University1 Name of health science college.....2	
109	Where was your first place of work immediately after graduation as a midwife?	Rural1 Urban2	
110	Where was your first facility of work immediately after graduation as a midwife?	Health centre.....1 Hospital2 Teaching institutions3	
111	How long have you been serving as a midwife?years	
112	In which type of health facility are you currently working?	Hospital.....1 Health centre.....2	

Q. No	Questions	Alternative choice	
113	How long have you been working in this facility?years	
114	How many different health facilities have you worked at in the past 3 years?number of health facilities	
SECTION 2: WORKING ENVIRONMENT			
201	Do you have guidelines on adolescent sexual reproductive health care services?	Does not have1 Has, but not observed.....2 Has, and observed.....3	
202	Which guidelines are available for you? (Circle all the available)	Family planning1 Technical guidelines on safe abortion care2 Infection prevention guideline.....3 Infection prevention for human immunodeficiency virus (universal precautions)4 Management protocol on selected obstetric topics5	
203	Do you have standard of midwives' care practice manual? (prepared by ministry of health)	Yes1 No2	
204	Did you receive technical support or supervision from an external body in the last year?	Yes, in the last 3 months.....1 Yes, in the last 12 months.....2 Yes, but long ago3 No support or supervision.....4	
205	How frequently does staff rotation happen?	Once a year1 Two times per year.....2 No rotation.....3 Others(specify)88	
206	Which shift/duty have you been taking for the last year?	Day shift.....1 Night shift.....2 Day and night shift.....3 Day and weekend shift.....4 Day, night and weekend shift.....5	
207	How many hours per week are you on duty at this facility?hours	
208	Which contraceptives methods were available to provide for the last 6 months? (Circle all the available)	Oral contraceptives.....1 Implants2 3-month injectables.....3 Intrauterine devices (IUDs).....4 Male condoms.....5 Female condoms.....6 Emergency contraception.....7	

Q. No	Questions	Alternative choice	
209	Which contraceptives methods were available to provide during night /weekend duty hours for the last 6 months? (Circle all the available)	Oral contraceptives.....1 Implants2 3-month injectables.....3 Intrauterine devices (IUDs.....4 Male condoms.....5 Female condoms.....6 Emergency contraception.....7	
210	Have you had a stock out of any of the following items in the last 3 months? (Circle all the stock out)	Combined oral contraceptives.....1 Implants.....2 3-month injectables.....3 Intrauterine devices (IUDs.....4 Male condoms.....5 Female condoms.....6 Emergency contraception.....7	
211	How many midwives are on night /weekend duty per day?number	
212	What would you like to see improved related to your working situation? (Circle all the applicable)	Support from Management.....1 Capacity building/training.....2 Supplies/stock.....3 Less workload (more staff).....4 Better working hours.....5 Incentives (salary promotion).....6	
213	What do you need to provide adolescent sexual and reproductive health care service during duty hours?	Capacity building/Training.....1 Management supports2 Equipment and supplies3 Others(specify)88	
214	Which In-service training did you take during the last year? (Circle all the applicable)	Adolescent sexual and reproductive health care service1 Family Planning services.....2 Comprehensive abortion care.....3 Diagnosis and treatment of sexually transmitted infections/ Human immune virus.....4 Basic emergency obstetric new-born care (BEmONC).....5	
215	Did you receive any training in related to adolescent sexual and reproductive health services?	Yes.....1 No.....2	
216	Which kind of adolescent sexual reproductive health training is needed for midwives? (Circle all the applicable)	Training on adolescent sexual reproductive health.....1 Family planning training.....2 Safe abortion care.....3 Diagnosis and treatment of sexually transmitted infections/Human immune virus4	

Q. No	Questions	Alternative choice	
217	When did you last receive any in-service training?	In the last 6 months.....1 In the last one year.....2 More than a year ago.....3 Has never received.....4	

SECTION 3: REPRODUUCTIVE HEALTH CARE SERVICE

Q. No	Questions	Alternative choice	
301	In which department/ unit are you currently working on? (Circle all the applicable units)	ASRH care services unit.....1 Contraceptive /Family Planning unit.....2 Comprehensive abortion unit.....3 Diagnosis and treatment of STI/HIV.....4 Antenatal unit.....5 Delivery ward/room.....6 Post-natal ward/room.....7	
302	How long have you been working in this unit?	Less than one year1 1-3 years.....2 4-6 years.....3 7-9 years.....4 10 years or longer.....5	
303	Which sexual reproductive health care services are you providing in this health facility? (Circle all the applicable Services)	Adolescents sexual and reproductive health care services.....1 Comprehensive abortion care.....2 Contraceptive/FP services.....3 Diagnosis and treatment of sexually transmitted infections/Human immune virus.....4 Antenatal services.....5 Delivery services.....6 Post-natal services.....7	
304	In the last one-year which sexual reproductive health care services were you providing when you were on duty? (Circle all the applicable Services)	Adolescents sexual and reproductive health care services.....1 Comprehensive abortion care.....2 Contraceptive/FP services.....3 Diagnosis and treatment of STI/HIV.....4 Antenatal care5 Delivery care services.....6 Post- natal care services.....7	
305	Which sexual reproductive health care services have you provided in last 3 months? (Circle all the applicable Services)	Adolescents sexual and reproductive Health care services.....1 Contraceptive/ Family Planning services.....2 Comprehensive abortion care..... 3 Diagnosis and treatment of STI /STI.....4	
306	Which of the following sexual reproductive health care procedures have you performed in the last 3 months? (Circle all	long acting reversible contraceptive methods, Intra uterine device.....1 long acting reversible contraceptive methods,	

Q. No	Questions	Alternative choice	
	the applicable procedures)	implants.....2 Manual vacuum aspiration.....3 Medication abortion.....4 Diagnosis and treatment of sexually transmitted infections/Human immune virus5	
307	In the last year, which of the following sexual reproductive health care procedures did you provide? (Circle all the applicable procedures)	long acting reversible methods Intra uterine device1 long acting reversible methods implants.....2 Manual vacuum aspiration.....3 Medication abortion.....4 Diagnosis and treatment of sexually transmitted infections/Human immune virus.....5	
308	In the last 3 months which of the following sexual reproductive health care procedures did you provide? (Circle all the applicable procedures)	Long acting reversible methods intra uterine device1 long acting reversible methods implants.....2 Manual vacuum aspiration.....3 Medication abortion.....4 Diagnosis and treatment of sexually transmitted infections/Human immune virus.....5	
309	In the last 3 months which sexual reproductive health care services were you providing when you were on night /weekend duty? (Circle all the applicable Services)	Adolescents sexual and reproductive health care services.....1 Contraceptive/FP services.....2 Comprehensive abortion care.....3 Diagnosis and treatment of sexually transmitted infections/Human immune virus.....4	
310	In which sexual reproductive health care service provision are you confident on your competence? (Circle all the applicable services)	Adolescents sexual and reproductive health care services.....1 Contraceptive/FP services.....2 Comprehensive abortion care.....3 Diagnosis and treatment of sexually transmitted infections/Human immune virus.....4	
311	In which sexual reproductive health care procedures are you confident on your competence? (Circle all the applicable procedures)	long acting reversible methods intra uterine device1 long acting reversible methods implants.....2 Manual vacuum aspiration.....3 Medication abortion.....4 Diagnosis and treatment of sexually transmitted infections/Human immune virus.....5	

Q. No	Questions	Alternative choice	
312	In which sexual reproductive health care services provision have you had a positive intention to provide service? (Circle all the applicable procedures)	Adolescents and youth sexual and reproductive health care services.....1 Contraceptive/FP services.....2 Comprehensive abortion care.....3 Diagnosis and treatment of sexually transmitted infections /Human immune virus.....4	
313	In which sexual reproductive health care services provision have you had a positive intention to perform the procedures? (Circle all the applicable procedures)	long acting reversible methods Intra uterine device1 long acting reversible methods implants.....2 Manual vacuum aspiration.....3 Medication abortion.....4 Diagnosis and treatment of sexually transmitted infections /Human immune virus.....5	
314	What is the level of confidence on your competency in providing sexual reproductive health care services?	Not confident at all.....1 Not confident2 Unsure.....3 Confident4 Very confident.....5	
Please answer the following questions by rating on a scale from 1 to 5 (1 being extremely poor confident at all ,5 being excellent confident			

	The list	Extremely poor confident at all	Poor confident	Unsure	Confident	Excellent confident	
315	How confident are you in providing adolescents and youth sexual and reproductive health care services						
316	How confident are you in providing comprehensive abortion care						
317	How confident are you in providing contraceptive/ family planning services						
318	How confident are you in providing Diagnosis and treatment of sexually transmitted infections /human immune virus						
319	How confident are you in providing antenatal services						
320	How confident are you in providing intrapartum care						

	services						
321	How confident are you in providing post-natal care services						

SECTION 4: ADOLESCENT SEXUAL REPRODUCTIVE HEALTH CARE SERVICE

Q. No	Questions	Alternative choice	
401	At any time of your career which of the following sexual reproductive health care services did you provide for Adolescent girls'? (Circle all the applicable Services)	Adolescents friendly sexual and reproductive health services.....1 Contraceptive services.....2 Comprehensive abortion care.....3 Diagnosis and treatment of sexually transmitted infections /Human immune virus.....4 Antenatal care.....5 Delivery services.....6 Post-natal care.....7	
402	Which sexual reproductive health care services do you provide for adolescent girls' in this facility? (Circle all the applicable Services)	Adolescents sexual and reproductive health services.....1 Contraceptive services.....2 Safe abortion care.....3 Post abortion care.....4 sexually transmitted infections/ Human immune virus care services.....5 Antenatal care.....6 Delivery care.....7 Post-natal care.....8	
403	Did you provide adolescent sexual reproductive health care services?	Yes1 No.....2	
404	Which sexual reproductive health care services do you provide for adolescent girls' during weekend and nighttime in this facility? (Circle all the applicable Services)	Adolescents sexual and reproductive health services.....1 Contraceptive services.....2 Comprehensive abortion care.....3 Diagnosis and treatment of sexually transmitted infections/ Human immune virus.....4 Antenatal care.....5 Delivery care.....6 Post-natal care.....7	
405	Do you provide adolescent sexual reproductive health care services during weekend and nighttime in this facility?	Yes1 No.....2	
406	In the last 6 months which of the following sexual reproductive health care procedures did you provide for adolescent girls'?	Pill1 Emergency contraceptive.....2 Injectable.....3 IUD insertion4	

Q. No	Questions	Alternative choice	
	(Circle all the applicable Services)	Implant insertion.....5 Manual vacuum aspiration.....6 Medication abortion.....7 Diagnosis and treatment of sexually transmitted infections/Human immunodeficiency virus8 None of the above.....9	
407	In the last 3 months, which of the following contraceptive methods did you provide for adolescent girls'? (Circle all the applicable services)	Pill1 Emergency contraceptive.....2 Inject able.....3 IUD insertion4 Implant insertion.....5 Manual vacuum aspiration.....6 Medication abortion.....7 Diagnosis and treatment of STI/ human immunodeficiency viru.....8 None of the above.....9	
408	If your response to question number 406 and 407 is none what was your reason for not providing the services? (Circle two the most applicable)	Lack of confident to perform the procedures.....1 lack of supplies /equipment.....2 lack of management supports.....3 No supportive guideline.....4 No indication/no clients.....5 Uncomfortable to perform.....6	
409	In your opinion which of the following contraceptive method is the most suitable method for adolescent girls'? (Circle all the applicable)	Pill1 Emergency contraceptive.....2 Injectable.....3 IUD.....4 Implant5 Condom6 None of the above.....7	
410	What methods do you provide if sixteen-year-old girl's come for contraceptive services? (Circle all the applicable)	Pill1 Emergency contraceptive.....2 Injectable.....3 IUD.....4 Implant5 Condom6 None of the above.....7	
411	What method of abortion will you provide if sixteen-year-old girls come for abortion care? (Circle all the applicable)	Medication abortion1 Manual vacuum aspersion2 None of the above3 Refer her to provider that performs abortions4	
412	Which contraceptive methods do you provide if sixteen-year-old girl's come for post abortion contraceptive care services?	Pill1 Injectable.....2 IUD.....3 Implant4	

Q. No	Questions	Alternative choice	
	(Circle all the applicable)	None of the above.....5	
413	What sexual reproductive health care services do you provide if sixteen-year-old girl's come to your facility in case of unprotected sexual contact for the last 2 months? (Circle all the applicable)	Counselling1 Contraceptive services.....2 Comprehensive abortion care.....3 Diagnosis and treatment for sexually transmitted infections and human immunodeficiency virus.....4 None of the above.....5	
414	What challenges do you have in providing adolescent girls' sexual reproductive health care services?	Limitation in competence1 Inadequacy of resources.....2 lack of management support.....3 Lack of professional recognition and development opportunities.....4 No adolescent clients.....5 Not assigned in adolescent sexual reproductive health care services provision.....6	
415	In which of the following procedure do you have confidence on your competence for adolescent girls'? (Circle all the applicable)	IUD insertion.....1 Implant insertion.....2 Comprehensive abortion care.....3 Diagnosis and treatment of sexually transmitted infections/Human immune virus.....4 None of the above.....5	
416	How confident are you that you are competent for providing adolescent sexual reproductive health care services?	Not confident at all.....1 Not confident.....2 Unsure.....3 Confident.....4 Very confident.....5	
417	Which approaches do you recommend for improving adolescent girls' sexual reproductive health care services? (Circle all the applicable Services)	Assign in ASRH care services provision...1 Guidelines need in ASRH services2 Training of health providers in comprehensive ASRH services.....3 Facility improvement and ensuring availability of integrated services during weekend and night duty.....4	
418	Which approaches are you recommending to improve midwives' practices in adolescent girls' sexual reproductive health care services? (Circle all the applicable services)	Capacity building and updates on adolescents' girls' SRH care services.....1 Improving midwives' motivation and retention.....2 Supportive guideline on ASRH care services3 Address midwives cultural, religious and traditional values to provide adolescent girls'	

Q. No	Questions	Alternative choice	
		health care services.....4 Improvement in interpersonal communication skills to provide advice and health services to adolescent girls'.....5	
419	How important is it to providing contraceptive methods for adolescent girls?	Very unimportant.1 Unimportant2 Neutral3 Important4 Very important5	
420	What is your opinion to provide long acting (IUD, Implant) family planning service to adolescent girls?	Strongly disagree.....1 Disagree.....2 Neutral3 Agree4 Strongly agree.....5	
421	How confident are you that you will be able to provide long acting contraceptive (IUD, Implant) to adolescent girls'?	Not confident at all1 Not confident2 Unsure.....3 Confident4 Very confident5	
422	How confident are you that you will be able to provide safe abortion care to adolescent girls'?	Not confident at all1 Not confident2 Unsure.....3 Confident4 Very confident5	
423	Please indicate your ability as a midwife in carrying out adolescent sexual reproductive health care practices during contraceptive service provision to adolescent girls.	Excellent5 Very good.....4 Good.....3 Average.....2 Below average1	
424	Please indicate your ability as a midwife in carrying out the adolescent sexual reproductive health care practices during comprehensive abortion care to adolescent girls.	Excellent5 Very good.....4 Good.....3 Average.....2 Below average1	
425	Please indicate your ability as a midwife in carrying out adolescent sexual reproductive health care practices during diagnosis and treatment for sexually transmitted infections and human immunodeficiency virus care to adolescent girl.	Excellent5 Very good.....4 Good.....3 Average.....2 Below average1	
426	Intend/Intention to provide contraceptive/ family planning services the next time for adolescent girls.	Definitely not1 Not.....2 Unsure.....3 Yes4	

Q. No	Questions	Alternative choice	
		Definitely yes.....5	
427	Intend/intention to provide maternal child health care services the next time for adolescent girls' when in needs	Definitely not1 Not.....2 Unsure.....3 Yes4 Definitely yes.....5	
428	Intend/intention to provide comprehensive abortion care the next time for adolescent girls' when in needs.	Definitely not1 Not.....2 Unsure.....3 Yes4 Definitely yes.....5	

Thank you very much

Annexure 5: Interview guide

RESEARCH TOPIC: MIDWIVES PRACTICES IN ADOLESCENT GIRLS' SEXUAL AND REPRODUCTIVE HEALTH SERVICES IN ADDIS ABABA, ETHIOPIA

General information

001. Questionnaire number _____

002. Name of institutions _____

003. Interviewer's name _____

- Gender
- Age of the respondent
- Current position
- Highest Educational status
- Programme trained on
- Experience in different level and on adolescent health

Midwives practices on reproductive health related question

- What is your experience in the management of the midwifery practice and in reproductive health care service?

Some of the probing questions that will be asked are the following:

- Are there policies, regulations and guidelines in midwifery practice relating to adolescent girls' sexual reproductive health care service?
- What challenges have you experienced when managing the midwifery practice in adolescent girls' sexual reproductive health care service?

Some of the probing questions that will be asked are the following:

- Do you work in partnership with the Ministry of Education/Ministry of Health?

Midwives practices in adolescent sexual reproductive health related question:

- What is your experience in the management of the midwives' practice in adolescent sexual reproductive health care service?
- What is your personal opinion on the midwives' practices in counselling and contraceptive service, comprehensive abortion care, prevention and treatment of STI and HIV, counselling for adolescent girls' (aged 10-19)?
- How do you motivate midwives to improve practices in adolescent girls' sexual reproductive health care service?
- Do you have continuous professional development, educational staff development mechanism?
- What is your view and that of your colleagues towards the provision of the midwives' practice in adolescent girls' sexual reproductive health care service?
- What in-service training do you recommend for midwives to improve adolescent girls' sexual reproductive health care services?
- What can be done to improve the implementation of the midwives' practice in adolescent girls' sexual reproductive health care service?
- Do you provide technical support or supervision in your work to someone either in this facility or externally?
- Related to midwives working situation what you would like to see being improved in the provision of adolescent girls' sexual reproductive health services?
- What is your recommendation to improve midwives' practice in adolescent girl's sexual reproductive health care services?
- Do you have additional points regarding this issue?

Annexure 6: Letter from the language editor

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26 February 2021

TO WHOM IT MAY CONCERN

I hereby certify that I have edited Aster Teshome Woldkiros's doctoral dissertation, **Midwives' practices in adolescent girls' sexual and reproductive health services in Addis Ababa, Ethiopia**, for language and content.

I have not checked, corrected or edited the corrected list of references or chapters.

IM Cooper

lauma M Cooper
192-290-4

Annexure 7: Originality Turnitin Report

MIDWIVES PRACTICES IN ADOLESCENT GIRLS' SEXUALITY AND REPRODUCTIVE HEALTH SERVICES IN ADDIS ABABA, ETHIOPIA

ORIGINALITY REPORT

0%

SIMILARITY INDEX

0%

INTERNET SOURCES

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