

**THE QUALITY OF HEALTH SERVICES DELIVERY IN OROMIA REGIONAL STATE,  
ETHIOPIA**

by

**MOTI FAJI MULETA**

submitted in accordance with the requirements

for the degree of

**DOCTOR OF LITERATURE AND PHILOSOPHY**

in the subject

**HEALTH STUDIES**

at the

**UNIVERSITY OF SOUTH AFRICA**

SUPERVISOR: PROF M.C. MATLAKALA

JANUARY 2019

## DECLARATION

**Name:** Moti Faji Muleta

**Student number:** 57660999

**Degree:** Doctor of Literature and Philosophy

**Title:** The quality of health services delivery in Oromia regional state, Ethiopia

I declare that the above thesis 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 thesis to originality checking software. The result summary is attached.

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

.....

**SIGNATURE**

31 January 2019

**DATE**

# **THE QUALITY OF HEALTH SERVICES DELIVERY IN OROMIA REGIONAL STATE, ETHIOPIA**

**STUDENT NUMBER:** 57660999  
**STUDENT:** MOTI FAJI MULETA  
**DEGREE:** DOCTOR OF LITERATURE AND PHILOSOPHY  
**DEPARTMENT:** HEALTH STUDIES, UNIVERSITY OF SOUTH AFRICA  
**SUPERVISOR:** PROF M.C. MATLAKALA

## **ABSTRACT**

Distinct dimensions of quality vary in importance depending on the context in which quality assurance effort takes place. Working through the process of quality assurance and continuous quality improvement may create an environment for transforming the health services and achieving positive health outcome goals. Substantial improvements have been observed in the coverage and access to health service delivery in Ethiopia. However, the quality of care has been lagging behind. The purpose of this study was to develop guidelines for care to enhance quality health services at Gindabarat District, Oromia Regional State, Ethiopia. The study followed a mixed method approach. The participants were purposively included in the study based on their availability, from a total of 7 government health facilities from the Gindabarat District. Self-administered questionnaires and interviews were used to collect data from samples of 127 health care workers and 29 health facilities managers, respectively. Collected data were analysed using SPSS Version 24 and ATLAS TI 8 respectively. The results revealed barriers towards quality health services delivery which were lack of equipment and supplies (inadequacy of blocks, materials, medical equipment; lack of sustainable supplies of drugs); inadequate human resources (low retention of skilled staff; absence of focal person assigned for quality improvement; shortages of health workers); absence of standard operating procedures (protocols, guidelines and manuals); and dissatisfaction of health care providers with services provided at the District. Based on the results, guidelines were developed to enhance quality health care delivery. The recommendations were aimed at improvement approaches at all levels of health service delivery.

## **KEYWORDS**

Primary health care; healthcare center; primary hospital; provider satisfaction; quality; quality health services delivery.

## ACKNOWLEDGEMENTS

I wish to acknowledge with heartfelt and sincere thanks the following people and groups for their contribution towards the completion of this thesis.

- First, I would like to thank the almighty God for his continued mercy upon my life and for giving me the opportunity to complete this study.
- I wish to express my heartfelt gratitude to people whose encouragement, assistance, guidance and untiring support made the completion of this study possible. In particular, my supervisor PROF M.C. MATLAKALA, for all she taught, and the help given to me.
- I would like to thank Professor Damen Hailemariam, School of Public Health, Addis Ababa University in Addis Ababa, Ethiopia for his valuable comments and assistance.
- I would like to thank Dr Mirgissa Kaba, School of Public health, Addis Ababa University in Addis Ababa, Ethiopia for his valuable comment and assisting qualitative data analysis and code book preparation.
- Ms TALANA ERASMUS, the Unisa librarian, for her invaluable assistance in finding the literature for me.
- The administration of the University of South Africa (UNISA) for offering and granting me student's bursary.
- The staff of the University of South Africa, Akaki campus, Ethiopia for their support.
- My wife Zewuditu Kenani and children Gemachu, Lensa and Yomiyu, who dedicated their time to continuously supporting and encouraging me and their eagerness to see me complete my study.
- Oromia Regional Health Bureau, West Shewa Zonal Health Office, and Gindabarat District Health Office for allowing me to conduct the study.
- Mr Gerbaba Guta, the statistician at the University of Ambo for his guidance and assistance with SPSS data analysis.
- Mr Samuel Ayele, Addis Ababa, for his guidance and assistance with ATLAS.TI 8 data analysis.
- The health workers from Gindabarat primary hospitals and health centers for their willingness to participate in the study.

## DEDICATION

*I dedicate this thesis to my Lord who gave me the courage and strength to go on.*

*I would like to dedicate this study to the following people: My late father and mother, Mr Muleta Fají and Mrs Diribe Tulu respectively, who did not live to see me accomplish my studies to this level.*

*My spouse, Zewuditu Keneni, and my Children Gemachu, Lensa and Yomiyu.*

## TABLE OF CONTENTS

## PAGE

Declaration .....	i
Abstract .....	ii
Acknowledgements .....	iv
Dedication .....	v
<b>CHAPTER 1 .....</b>	<b>1</b>
<b>ORIENTATION TO THE STUDY .....</b>	<b>1</b>
1.1 INTRODUCTION .....	1
1.2 BACKGROUND TO THE RESEARCH PROBLEM.....	2
1.3 STATEMENT OF THE RESEARCH PROBLEM.....	3
1.4 RESEARCH PURPOSE .....	5
1.4.1 Research objectives .....	5
1.4.2 Research questions .....	6
1.5 DEFINITIONS OF TERMS .....	6
1.5.1 Assessment of quality.....	7
1.5.2 Health centre .....	7
1.5.3 Health care provider satisfaction.....	7
1.5.4 Health service .....	7
1.5.5 Quality of care delivery .....	7
1.5.6 Primary Hospital. ....	7
1.6 THEORETICAL FRAMEWORK.....	7
1.6.1 Theoretical foundations of the study .....	9
1.7 SIGNIFICANCE OF THE STUDY .....	10
1.8 INTRODUCTION TO RESEARCH METHODOLOGY .....	11
1.8.1 The study context.....	11
1.9 SUMMARY .....	12
1.10 ORGANIZATION OF THE THESIS .....	12
<b>CHAPTER 2.....</b>	<b>13</b>
<b>LITERATURE REVIEW .....</b>	<b>13</b>
2.1 INTRODUCTION.....	13
2.2 DEFINITIONS OF QUALITY.....	13
2.2.1 Dimensions of quality.....	14

2.2.2	Dimensions of service quality .....	15
2.2.3	Factors influencing healthcare service quality .....	16
2.2.4	Quality assurance versus quality improvement .....	18
2.3	DONABEDIAN'S MODEL OF QUALITY CARE .....	19
2.4	QUALITY HEALTHCARE .....	21
2.4.1	Structure .....	22
2.4.2	Process.....	23
2.4.3	Outcomes .....	24
2.5	RELEVANCE OF THE THEORETICAL FRAMEWORK TO THIS STUDY .....	25
2.6	STANDARD OPERATING PROCEDURES FOR QUALITY ASSURANCE.....	28
2.6.1	Operational model for quality in health care .....	29
2.6.2	Equitable access to quality health services .....	30
2.6.3	Regulatory systems .....	31
2.6.4	Health and health related indicators in Ethiopia.....	31
2.7	OROMIA REGIONAL STATE .....	32
2.8	GINDABARAT DISTRICT .....	32
2.9	HEALTH SYSTEM AND HEALTH POLICY .....	38
2.9.1	Health System .....	39
2.9.2	Health service delivery.....	40
2.10	DIMENSIONS OF HEALTH WORKFORCE PERFORMANCE.....	44
2.11	SUMMARY .....	46
	<b>CHAPTER 3.....</b>	<b>47</b>
	<b>RESEARCH DESIGN AND METHODS.....</b>	<b>47</b>
3.1	INTRODUCTION .....	47
3.2	RESEARCH DESIGN.....	48
3.4	RESEARCH METHODS FOR PHASE 1 .....	50
3.4.1	Study setting.....	50
3.4.2	Population of the study.....	51
3.4.3	Sample and sampling methods .....	51
3.4.4	Ethical issues related to sampling.....	52
3.5	DATA COLLECTION .....	53
3.5.1	Development and testing of the data collection instrument.....	54

3.6	DATA COLLECTION PROCESS.....	55
3.6.1	Ethical considerations related to data collection .....	57
3.7	DATA ANALYSIS.....	57
3.8	INTERNAL AND EXTERNAL VALIDITY OF THE STUDY .....	59
3.9	TRUSTWORTHINESS.....	60
3.10	RESEARCH METHODS FOR PHASE 2.....	64
3.11	SUMMARY .....	64
	<b>CHAPTER 4.....</b>	<b>66</b>
	<b>ANALYSIS, PRESENTATION AND DESCRIPTION OF FINDINGS .....</b>	<b>66</b>
4.1	INTRODUCTION .....	66
4.2	PHASE 1 QUANTITATIVE APPROACH .....	66
4.2.1	Quantitative data management and analysis.....	66
4.2.2	Quantitative data presentation.....	66
4.2.3	Interpretation and discussion of quantitative data.....	76
4.3	SERVICE DELIVERY PRACTICE GAPS IDENTIFIED AT GINDABARAT PUBLIC HEALTH FACILITIES .....	82
4.3.1	Organization management and quality improvement services. ....	90
4.4	OUTCOME RELATED GAPS IDENTIFIED AT GINDABARAT PUBLIC HEALTH FACILITIES .....	90
4.5	PHASE 2 Qualitative approach.....	92
4.6	DATA MANAGEMENT AND ANALYSIS .....	93
4.7	QUALITATAIVE RESEARCH PRESENTATION .....	95
4.7.1	Demographic characterstics .....	95
4.8	THEMES AND SUB-THEMES.....	99
4.9	PRESENTATION AND DISCUSSION OF RESULTS.....	100
4.10	CONVERGENCE OF QUANTITATIVE AND QUALITATIVE FINDINGS.....	137
4.11	SUMMARY .....	141
	<b>CHAPTER 5.....</b>	<b>142</b>
	<b>DEVELOPMENT OF THE GUIDELINE TO ENHANCE THE QUALITY OF HEALTH SERVICE DELIVERY.....</b>	<b>142</b>
5.1	INTRODUCTION .....	142
5.2	DEFINITION OF GUIDELINES.....	143
5.3	PURPOSE OF THE GUIDELINES .....	142

5.4	SCOPE OF THE GUIDELINES .....	143
5.5	STEPS FOLLOWED IN THE DEVELOPMENT OF GUIDELINES.....	143
5.6	DEVELOPED GUIDELINES .....	145
5.7	VALIDATION OF THE GUIDELINES.....	149
5.8	SUMMARY OF GUIDELINE DEVELOPMENT .....	152
5.9	SUMMARY .....	155
	<b>CHAPTER 6.....</b>	<b>156</b>
	<b>CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS.....</b>	<b>156</b>
6.1	INTRODUCTION .....	156
6.2	CONCLUSIONS ON THE FINDINGS.....	156
6.3	CONTRIBUTIONS OF THE STUDY .....	161
6.4	LIMITATIONS OF THE STUDY .....	162
6.5	CONCLUSIONS .....	162
6.6	RECOMMENDATIONS .....	164
6.7	SUMMARY .....	172
	<b>REFERENCES.....</b>	<b>173</b>
	<b>ANNEXURES.....</b>	<b>187</b>

## LIST OF TABLES

Table 1.1 Research objectives for phases 1 and 2 .....	11
Table 4.1 Demographic characteristics of the research participants .....	67
Table 4.2 Distribution of workers in each facility according to their profession.....	69
Table 4.3 Distribution of workers according to their agreement level on quality of services given in their facility. ....	70
Table 4.4 Classification of participants' agreement level according to their characteristics.....	71
Table 4.5 Chi-Square test of association between workers related characteristics and agreement level on overall quality of their facility's services .....	76
Table 4.6 Age categories of participants .....	95
Table 4.7 Profession of the participants .....	96
Table 4.8 Participants' years of experience.....	97
Table 4.9 Participants by facilities .....	98
Table 4.10 Participants by facility level.....	98
Table 4.11 Themes and sub-themes that were identified.....	99
Table 5.1 Biographic information of experts.....	149
Table 5.2 Criteria for validating each guideline .....	151

## LIST OF FIGURES

Figure 1.1	The structure-process-outcome-Model .....	9
Figure 4.1	Participants' agreement level by age.....	73
Figure 4.2	Participants' agreement level by facility.....	73
Figure 4.3	Participants' agreement level by years of experience .....	74
Figure 4.4	Distributions of health workers in each facility:.....	75
Figure 4.5	Participants characteristics by gender.....	96
Figure 4.6	Participants by profession .....	97
Figure 4.7	Participants' age with their work experience .....	98

## LIST OF ANNEXURES

Annexure A: Ethical clearance certificate from Department of Health Studies, University of South Africa.....	187
Annexure B: Map of Ethiopia, Oromia regional state, West shewa zone and Gindabarat District .....	188
Annexure C: Request to conduct a research study .....	189
Annexure D: Permission letter from West Shewa Zonal Health Department .....	191
Annexure E: Permission letter from Gindeberet District Health offic.....	194
Annexure F: Questionnaire and interview .....	196
Annexure G: Information leaflet and consent form for individual interviews .....	201
Annexure H: Consent.....	203
Annexure I: Average scores of evaluations on each strategy.....	208
Annexure J: Turn-it-in report .....	209

## LIST OF ACRONYMS AND ABBREVIATIONS

CRC	Caring, Respectful and Compassionate
CQI	Continuous Quality Improvement
DIS	Drug information service
EHRIG	Ethiopian Hospital Reform Implementation Guidelines
EHCRIG	Ethiopian Health center Reform Implementation Guidelines
EQA	External Quality Assurance
ES	Ethiopian Standard
FDRE	Federal Democratic Republic of Ethiopia.
FMHACA	Food, Medicine, Health care Administration, and Control Authority.
GTP	Growth and Transformation Plan
IFFR	Internal Facility Report and Resupply
IPLS	Integrated Pharmaceutical Logistic system
IQC	Internal Quality Control
IQA	Internal Quality Assurance
ISO	International Standards Organization
HC	Health center
HP	Health post
HO	Health Officer
HOSP.	Hospital
HSTP	Health Sector Transformation Plan
MD	Medical Doctor
MDGs	Millennium Development Goals
MOH	Ministry of Health
NGO	Non-Governmental Organization
OPD	Out Patient Department
ORHB	Oromia Regional Health Bureau
PFSA	Pharmaceuticals Fund and Supply Agency
QA	Quality Assurance
PHC	Primary Health Care
PHCU	Primary Health Care Unit

QA	Quality Assessment
RRF	Report and Request Form
SOP	Standard Operating Procedure
TQM	Total Quality Management
WHO	World Health Organization
WoHO	Woreda Health Office
ZHD	Zonal Health Office

## **CHAPTER 1**

### **ORIENTATION TO THE STUDY**

#### **1.1 INTRODUCTION**

Quality is increasingly becoming an important aspect of health care. Patients have become more aware of quality issues and want healthcare to become safer and of higher quality. Similarly, the providers of care have a moral obligation to provide high quality and safe care. Literature indicates that studies of patient satisfaction and experiences with health care are carried out regularly, and the results are made available to the public together with other indicators of health care quality; and therefore, quality of health care delivery is important topic in the health services (Chahal & Kumari 2012:1).

Health services are the most visible functions of any health system, to both the users and the public. Health service provision refers to the way inputs such as money, staff, equipment and drugs are combined to allow the delivery of health intervention. Improving access, coverage and quality of services depends on these key resources being available, on the ways services are organised and managed and on incentives influencing providers and users (Mosadeghrad 2014:77).

The health system in Ethiopia has a three tiers system, which consists of primary level health care; offered at health posts, private clinics, health centers and primary hospitals; secondary levels offered in general hospitals and specialty centers; and tertiary levels health care offered in specialized hospitals (Federal Ministry of Health (FMOH) 2010/2011). Currently Ethiopia has four health sector strategic pillars; namely, excellence in health service delivery, excellence in quality assurance, excellence in leadership and governance and excellence in health system capacity (Strategic Development Plan (SDP) 2015-2030).

From the four Ethiopian health sector pillars mentioned above, excellence in quality assurance and excellence in health service delivery are important issues to be addressed.

These themes refer to the promotion of good health practices at individual, family and community levels and the provision of preventive, curative, rehabilitative and emergency health services. According to the Ethiopian FMOH (2010/11), these pillars are meant to consolidate gains made on primary health care including the health extension program by transforming it along other levels of care to ensure universal health coverage. Health centers act as a bridge between primary hospital and health posts; and are supposed to provide a package comprising of both preventive public health and essential curative services on an ambulatory basis for a population of 25,000 people in the Gindabbarat district, Oromia regional state, Ethiopia. The health centers have a capacity of ten beds and are open for 24 hours in a day to provide curative health and emergency services.

Haj, Lamrini and Rais (2013:17) indicate that quality in health care has three dimensions, namely, structure, process and outcomes. Structure includes the premises, personnel, education, training, experience and certification, and the settings where the care is provided; such as the adequacy of the facility's staffing, equipment, safety devices, and overall organization (Haj et al 2013:20). Process refers to activities required for care delivery, as well as those aspects of the service delivery setting that directly affect the patient (Hvenegaard, Gyrd-Hansen, Arendt, Sorensen, Laustsen & Jensen 2010:6). Outcome refers to the product of both the structure and the process.

## **1.2 BACKGROUND TO THE RESEARCH PROBLEM**

Although infrastructure expansion was phenomenal in Ethiopia in the last decade, some health facilities were operational without the necessary materials and the necessary human resources, which cast doubts about the quality of services rendered in the rapidly expanding facilities. Health facilities can only provide quality services provided there is physical infrastructure that is matched with adequate and functional materials and supplies; sufficient number of trained human resources that are performing up to standards; and if their target population is satisfied with the service and continue utilising the services (Fisseha, Berhane, Worku & Terefe 2017:187).

Service delivery is one of the health systems strengthening building blocks in Ethiopia (World Health Organization (WHO) 2007). The role of a strengthened health quality framework and strategy is to ensure that national policies, guidelines, and protocols around quality are reliably implemented, building on the extensive resources and infrastructure that the government has already put in place, thereby accelerating Ethiopia's efforts to close remaining gaps in health outcomes and ensure equity for its diverse population (FMOH 2016). The FMOH (2016) indicates that critical to improving the quality of hospital care is having an effective networked health care system that strives to deliver quality and efficient health services to the consumer. Quality healthcare includes characteristics such as availability, affordability, acceptability, appropriateness, competency, timeliness, privacy, confidentiality, attentiveness, caring, responsiveness, accountability, accuracy, reliability, comprehensiveness, continuity, equity, amenities, and facilities of healthcare services (FMOH 2013).

Anecdotal information indicates that there is an imbalance between increasing access, and providing quality of service delivery, which limits the utilisation of potentially available services. The issue around quality is attributed to amongst others lack of knowledge and skills; for instance, absence of Human Immunodeficiency Virus (HIV) test kits, which affects HIV counselling and testing (HCT) services prevention, absence of microscopes at health centers. Inputs that were made available are not always used as they are supposed to (e.g. ambulances, microscopes, etc.). In situations where all the knowledge, skills and inputs are available, several facilities are not ready to provide services (lack of water, inability to provide maternity services), power sources (inability to run a lot of equipment, including refrigerators).

Quality of care outcomes remain low in Gindabarat District. Emergency management scale-up is still rather low and built around existing standards. There is still limited regulation and support of public service providers on improving quality of care; as well as lack of comprehensive and independent monitoring of the improvement in quality of care in the country (FMOH 2014).

### **1.3 STATEMENT OF THE RESEARCH PROBLEM**

Health workers to population ratio in the Gindabarat District is much lower than the World Health Organization (WHO) minimum standard of 1GP:10,000 populations, and 1 Nurse: 5,000 populations. There is also transportation and geographically inaccessible areas in this district. Shortage of health personnel is the major problem in peripheral health facilities, and there is high transfer of skilled staff and new graduate health workers, as well as lack of interest to work in rural districts like Gindabarat. Even though the physical access for primary health care facilities has improved significantly, some of the health facilities are not providing the services as expected for their level due to various reasons. Addressing client concerns is as essential to good quality health care delivery as technical competence.

There seem to be no standard operating procedure (SOP) for the different health centres as suggested by Lengu (2011:1). Access to health care remains a major problem for many people, particularly in rural areas such as Gindabarat District. The distribution of services is highly concentrated on accessible roads. Thus, the population living in rural areas is in limited access to health services. According to the 2014 report of West Shewa Zone there is shortage of health personnel, essential drugs and medical equipment (FMOH 2010/2011). For example, only three health workers were assigned in health centers found in Gindabarat district which is below standard,

There is limited quality recording, reporting and documentation system. According to the monthly and quarterly reports on healthcare delivery audit from Gindabarat districts in 2014, the data were not complete, with no timeliness; thereby not helping to make timely decisions or to attend to problems. Therefore, this study sought to assess the, barriers to quality health care delivery.

It seems that at Gindabarat District, health centers have inadequate structures to implement services. Currently in this district, there is enough coverage for less than 5

year's vaccines such as measles. However, there are outbreaks, which are at times associated with inefficiency of health services.

The primary health care network model used in the region outlines that health professionals at health centers are responsible to support the health extension workers (HEWs) within their catchment population. Similarly, implementation of the urban health extension package is supported by health centers and district health office in town. Furthermore, a primary hospital is required to support health centres in catchment areas. According to the researcher's observation; even though the physical access for primary health care facilities has improved significantly, some of the health facilities are not providing the services that are expected to be provided at their level due to various reasons. Shortage of health personnel is the major problem in peripheral health facilities, and there is high turnover of skilled staff and new graduate health professionals are assigned yearly which shows high attrition rate and low retention rate.

## **1.4 RESEARCH PURPOSE**

The purpose of the study was to assess the quality of health care delivery with an aim to develop guidelines for care to enhance the quality health services delivery at Gindabarat District, Ethiopia.

### **1.4.1 Research objectives**

Research objectives describe what the researcher expects to achieve by the research findings. The objectives of this study provided an accurate description of the specific actions taken to reach the purpose of the study. As there was no hypothesis tested, the research objectives were used to collect information for the statement of purpose. The research objective provided an adequate guide to the research; and were to:

- Describe the quality of health services delivery in Gindabarat District.
- Explore the barriers to health service delivery at the health centres and hospital in Gindabarat District.

- Describe health care providers' satisfaction with services provided at Gindabarat District
- Identify practice gaps in the delivery of health services at the health centres and primary hospital in Gindabarat District.
- Develop guidelines to enhance the quality health services delivery.

#### **1.4.2 Research questions**

The research questions that were derived from the problem statement were organised according to the theoretical framework of the study (Donabedian 1980), which is structure, process and outcome. The research questions were arranged and asked under the following:

- What are the barriers to quality health service delivery in Gindabarat district?
- To what extent are the health service providers of the district satisfied with the service they render?

#### **1.5 DEFINITIONS OF TERMS**

Terms refer to words or expressions that have a precise meaning of the objects or people that fall within the topic of discussion. Polit and Beck (2012: 722) refer to them as concepts when they are abstract and inferred from situations, behaviours and characteristics. Terms used in this study were as follows:

**1.5.1 Assessment of quality** in health service delivery can have different purposes such as describing health care from the patient's point of view; measuring the process of

care, hereby both identifying problem areas and evaluating improvement efforts; and evaluating the outcome of care (Beyene et al 2011:49).

**1.5.2 Health centre:** Health facility at primary level of the healthcare system, which provides promotive, preventive, curative and rehabilitative outpatient care including basic laboratory and pharmacy services with the capacity of 10 beds for emergency and delivery services (ESA3611 2012:8).

**1.5.3 Health care provider satisfaction:** In this study it refers to feelings of happiness or disappointment in result for comparing a product/service perceived performance or outcome with its expectation satisfaction.

**1.5.4 Health service** include all services dealing with the diagnosis and treatment of disease, or the promotion, maintenance and restoration of health (WHO 2017).

**1.5.5 Quality of care delivery** is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge (FMOH 2016).

**1.5.6 Primary Hospital is** a health facility at primary level of health care which provides promotive, preventive, curative and rehabilitative services with a minimum capacity of 35 beds and provides at least 24 hour emergency services, general medical services, treatment of basic acute and chronic medical problems, basic (ESA3617 2012:6).

## **1.6 THEORETICAL FRAMEWORK**

A theoretical framework provides a rationale for predictions about the relationships among variables of a research study and plays an important role in guiding the entire process of the research study. A model is a symbolic representation that helps the researcher to express abstract concepts and relationships easily, using minimal words.

Donabedian's (1988) model of quality care was used as the conceptual framework in this study. Donabedian model provided a framework for examining health services and evaluating quality of health care. According to the model, information about quality of care can be drawn from three categories, namely, structure, process and outcomes. The role of quality assessment was to assess whether the health centres and primary hospital were meeting the existing standard of the country. The structure-process-outcome-Model according to Donabedian (2003:46) is as follows:

- Structure denotes the attributes of the settings in which care occurs. Structure describes the context in which care is delivered, including hospital and health centers buildings, staff, financing, and equipment. This includes the attributes of material resources (such as facilities, equipment, and money), of human resources (such as the number and qualifications of personnel), and of organizational structure. Material resources denote the facility and the equipment for providing quality care. Organisational structure incorporates medical and nursing staff, policies and performance review
- Process denotes what is done in giving and receiving care. Process denotes the transactions between patients and providers throughout the delivery of healthcare. It includes the patient's activities in seeking care and carrying it out as well as practitioners' activities in making a diagnosis and recommending or implementing treatment. The activities of the professionals in rendering care which include the diagnosis, treatment, rehabilitation, education and preventive treatment. Areas like health care service such as barriers to achieving the set goal are noted in the model.
- Finally, outcomes refer to the effects of healthcare on the health status of patients and populations. Outcome includes patient safety, provider and patient satisfaction, effectiveness and comfort. Outcome refers to the desired quality of the health services resulting from the processes and the effects of the structure. Changes in health status include the knowledge, and satisfaction that the client has received from the service provided. Outcomes are effects of the quality of care on the clients' health and well-being as it reflects how skilfully it has been executed.

## The Framework: A Useful Definition of Quality

---



**Figure 1.1 The structure-process-outcome-model (adapted from Donabedian 2003)**

### 1.6.1 Theoretical foundations of the study

Assumptions are basic principles that are accepted as being true based on logic or reason without proof or verification (Polit & Beck 2012:14). Assumptions indicate the scholars' insight into their research, their ability to reconcile ontology, epistemology and methodology (Brink, Van der Walt & Van Rensburg 2006:3). Assumptions in this study were as follows:

**Ontological assumptions:** Ontology is defined by Crotty (2003:10) cited by Ahmed (2008: 3) as the study of being. It is concerned with the kind of world one is investigating, the nature of existence, and the structure of reality. Ontology is the science of the essence of being which is closely related to one's view of reality. In short, ontological assumptions are concerned with what we believe constitutes social reality'. It is the study of being, concerned with 'what is', with the nature of existence (James 1987:9).

**Epistemological assumptions:** Epistemology is a way of understanding and explaining how we know (Crotty 2003:3). Epistemology refers to the nature of knowledge and the relationship between the knower and that, which would be known (Mertens 2010: 469). Epistemology is also concerned with providing a philosophical grounding for deciding

what kinds of knowledge are possible and how we can ensure that they are both adequate and legitimate. It is the theory about the reality and is concerned with how we come to know what we know (Ahmed 2008:3).

**Methodological assumptions:** Methodology is the strategy, plan of action, process or design lying behind the choice and use of particular methods and linking the choice and use of the methods to the desired outcomes (Crotty 2003:3).

In this study, the two main arguments for promoting a focus on quality in health systems were rationalised as follows:

- Even where health systems is well developed and resourced, there is clear evidence that quality remains a serious concern, with expected outcomes not predictably achieved and with wide variations in standards of health-care delivery within and between health-care systems.
- Where health systems, particularly in developing countries need to optimize resource use and expand population coverage, the process of improvement and scaling up needs to be based on sound local strategies for quality so that the best possible results are achieved from new investment (WHO 2006:3).

## **1.7 SIGNIFICANCE OF THE STUDY**

The study could benefit the health care users and health care providers in improving quality health services delivery in public health institutions of Gindabarat district. The research could make a contribution to identify barriers towards quality health services delivery, thereby enhancing quality care to patients.

The level of satisfaction with health care service delivery influences the health of the community. The study may contribute towards improvement of the quality of health provided at health centers and hospital to the satisfaction of the providers of care. On the other hand, the findings of this study may provide recommendations to guide health workers with regard to the day-to-day provision of services to improve the health of the

patients and to address the problems that cause the quality of health care delivery to deteriorate.

## 1.8 INTRODUCTION TO RESEARCH METHODOLOGY

A concurrent mixed methods approach was used to understand different perspectives of quality in health services (Creswell 2014:106). The approach included two phases in relation to the objectives and outcome of the study (see Table 1.1). Mixed methods research is a research design with philosophical assumptions that guide the direction of the collection and analysis of qualitative and quantitative data in a single study. Its central premise is that the use of quantitative and qualitative approaches provides a better understanding of research problems than either approach alone (Creswell & Planoclarck 2007:5).

**Table 1.1 Research objectives for phases 1 and 2**

Phase I (concurrent)		Phase 2
Qualitative	Quantitative	Outcome
Explore the barriers to health service delivery at the public health facilities in Gindabarat district	Describe health care providers' satisfaction with services provided at Gindabarat district	Develop the standard guideline to enhance the quality of service delivery (based on the findings from phase 1)
Describe the quality of health services delivery in Gindabarat district.	Identify practice gaps in the delivery of health services at the health centres in Gindabarat district.	

### 1.8.1 The study context

The study was conducted in Gindabarat District, Oromia Region in Ethiopia. Oromia Region is Ethiopia's largest national regional state, classified into three agro- ecological zones namely, highlands (8%), midlands (75%), and lowlands (17%). According to the

most recent national census (2007), Oromia's population in 2015 was estimated to be 34,898,397. The majority of the population (86.2) resides in rural part of the region. The region has 18 zones, 12 town administrations, 310 districts, and 6,531 rural and 490 urban kebele. Oromia Regional Health Bureau (ORHB) is responsible for promotive, preventive and curative health services in the region. Currently, there are 43 governmental hospitals, 1,317 health centers, and 6,428 health posts. Gindabarat has 6 government health facilities (1 Primary Hospital and 5 HC). The research was conducted in the health centers in Gindabarat District, which is one of the rural regions in Oromia. The population of the study comprised of health center managers and health workers working in public centers.

Detailed research design, methods, sampling, data collection, data analysis and ethical consideration applied for this scientific study are described in chapter 3.

## **1.9 SUMMARY**

Chapter 1 outlined the introduction of the study. Background to the study, the research problem, purpose and significance of the study, research design and methods were explained. Definitions of terms important for the subsequent chapters were listed. The next chapter is literature review.

## **1.10 ORGANIZATION OF THE THESIS**

The content of thesis is organised into six interrelated chapters. These chapters are as follows:

Chapter 1: Orientation to the study

Chapter 2: Literature review

Chapter 3: Research design and methods

Chapter 4: Analysis, presentation and description of findings.

Chapter 5: Development of the guidelines to enhance the quality of service delivery

Chapter 6: Conclusions, limitations and recommendations

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **2.1 INTRODUCTION**

This chapter presents reviewed literature that is relevant to quality health service delivery. The literature study provided a review of what others have done on the topic under study. Burns and Grove (2005:37) explain that reviewing of literature is necessary because it provides insights on how others have investigated similar research problems. The concepts of quality and health services are outlined and the gaps identified are described. The literature review undertaken include the theoretical framework of the study, that is, Donabedian's model of quality of care and standards and the setting of the study which is the Ethiopian healthcare context. The search strategy included the use of the key words such as healthcare standards, quality care, Donbedian's model. The search engines were journals, books and online from Pubmed and Medline.

#### **2.2 DEFINITIONS OF QUALITY**

To date, there is no universally accepted definition of "quality" within the global health care community. Generally, the following definition from the United States Institute of Medicine (IOM) is used: "the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge" (FMOH 2016:12).

In Ethiopia, as highlighted in the HSTP, quality and equity are defined together, believing that the two must go hand-in-hand. Through various consultative processes, the domains that have been prioritized in this strategy are safe, effective, patient-centered, efficient, accessible, comprehensive, accessible, comprehensive, affordable, and timely. With these prioritised domains, quality in Ethiopia is defined as "comprehensive care that is measurably safe, effective, patient-centered, and uniformly delivered in a timely way that

is affordable to the Ethiopian population and appropriately utilises resources and service efficiently” (FMOH 2016:13).

A concise, meaningful and generally applicable definition of quality in all fields and professions including health care is difficult to arrive at. Quality may be looked at from two perspectives, either by the service provider, which is furnishing service, or by the consumer, who is supposed to have received quality service. There is growing consensus that what the service provider believes in as quality service may not hold true for the consumer (Delisa, Gans, Walsh & Bocked 2004:530).

Health providers, therefore, need to measure the quality of their services to meet the needs and expectations of consumers. This contributes to improvement through a specific sort of practice, intervention, or policy that aims at the targeted population.

### **2.2.1 Dimensions of quality**

Six Domains of health care quality as defined by the Institute of Medicine (IOM) are:

- **Safe:** avoiding injuries to patients from the care that is intended to help them; the WHO defines “patient safety” as the prevention of errors and adverse effects to patients associated with health care.
- **Effective:** providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit.
- **Patient-centered:** providing care that is respectful of and responsive to individual patient preferences, needs, and values, and ensuring that patient values guide all clinical decisions.
- **Timely:** reducing waits and sometimes-harmful delays for both those who receive and those who give care.
- **Efficient:** avoiding waste, including waste of equipment, supplies, ideas, and energy.

- **Equitable:** providing care that does not vary in quality because of personal characteristics such as gender, ethnicity, geographic location, and socioeconomic status (Beattie 2012:288-304).

Healthcare facilities receive demands from accreditation organizations, community driven committees, and external customers in terms of what makes up quality healthcare. According to Wallace and Jermy (2015:2517) quality in healthcare began during Florence Nightingale's involvement as a nurse in the Crimean War utilising descriptive statistics to discover a positive correlation between unsanitary conditions and patient death.

Today, the Institute for Healthcare Improvement and Bill & Melinda Gates foundation Ethiopia, which was developed in 2010 is the leading organization in healthcare quality. The importance of quality can be stated in the following sentences - *"No quality, no sales. No sale, no profit. No profit, no jobs"*. The quality of health services provided by health providers is becoming more and more vital and the demands of quality control, managements and improvements (Behzad et al 2016:475).

### 2.2.2 Dimensions of service quality

**Reliability** - consistency of performer and dependability.

**Responsiveness** - willingness or readiness to provide service, timeliness.

**Competence** - possession of skills and knowledge required to perform the service.

**Access** - approachability and ease of contact.

**Courtesy** - politeness, respect, consideration for property, clean and neat appearance.

**Communication** - educating and informing customers in language they can understand, listening to customers.

**Credibility** - trustworthiness, belief, is having customer's best interest at heart.

**Understanding** - making an effort to understand the customer's needs, learning the specific requirements, providing individualized attention, recognizing the regular customers.

**Security**- freedom from danger, risk or doubt.

**Tangibles**- the physical evidence of service (facilities, tools and equipment).

Benefits gained by quality to a firm are positive company image, better competitive ability and increased market share (Institute of Medicine)

### **2.2.3 Factors influencing healthcare service quality**

Quality in a healthcare is a production of cooperation between the patient and the healthcare provider in a supportive environment. Personal factors of the provider and the patient, and factors pertaining to the healthcare organization, healthcare system, and the broader environment affect healthcare service quality. Healthcare quality can be improved by supportive visionary leadership, proper planning, education and training availability of resources, employees and processes, and collaboration and cooperation among providers (Mosadeghrad 2014:85).

Safety minimises the risk of injury, infection, harmful side effects or medico-legal risks. Safety involves both the patient and health care provider safety. Therefore care should be rendered by skilled and competent health care providers. Patients must be protected from acquiring nosocomial infections and from incompetent health care providers. The quality of health care depends on the effectiveness of the service delivery norms and clinical guidelines. It is an important dimension of quality at the central level where norms and specifications are defined. Patients are valued as persons in their own right, in their own social world, and in their specific context, so they need to be listened to, informed, respected and involved in their care (Epstein & Street 2011:1).

- **Improving the delivery of health services**

Despite much progress, the gap between need and effective action is still large. More resources, further development of cost-effective interventions, and better health financing schemes are certainly needed. Nevertheless, it is striking that even the funds and technologies that are available are often not being used effectively.

In many countries, one encounters health facilities with shockingly few patients, communities with low levels of coverage, or trained workers missing from their assigned posts and empty shelves for drugs and supplies when workers have been paid and supplies purchased. Clearly, having money and technology are not sufficient conditions for impact. Even with money and better technologies, a major challenge remains improving the delivery of healthcare services. Without improvement in the performance of the organizations that deliver health services, potential gains in health outcomes from increased funding and better technologies will not be achieved (Berman et al 2011:1).

Improvements in performance at the system level and the facility level may be both imperative, and indeed interdependent. System level initiatives alone are often too blunt an instrument to improve service delivery across diverse organizations, and they also depend a great deal on the desired response by individual facilities and organizations. Without interventions directed at performance within individual facilities, broader policy reforms may not achieve their full impact. Yet interventions at the facility level cannot have a substantial and sustained impact on health outcomes if they are not reinforced by efforts that address the entire mix of delivery organizations. Without changes at the system level, improvements within facilities may be undercut (Berman et al 2011:3).

- **Comparison with domestic or international standards**

Where technical or legal standards exist, they offer a good benchmark against which to compare the results of diagnostic assessments of organization performance. This approach is well suited to performance domains like quality and access for which standards have been established. Clinical quality, for example, is covered by domestic and international medical practice guidelines, which set standard for the process of clinical care and delivery.

Managerial quality is addressed in well-established standards and laws regarding such matters as financial management and procurement. The intermediate outcome of access can also be compared with established standards in those countries that legally

guarantee some level of access to health services. Comparisons with reference to standards are useful because they reveal if performing organization is meeting domestic or international performance standards. Such standards also provide a transparent performance rankings and target setting. This type of comparison cannot be made regarding the immediate outcomes for which clear technical or legal standards are lacking (Berman et al 2011:31).

#### **2.2.4 Quality Improvement versus Quality Assurance**

These two items are usually used interchangeably. However, they mean different issues. The differences between the two are as follows:

Quality improvement (QI) means finding ways to do better than standard and breaking through to unprecedented levels of performance. The desired results are quality levels that are even higher than the planned performance level. Quality improvement is the responsibility of those who produce the products (workers) and not that of inspectors. (Bhat 2010:45)

Quality improvement implemented in hospitals in Ghana and Jamaica caused significant changes in obstetric care in both countries, such as an increase from 65% to 93% of patients with genital tract sepsis treated with broad-spectrum antibiotics (Marjolein 2009:6).

Quality assurance refers to any action directed towards providing consumers with products of appropriate quality. The term quality assurance is intended to include all of the activities that are performed to ensure that the product performs to the customer's satisfaction and many departments are involved in this effort. (Bhat 2010:44). Quality assurance is inspection oriented, reactive, involves correction of special causes to low quality, is the responsibility of few people because is narrow focus, and in quality assurance. Authority solves problems.

On the other hand, quality improvement is planning oriented, proactive, involves correction of common causes, is the responsibility of all involved with the work because it is cross-functional. Employees at all levels solve problems.

Quality improvement is a continuous process whereby organizations iteratively test and measure changes in work routines, set and achieve ambitious aims, shift system performance, and spread best practices for rapid uptake at a larger scale to address a specific issue or suite of issues they have determined to improve. (FMOH, 2016:13). Within QI, there are several approaches to drive change and accelerate the improvement of quality in Ethiopia, such as the Model for Improvement, the design and context in which QI programs are implemented, as well as the methods used to carry out the changes, matter greatly.

Quality health care is a human right. Higher health care quality results in satisfaction for the clients (patients and the community in general), employees, suppliers and better performance for the organisation. If quality of health care services improves, costs decrease, productivity increases and a better service would be available for clients which in turn enhance organizational performance and provides long-term working relationships for employees and suppliers (Mosadeghrad 2012:251).

### **2.3 DONABEDIAN'S MODEL OF QUALITY CARE**

Donabedian developed the model of quality to provide a framework to examine health services and evaluate the quality of care. He proposed that one could assess whether high quality of care is provided by examining the structure of the setting in which care is provided, by measuring the actual process of care, and by assessing the outcome of care (Donabedian 1990:1116).

The researcher considered Donabedian's model of quality appropriate for this study as it addressed the inputs in terms of available facilities and resources. Overall, the theoretical model presented is very useful because it describes structures, process and outcomes

performance enhancing quality dimensions which the researcher would like to explore at length. This model aided the researcher to determine and maintain the focus of the study. The model also assisted the researcher in organising literature review, data collection instruments, presentation and discussion of the findings as well as the formulation of recommendations.

Structure refers to the organisation and all its resources including infrastructure (building), material, human, premises and procedure manuals which will be utilised during the execution of daily activities in order to provide quality care to patients. The quality of structure also refers to the security and validity of equipment, unit area, the patient level of knowledge and consciousness of health by all who are involved in health care; that is, patient/client, community, family members and health care professionals (Lundqvist & Axelsson 2007:52; Hunt, Keeley, Cobb & Ahmeedzai 2004:249).

The context (structure) in which care is delivered affects process and outcomes. The second component is the process of service delivery. Process refers to the actions and behaviours required from the staff in giving care. It relates to the manner in which care is delivered and expresses the attributes of the performance. During the quality assessment process, activities can be divided into preventive, diagnostic, treatment, nursing care, and rehabilitation activities (Lundqvist & Axelsson 2007:52). If staff is not well trained, quality decreases. The last component is the outcome of the whole exercise of service delivery and infrastructure input.

Outcome means what is achieved. The result is the change or improvement in a patient's health, attitude or behaviour conducive to future health, self-care abilities, functional abilities, and morbidity and mortality status. The outcome is attributed to structure and process activities during the delivery of care (Lundqvist & Axelsson 2007:52; Hunt et al 2004:249).

The quality of care can be defined in relation to its effectiveness with regard to improving the patient's health status, and how well it meets professionals' and the public's standards

about how the care should be provided (Donabedian 1988:1743). The quality of health care is defined in the following broad terms:

- effectiveness (achieving the intended benefits in the population, under usual conditions of care);
- acceptability and humanity (to the consumer and provider);
- equity and accessibility (the provision and availability of services to everyone likely to benefit (in 'need'));
- efficiency (greatest benefit for least cost).

## **2.4 QUALITY HEALTHCARE**

Quality healthcare is a multi-dimensional concept. Donabedian (1988) distinguished three components of quality health care: technical quality, interpersonal quality, and amenities. Technical quality relates to the effectiveness of care in producing achievable health gain. Interpersonal quality refers to the extent of accommodation of the patient needs and preferences. The amenities include features such as comfort of physical surroundings and attributes of the organization of service provision. The triad structures, processes and outcomes were proposed as a framework for assessing quality of care. Structures refer to the attributes of the settings in which care is provided. It includes such elements as resources, staff and equipment. Process covers all aspects of delivering care and is related to interaction within and between practitioners and patients. An outcome focuses on the end results or the effect of the care provided.

Measuring the quality of healthcare is a necessary step in the process of improving healthcare quality. Donabedian (1988: 1743) states that we need detailed information about the causal linkage among the structural attributes of the settings in which care occurs, the process of care, and the outcomes of care. Furthermore, the way health care is delivered is often fragmented, overly complex, and uncoordinated. These problems can lead to serious harm or even death. Quality measurement can be used to improve our nation's health care by: 1) Preventing the overuse, underuse, and misuse of health care services and ensuring patient safety. 2) Identifying what works in health care and what

does not to drive improvement. 3) Holding health insurance plans and healthcare providers accountable for providing high-quality care. 4) Measuring and addressing disparities in how care is delivered and in health outcomes: and 5) Helping consumers make informed choices about their care (Caitlin 2014:2). Quality measures fall into structure, process, outcome and patient experience.

### **2.4.1 Structure**

Performance of health workers can also be improved through provision of better infrastructure, equipment, and materials such that the employees can apply and develop their professional skills (FMOH 2016:3). Mosadeghrad (2012:251) defined quality healthcare as “consistently delighting the patient by providing efficacious, effective and efficient healthcare services according to the latest clinical guidelines and standards, which meet the patients’ needs and satisfies providers. Quality healthcare includes characteristics’ such as availability, affordability, acceptability, appropriateness, competency, timeliness, privacy, confidentiality, attentiveness, caring, responsiveness, accountability, accuracy, reliability, comprehensiveness, continuity, equity, amenities, and facilities.

- **The quality approach**

The focus of the quality approach is to improve customer satisfaction through customer orientation and prevention of errors. The design of a quality-based performance management system focuses on the assessment of employee and system factors the relationship between the managers and employees in solving performance problems, internal and external customers in setting standards and measuring performance, and using a number of sources to evaluate employee and system factors (Lutwama 2011:95).

Quality approach encompasses the expansion and standardization of health and health related facilities. It involves development of standard design of health infrastructures, carry out their constructions, maintenance, renovation, rehabilitation, equipping and furnish them in user-friendly manner. Utilities (water, sanitation, and power) are among

key determinants of functionality of health infrastructures that require a great deal of attention in management and expansion of health and health related facilities (Lutwama 2011:90).

Systematic and planned inspection and maintenance have not been adopted by the HCs. No standardised system exists for the maintenance and first-look repairs of medical equipment. Equipment occupies space needed for clinical services. According to the mid term review of HSDPIV 2013, the effort to establish a strong maintenance structure at all levels of the health systems remains fragmented. Investment on biomedical engineers' training and other human resources related to infrastructure maintenance is inadequate (FMOH 2010/2011-2014/2015). Structure measures evaluate the infrastructure of health care setting, such as hospitals or doctor offices, and whether that health care setting is able to deliver care. These measures include staffing of facilities and the capabilities of these staff, the policy environment in which care is delivered, and the availability of resources within an institution.

#### **2.4.2 Process**

Management principles in quality management teach “building quality in the process” or “process control”. To obtain good results, it is better to focus on process that produces the results and to control the process. To do this, it is necessary to identify relationships between the results and process factors, standardize the process factors, and perform work following the standard procedures. In addition, when the results are not desirable, the relevant process conditions are to be revised for improvement (Iizuka, Munechika & Tsuru 2009:50).

Patients should receive care and treatment that meets their basic needs and contributes to their recovery by ensuring effective care standards and protocols. Action should be taken to reduce unintended harm to patients and staff, i.e, adverse effects resulting from the care given and failure of the care system and its workers through ignorance, inadequate inputs system failure or at times from negligence (FMOH 2016).

- **Process measures**

Process measures are used to determine the extent to which providers consistently give patients specific services that are consistent with recommended guidelines for care. These measures are linked to procedures or treatments that are known to improve health status or prevent future complications or health conditions.

### **2.4.3 Outcomes**

The outcome standards seek to establish whether the goals of care have been achieved. The outcome is indicated by the health status, the cost of care and patient's satisfaction and wellbeing. A well-defined structure standard increases the chance of achieving the anticipated outcome. If there is enough equipment, qualified, experienced and competent staff, and the organizational structure are in place and do not pose any danger to both patients and health care providers, the intended outcome can be achieved; for instance, relief of pain or a healthy patient (Pamela, Mitchel, Sandra & Bonnie 2007:1).

- **Outcomes measures**

Outcome measures evaluate patients' health as a result of the care they have received. More specifically, these measures look at the effects, either intended or unintended, that care has had on patients' health, health status and function. They also assess whether or not the goals of care have been accomplished. Outcome measures frequently include traditional measures of survival (mortality), incidence of disease (morbidity) and health related quality of life issues.

Although outcome measures are important to patients and providers, their usefulness is limited by the fact that developing outcome measures that are truly meaningful can be hard. Key challenges to developing meaningful outcome measures include measuring outcomes. Often this requires detailed information that is available only in medical records and this information is difficult and expensive to obtain. Although social determinants of health (such as access to safe housing, social support, and economic opportunity) can

have a profound impact on health outcomes, there is little agreement on whether or not providers can be held accountable for the confounding effects of social determinants (Caitlin 2014:6).

Three major components of a production system are:

- (i) Inputs: physical facilities, materials, capital, equipment, people and energy.
- (ii) Outputs: the products and services produced by the system.
- (iii) Processes: the means by which inputs are transformed into outputs.

The International Standard promotes the adoption of a process approach when developing, implementing and improving the effectiveness of a quality management system, to enhance customer satisfaction by meeting customer requirements. For an organization to function effectively, it has to identify and manage numerous linked activities. An activity using resources in order to enable the transformation of inputs into outputs can be considered as a process. Often the output from one process directly forms the input to the next (ESISO 13485:2016).

## **2.5 RELEVANCE OF THE THEORETICAL FRAMEWORK TO THIS STUDY**

The theoretical model presented is very useful because it describes performance enhancing dimensions which the researcher explored at length. This model helped the researcher to determine and maintain focus of study. The model also assisted the researcher in organizing literature review, data collection instruments, presentation of data, discussion of findings and the development of a performance management framework. Quality has become an increasingly predominant part of our lives. People are constantly looking for quality products and services. The existence of this desire for quality has caused firms and organizations throughout the world to consider it as an essential component of any service and production process (Mosadeghrad 2014:77).

Quality is a strategic differentiator tool for sustaining competitive advantage. Improving quality through improving structures and processes leads to a reduction of waste, rework, and delays, lower costs, higher market share, and a positive company image.

- **Process of improving access and quality to health services**

Remarkable progress has been made in improving access to primary health care units through massive expansion of health centers and health posts as well as deployment of low and midlevel health workforce. However, available per capita measures of outpatient visits and hospital admission reports indicated low service utilization compared to expansion of physical access of health facilities (FMOH 2015/2016).

- **Three levels of quality**

An organization that is committed to quality must examine quality at three levels: (i) the organization level, (ii) the process level and (iii) the performer level/job level. At the organizational level, quality concerns centre on meeting external customer. An organization must seek customer input on a regular basis. Customer-driven performance standards should be used as the basis for goal setting, problem solving, performance appraisal, incentive compensation, non-financial rewards, and resource allocation. At the process level, organization units are classified as functions or departments, such as marketing, billing and so on. Since most processes are cross-functional, the managers of particular organization organizational units may try to optimize the activities under their control, which can sub optimize the activities for the organization on a whole.

At the performer level (sometimes called the job level or the task-design level), standards for output must be based on quality and customer-service requirements that originate at the organizational and process level. These standards include requirements for accuracy.

Introduction to Quality completeness, innovation, timeliness and cost. For each output of an individual's job, one must ask questions such as:

- (i) What is required by the customer, both internal and external?
- (ii) How can the requirements be measured?
- (iii) What is the specific standard for each measure?

Viewing an organization from this perspective clarifies the roles and responsibilities of all employees in pursuit of quality. Top managers must focus attention at the organizational level, middle manager and supervisors at the process level and all employees must understand quality at the performer level.

Mosadeghrad (2012:252) states the concept of quality in terms of three dimensions: technical, systemic and generic quality. Technical quality is concerned with the professional content of work within a given area. Systemic quality refers to the quality of systems and processes that operate across the boundaries between areas of work. Generic quality refers to those aspects of quality, which involve inter-personal relationships. Good quality increases productivity and profits in addition to improving product image, brand image and company image.

Health care encompasses elements of perspectives quality, which form the basis of the National core standards developed by the South African National Department of Health as the six dimensions from the WHO (2016). According to Malaikas (2013:15), health care encompasses elements of perspectives quality, which form the basis of the National Core Standards. These elements comprise the so-called 3As and 3Es. The 3As describe: acceptability, accessibility and appropriateness:

**Acceptability** requires health care professionals to supply correct information to patients; encourages patients to be involved in decision-making regarding the care that they receive and the acknowledgement of the patients' rights by health care professionals.

**Accessibility:** health care facilities should be convenient to patients in terms of distance, transport, days and hours of health care provision when it is needed by the patients.

**Appropriateness:** health care services should meet the patients' physical, psychological and social needs, and the services should be adjusted to the patients' age, knowledge and their abilities.

The 3Es describe effectiveness, efficiency and equity.

**Effectiveness:** this element encourages the correct utilisation of equipment, accompanied by measurements and monitoring the set standards.

**Efficiency:** indicates the skillful use of resources, advocates for the availability of medicines and other equipment when needed as well as using health care professionals' time efficiently in meeting a variety of needs.

**Equity:** special services should be arranged to meet particular needs without discrimination towards patients by age, gender, disability, race, culture nor religion (Malaikas 2013:15).

## **2.6 STANDARD OPERATING PROCEDURES FOR QUALITY ASSURANCE**

Rowmer and Aguilar (1998:3) define quality health care as 'degree to which the resources for health care or the service included in health care corresponds to specific standards. Quality health care is explained as doing the right thing, at the right time, in the right way for the right people to produce the best possible results (Farguhar 2006:33). Standard Operating Procedures(SOPs) include statements of specifications and standards for quality assurance. Successful medical CQI systems are built on the foundation of an excellent traditional QA system. Beyond its description of the relationship of cost to quality and its explicit approach to process (in addition to outcome) measurement, CQI's main contributions to traditional QA are a series of formal mechanisms to deal with situations that traditional QA leaders were forced to solve on an ad hoc basis. Situations center around the difference between specifications (within CQI) and standards (within traditional QA) (James1987:472).

### **2.6.1 Operational model for quality in health care**

Medicines' unique division is between delivery quality (as measured by patients' expectations) and content quality (as measured by health delivery professionals expectations, acting on behalf of patients). The four major divisions of the model are the quality of management, quality of evaluation, quality of services (Delivery Quality) and value of care (Content Quality)(James 1987). This study focus on the quality of services. The strategic objectives tha are aligned to SOPs in Ethiopia for quality assurance to improve the the quality of service delivery were as follows:

- Service provision or delivery is an immediate output of the inputs into the health system, such as the health workforce, procurement and supplies, and financing. Increased inputs should lead to improved service delivery and enhanced access to services.
- Ensuring availability of health services that meet a minimum quality standard and securing access to them are key functions of a health system.

Among the 124 standards contained in the Ethiopian Hospital Reform Implementation Guidelines (EHRIG), 8 are on quality management and improvement. The national average EHRIG attainment in EFY 2006 was 76%. The hospital reform has brought positive improvements, including reduced waiting time to 52 minutes and reduced institutional mortality rate to 4%. The bed occupancy, average waiting time to surgery and patient satisfaction showed improvement in 2006 EFY to 75%, 10 days and 77%, respectively. The Ethiopian Hospitals Alliance for Quality (EHAQ) was established in EFY 2004, which aimed at sharing experiences among lead and general member hospitals for quality improvement. At the closing of the patient satisfaction cycle, the best performing public institutions (6 lead hospitals, 3 clusters, 11 general member hospitals, 2 hospitals, and one RHB) were awarded, after being evaluated through data driven and transparent approach. A similar reform and quality alliance need to be implemented for health centers (HSTP 2015:42).

To improve the quality of emergency services in Ethiopian public hospitals, a number of initiatives have been implemented, such as: (i) ambulance procurement, distribution and utilisation; (ii) establishment of emergency command post; (iii) provision of training on basic and advanced life support; and (iv) strengthening of specialty care like intensive care unit, burn services, and trauma care services. A number of undertakings are taking place in improving emergency care. Besides, different guidelines, such as Ambulance Management Guidelines, First Aid Guidelines, Intensive Care Unit Establishment Guidelines, and Liaison Services Manuals, have been prepared (HSTP 2015:43).

According to the WHO (2017) laboratory quality ranking, every laboratory system is expected to fulfill the five levels of laboratory quality standards, ranging from one to five. As part of this quality standard mechanism, laboratories are participating in Strengthening Laboratory Management towards Accreditation (SLMTA) trainings. Similarly, one laboratory participated in external quality control managed by international experts; whereas 22 laboratories participated in national laboratory quality control and standard assessment. About 156 laboratories have participated in Quality Control activities through provision of quality control samples (regarding chemistry and haematology, DNA PCR, viral load, and TB culture) as part of the on-going laboratory quality assurance mechanism.

### **2.6.2 Equitable access to quality health services**

Equity is the absence of avoidable or remediable differences among populations or groups defined socially, economically, demographically, or geographically. Thus, this strategic objective deals with reducing disparities between regions and groups with different levels of underlying social advantage/disadvantage (women, youth, children, wealth, disability) in the provision of quality health services. While ensuring equitable access to health services, it also focuses on quality planning and quality improvement activities in the health care delivery system with provision of customer centered, efficient, effective, timely and safe health service (HSTP 2015:87).

### **2.6.3 Regulatory systems**

Functional regulatory system refers to implementation of an effective, transparent and accountable system that ensures adherence by all state and actors to the standards set by the country's rules and regulations (HSTP 2015:90).

Policy and procedures encompasses strengthening of health system through continuous analysis and improvement of existing health and health related policies, proclamations, regulations, guidelines, standards, directives and other health related legal frameworks in the spirit of health in all policies.

### **2.6.4 Health and health related indicators in Ethiopia**

Ethiopia has high maternal mortality ratio and poor access to maternal health services. A study conducted in three districts in South west shewa zone, Ethiopia reveals coverage of at least four ANC visits and skilled birth attendant's delivery were 45.5% and 28.6 % respectively (Wilunda et al 2015:74). Improve health infrastructure: Adequate infrastructure, which includes building, equipment, supplies, transport and communication equipment, forms one critical element of health system.

Primary care is delivered at three types of facility, viz, health posts, health centers, and primary hospitals. Each primary health care unit comprises five health posts, one health center, and a primary hospital. Each health post is staffed with two health extension workers (HEWs) and is responsible for a population of 3,000 to 5000 people. Health centers have an average of 20 staff and provide both preventive and curative services. It also services as a referral center for patients coming from health posts and a practical training institutions for HEWs. Health centers have an inpatient capacity of 10 beds. Rural healthcenters serve populations up to 25,000 persons, while urban health centers serve up to 40,000 persons. A primary hospital provides inpatient and ambulatory services to an average population of 100,000. It also serves as a referral center for patients from health centers in the hospital's catchment area, and is a practical training center for nurses and other paramedical health professionals. A primary hospital has an average inpatient capacity of 35 beds and a staff of 53 persons. The secondary care level is made

up of general hospitals. A general hospital provides inpatient and ambulatory services to an average of 1 million people. It is staffed with roughly 230 professionals and services as a referral center for primary hospitals. General hospitals have an inpatient capacity of 50 beds and act as training centers for health officers, nurses, emergency surgeons and other health professionals.

The tertiary care level comprises specialized hospitals. A specialized hospital services an average of 5 million people. It is staffed with roughly 440 professionals, services as a referral center for general hospitals, and has an inpatient capacity of 110 beds (Alebachew et al 2014:5).

## **2.7 OROMIA REGIONAL STATE**

Oromia is the largest region, covering nearly a third of the country's landmass. It is located in the central part of Ethiopia and extends to the western, southern and eastern part of the country. According to the most recent national census (2014), Oromia's population is estimated to be 33,914,865. The majority of the population (86.2%) resides in rural part of the region. The region has 18 zones, 12 town administrations, 307 districts, and 6531 rural and 490 urban kebeles. There are 1320 functional health centers and 53 hospitals in Oromia. Health and health related indicators (FMOH 2015). Public health facility to population ratio in Oromia is 1 HC: 25693 while 1 Hospital: 639903. Distribution of OPD attendance per capita in Oromia is 0.37. Admission rate per 1,000 population of oromia is 11 %. Health and health related indicators (FMOH 2015).

## **2.8 GINDABARAT DISTRICT**

Woreda is an administrative division in Ethiopia with an average population of 100,000 and is managed by democratically elected council that forms local government. Woredas is composed of 31 kebeles, which are the lowest administrative units. Woreda has 31 health posts, 6 health centers and one primary hospital.

The woreda health office is organized to provide programmatic and administrative support for the primary health care facilities. It plays a stewardship role ranging from multisectoral coordination and linkage across local government, to regulation of public and private health service (mainly primary care), and generating strategic information and assessing performance for accountability. It has also a financing responsibility by providing oversight to the revenue generated by the health facilities, the budget allocated by the council for the health sector, resource generated through community based health insurance schemes and purchasing services.

Briefly, the woreda health office is responsible for the prevention of disease, promotion of health, and provision and regulation of essential health services in the woreda. Gindabarat district's population is estimated to be 137365. Public health facility to population ratio in this district is 1 HC: 22894 while 1 Hospital: 137365. Health and health related indicators (MOH 2015).

The objective of this study was to develop guidelines for care to enhance quality health services at Gindabarat district. The expected outcome of woreda transformation: Transformed woreda is expected to have an accountable and transparent governance system that nurture meaningful community participation and strive to meet the needs of the people, make data-informed decisions, and apply evidence-based frameworks to systematically identify bottlenecks and scale-up best practices to address them, and achieve universal health coverage.

One of the woreda transformation agenda was to develop high performing primary health care units (PHCU) and achievement of universal health coverage with financial risk protection. These goals will be achieved by implementing six clear strategies. Establish a culture of quality management, focus and data-driven achievement, by choosing and nurturing great PHCU directors and health professionals and empowering them to get results Promote equal care for equal need by expanding high performing PHCUs and establishing mechanisms for turning around low-performing health centers and health posts(HSTP 2015/2016:116). It was identified in the study that primary hospital and health

centers render services that was below minimum standard. According to Ethiopian standard, primary hospital shall mean a health facility at primary level of health care which provides promotive, preventive, curative and rehabilitative services with a minimum capacity of 35 beds and provides at least 24 hour emergency service general medical services, treatment of basic acute and chronic medical problems, basic emergency surgical intervention and comprehensive Emergency Obstetric care (CEOC) including laboratory, imaging and pharmacy services and other related services stated under this standard (ES 3617, 2012:7). Health centre shall mean a health facility at primary level of the health care system, which provides promotive, preventive curative and rehabilitative outpatient care including basic laboratory and pharmacy services with the capacity of 10 beds for emergency and delivery services. (ES 3611, 2012:8).

***Gindabarat District Health Office:*** Gindabarat District office is one of the 22 districts in west shewa zone. It is a rural district where there is geographical access problem that is it is located at where there is no all-weather road. The district health office is an integral part of the quality health service delivery playing a vital management and coordination role and integrating the various governing structures of multiple primary health care facilities within the district. The management, coordination, and distribution of technical support in each level is the responsibility of the District Health offices. The primary care level is established on the district level and includes a primary hospital, local health centers, and rural health posts. In the district there is primary health care unit comprises of one primary hospital that gives technical support for six health centres and 31 health posts. Patients within this district has to walk on foot, long distances to visit this hospital. The district has high turnover of staff as they are transferred after only serving for two years. It has low staff retention, as there is no medical college for professional career development. In Gindabarat District, there is no adequate general surgery service except emergency cases. It also supports the activities of health centres found in the district. There is only one Ambulance at the district level. There is no cleaner and guards at all health posts in the district. There are no biomedical engineers at all health facilities. Theoretically, health posts are accountable for the health centres but practically they are

accountable for district health office. This shows that there is mandate problem in giving health services.

All district Health Offices shall be designed, constructed, and maintained in a manner that is safe, clean, comfortable and conducive working environment for well-being of the staff and functional for the type of services to be provided. During construction, it needs utilization of proper construction materials that suits the health services. The room size and space of health office of this district is not enough for the staff and clients. It needs urgent renovation.

**Gindabarat Primary Hospital:** Primary hospital shall mean a health facility at primary level of health care which provides promotive, preventive, curative and rehabilitative services with a minimum capacity of 35 beds and provides at least 24 hour emergency services, general medical services, treatment of basic acute and chronic medical problems basic emergency surgical intervention and Comprehensive emergency Obstetric Care (CEOC) including laboratory, imaging and pharmacy services and other related services stated under the standard. (ESA3617 2012:6). A primary hospital provides inpatient and ambulatory services to an average population of 100,000.

This primary hospital is 193 km from Addis Abeba. Total health workers are 97 and 79 supportive staff, which makes 176. From these emergency surgery officers 3, GP=15, nurses all forms 44, midwifery 13 pharmacy 7 and 7 laboratory workers. This is a government primary hospital which has governing board, the primary hospital has chief executive office (CEO) is responsible for planning, organizing and directing and controlling the day today operation of the hospital. In addition, this hospital has chief clinical officer [CCO] who is medical doctor and oversees the clinical care provided by the hospital. Hospital department heads are hospital management committee. Each department heads are management committee. This committee is adviser of chief executive officer on the day-to-day management of the hospital. It has different department and wards. It has both technical and supportive staff. Health service in this district started historically in 1961 at mukadima kebele by American missionaries that

currently transferred to the capital city of Gindabarat district, kachisi town by the year 2004. Since then this hospital was upgraded from the health centre to primary hospital.

There is no laundry machine and trained work force, there is electric power but high interruption of power supply, during electric power interruption there is no water supply, this hospital has design problem because it was upgraded from health center there is no adequate rooms for different health services program. There is high turnover of staff. Hospital has Chemistry machine but not installed.

**Kachisi Health center:** Health center shall mean a health facility at primary level of the healthcare system which provides promotive, preventive, curative and rehabilitative outpatient care including basic laboratory and pharmacy services with capacity of 10 beds for emergency and delivery services (ESA3611 2012:8). Kachisi health centre is newly established at the capital town of the district. Under this health centre there are six kebele's namely kachisi 01, Damota and Harbu Guba, Haro Berbabo, Mudhi ula baro, Goro Abasabat and laga macha. They do have health posts. Since it is the health center at the town of the district it was supposed to be type A health center but, it is type B health center.

**Mukadima Health center:** Mukadima health center is a type B health center 17 km away from Kachisi District town giving both curative and prevention services. It has five health posts namely Bake Fayina, Chando Jibat, Kalo Badhasa, Bidaru Gobota and Mukadima. This health center is located under big plateau (geographical access problem), there is no Ambulance allocated for this health center, no electrical power supply, constructed 50 years back no maintenance service given, no IPD service.

**Chulute Health center:** Chulute health centre is a type B health centre 15 km away from kachisi district town giving both curative and prevention services. It has five health posts namely Gamada, Bake Bala'a, Meti Innabse, Harbu Guba and Bagalo. No reagents for laboratory tests, there is no general technician for maintenance and environmental sanitation worker assigned, there is water supply but not installed in each rooms, there is

laundry machine but not functioning, there is no FP for IP, environmental and quality activities.

**Gura Jarjara Health center:** Gura Jarjara is one of the health centre found within the district. Under Gura Jarjara health centre there are seven HPs or kebele's as a catchment population. There are areas which are pocket land very difficult to reach. Each HC provide services to approximately 25,000 people. HC provides both preventive and curative services. It has seven health posts namely Kare sole, Dire Faji, Saka Borki, Bashe, saka Yadi, Kiltu sanbataa and Goro mana erga. The effect of geographical access on utilization health services is more serious in this area where there is lack of road and means of transportation. The kebele's are very far from this health centre, which makes it difficult to utilize the health services. There is no IPD services, health center needs additional block, there are no health workers like pharmacy and laboratory, laundry machine, there is no electric power supply, there is no home for staff resident with high staff turnover.

**Kare Dobi Health center:** Kare Dobi is one of the six health centres found in this district. This health centre is located at 27 km away from kachisi town. It is type B health centre which needs additional blocks. Kare Dobi has 4 HP namely Kare Dobi, Kare Sankori, Chome Mana erga and Ula Aba Dadhi. There is no Ambulance for each health centres except occasional support from the Ambulance found at the district level. Theoretically, health posts are accountable for the health centres but practically they are accountable for district health office this shows that there is mandate problem in the primary health care unit. This shows that there is mandate problem in giving health services. There are no health professionals assigned like health officer, midwifery, water supply is hand pump, there is no laundry machine, there is no means of transportation allocated for this health center, there is no IPD services, it needs additional block, there is no general technician for maintenance service and there is no environmental sanitation worker. There is no home for staff resident.

**Abuye Roge Health center:** Abuye Roge is one of the six health centres found at Gindabarat District. It is type B health center. There are five kebeles, which has one health

post each namely, Wine Roge, Shankori Tapisa, Tapisa Madale, Irensa Kono and Chirecha Gato. This health center does have adequate land for expansion but situated on piece of land. There is no IPD services, no water supply, no autoclave, no sustainable drug supply, no pharmacy worker; no adequate health worker with high turnover. There is no home for staff resident.

## 2.9 HEALTH SYSTEM AND HEALTH POLICY

Health system building blocks include:

- **Service delivery:** packages; delivery models; infrastructure; management; safety & quality; demand for care
- **Health workforce:** national workforce policies and investment plans; advocacy; norms, standards and data
- **Information:** facility and population based information & surveillance systems global standards, tools
- **Medical products, vaccines & technologies:** norms, standards, policies; reliable procurement; equitable access; quality
- **Financing:** national health financing policies; tools and data on health expenditures; costing
- **Leadership and governance:** health sector policies; harmonization and alignment; oversight and regulation (WHO 2007).
- **The Ethiopian Health System Strengthening Initiatives**

Several initiatives were implemented in Ethiopia as part of strengthening the health system. Although most of the points depicted below are part of the reform process, it can be taken as components of the Health System Strengthening Initiatives. Business Process Reengineering - leading to a set of new approaches like benchmarking best practices, designing new processes, revising organizational structures and a selection of key processes, decentralization of health service, health care financing, health Insurance,

hospital reform initiatives, harmonization and alignment, different health work force development initiatives and health management information system.

### **2.9.1 Health System**

The WHO defines a health system as the sum of the organizations, institutions, and resources whose shared primary purpose is to improve health. The broad health system includes everyone responsible for good health, from the family in a rural village to the surgeon in a hospital in the capital city. A lot remains to be done towards improving quality of care at each level of the health system. The health system, over the last two decades, were focused in improving coverage of essential health services. It is high time to pay attention to the quality and equity of health service at all levels of the system. While it is essential to maintain high coverage of critical services, the health system should be reoriented to continuously assess who amongst the community members are not reached and why they are missed.

Maintaining high quality standards is very important for health care facilities. The healthcare facilities should appoint an office responsible for ensuring quality of care in hospitals, ambulatory surgical treatment centers and nursing homes. The office should license and certify the types of health care facilities available. The office should conduct surveys annually for participation in the Medicare program and should be responsible for investigating all facility complaints received from patients. Total quality management implementation enables the health facilities to maximize patients' satisfaction achieve higher productivity and gain better service quality. Total quality management provides a continuous improvement of quality services and the employees of the facility. Total quality management implementation maintains strong relationship with the individuals through achievement of providing high quality services that ensures customer satisfaction (Ahmad et al 2015).

- **National Health Policy**

The 1993's health policy issued by the government of Ethiopia is one among the prominent developments of the country. The policy envisioned the health care sector development program. It reorganized the health services delivery system to contribute its own to the overall socio-economic development. The policy principally focuses on fiscal and political decentralization, expanding the PHC services to all segments of the population and encouraging partnerships and the participation of nongovernmental actors. The policy on quality in health care requires all health professionals to be aware of the need to improve quality during their duties and patient activities.

- **General theme of the policy**

Development of an equitable and acceptable standard of health service system that will reach all segments of the population within the limits of resources and assurance of accessibility of health care for all segments of the population.

- **Health service**

The Health Sector priority is to expand and sustain the progresses made so far, which will require visioning the future health care system with a purpose of ensuring quality health services and be equitable, sustainable, adaptive and efficient to meet the health needs of a changing population between now and 2035. The main goal of the health system is ensuring that everyone who needs health services (promotion, prevention, treatment, rehabilitative and palliative) is able to get them, without undue hardship. Hence, Universal Health Coverage (UHC) needs to be a goal for Ethiopia's health sector in the coming decades.

## **2.9.2 Health service delivery**

The health sector has the following four strategic themes:

### **2.9.2.1 Excellence in health service delivery**

A health system that: Delivers equitable promotive, preventive, curative and rehabilitative services ensuring that all people obtain the health services they need without suffering financial hardship when paying for them; and enables the community to practice and produce good health; and be protected from emergency health hazard with the attributes of comprehensiveness, accessibility, coverage, continuity, responsiveness and coordination.

### **2.9.2.2 Excellence in quality improvement and assurance**

Refers to managing and improving quality and safety in health services at all levels of the healthcare system. A community will be served with health care that is effective, efficient, person-centered, equitable, safe, and timely at all levels and at all times through quality planning, Quality Assurance or Quality Control and quality improvement.

### **2.9.2.3 Excellence in leadership and governance**

Efficient, accountable and transparent institutions serve all segments of the population which incorporates equitable and effective resource allocation, leadership development with the concept of community empowerment, woreda transformation and partnership and coordination.

### **2.9.2.4 Excellence in health system capacity**

Refers to the enhancement of resources for health with expected result of communities served by qualified, committed and motivated providers in health facilities that have the necessary equipment, tools and technological solutions as per the standards.

- **Strategic objectives**

The objectives are as follows:

**Improve Health Status:** This objective describes the improvements in health status of the population and factors affecting it. It is meant the reduction of morbidity and mortality so that citizens will be healthier, more productive and socially active. It also means that social determinants of health are addressed through proactive multi sectoral collaboration.

**Improve Supply chain and logistics management:** The focus of this strategic objective is to ensure access to quality assured, safe, effective and affordable essential medicines with which the sector intends to respond to the majority of health problems of the society; significant reduction in the pharmaceutical wastages and improved rational drug use.

**Improve development and management of human resource for health:** This strategic objective entails human resource planning, development and management. The human resource management focuses on recruitment as per the need, deployment, performance management and motivation. One of the main focuses of this strategic objective is to promote patient-centered, respectful, and compassionate care by all health professionals.

**Organizational systems:** Organizations as diverse and includes hospitals, health centers and district health offices and they have the following characteristics in common:

1. Social entities: they are composed of people and groups of people, who interact with each other to perform essential functions in the organization
2. Goal-directed, they exist for a purpose.
3. Deliberately structured activity systems that perform tasks, which are deliberately subdivided in departments and sets of activities.
4. Identifiable boundaries: that identifies which elements are inside and which are outside the organization.

In Ethiopia, though not a new concept, at the core of efforts to improve the quality of health care is also the concept of patient centered care. It is emphasized in one of the HSTP transformational agendas, improving the quality and equity of health service delivery and the emphasis is given not because it is a new concept; but rather it is the one that could be viewed as receiving more talk than action in practice. Given the

tremendous work in the past 20 years, Ethiopia made great strides toward access to health care for its entire population. With that advance comes the increasing responsibility of the country to plan improve, and control the quality of the care being delivered with a particular emphasis on provision of patient centered care.

**Types of health facilities:** There are three types of health facilities in Ethiopia. These are primary hospital at district level, general hospital at zonal level and referral hospitals at the regional level while there are two types of health centers in Ethiopia Type A. Which has three block of building and type B health centres which has two blocks. Gindabarat District has one primary hospital and six health centres all are type B. Ethiopia recently introduced a three-tier health care delivery system.

Level one: The woreda (district) includes a primary hospital (with population coverage of 100,000 people), health centers (1/25,000 population), and their satellite health posts (1/5,000 population) connected to each other by a referral system. Health centers and health posts form a primary health care unit with each health center having five satellite health posts.

Level two: A general hospital with population coverage of 1 million people.

Level three: A specialised hospital that covers a population of 5 million. The rapid expansion of the private –for –profit and non-governmental organization (NGO) sectors is playing a significant role in expanding health service coverage and utilization of the Ethiopian health care system, thus enhancing the public /private/ NGO partnerships in the delivery of health care services in the country.

Offices at different levels of the health sector, from the Federal Ministry of Health (FMOH) to RHBs and woreda health offices, share decision-making processes, powers, and duties where FMOH and RHBs focus more on policy matters and technical support while woreda health offices focus on managing and coordinating the operation of a district health system that includes a primary hospital, health centers and health posts under the woreda’s jurisdiction.

## **2.10 DIMENSIONS OF HEALTH WORKFORCE PERFORMANCE**

The WHO (2006:68) suggests four dimensions that determine how health workers perform. These dimensions include availability, responsiveness, productivity and competence.

- **Availability of health workers**

Availability refers to having the right numbers of health workers, in the right locations, at the right moment and with the necessary expertise. Health workers form the backbone of the health system. They assist in the execution of health service delivery. It is the responsibility of the respective governments to facilitate access of its citizens to affordable and appropriate health care, however in many developing countries the health systems are faced with a range of personnel problems. Some of these challenges include lack of an inequitable distribution, as well as attrition of skilled health personnel.

In sub-Saharan Africa, the health workforce averages to only 0.8 health workers per 1000 people, which is low compared to other regions of the world (Chen et al 2004:1984). In ideal situations, the poor countries (like most of the sub-Saharan countries) with the highest burden of disease should have the largest health workforce. Regrettably, most sub-Saharan African countries have the lowest concentration of health workers. Studies have reported disparities in the distribution of health workers even within the same country, with large concentrations of well-qualified health personnel in urban areas.

Shortages of health workers affect performance of the existing staff because health care delivery is a labour-intensive industry. There is need to have sufficient health care providers to treat and care for the patients. Therefore, as the number of health workers drops, the ability of health care systems to deliver quality services is compromised. The shortage also limits access and reduces the quality of health care. Furthermore, waiting times are longer and often facilities are staffed with unqualified health personnel. Despite significant progress during HSDP IV, the increase in the number of key human resource

categories is still lagging behind demands of the public sector. Especially for CEmONC (emergency caesarean sections). The low number of IESO graduates annually and the few gynecologists graduating every year will not be sufficient to increase providers in time for the MDGs or the immediate post MDG period. The IESO deployment were challenged by the lack of preparation of primary hospitals as well as the shortage of anesthetists.

The world Health report of 2010 identified three interrelated problems that limit universal coverage. Limited availability of health resources, (2) overreliance on direct payments at the time people need care, and (3) inefficient and inequitable use of resources (WHO 2010). The limited availability of resources for health in Ethiopia is very clear. Ethiopia endorsed a health care financing strategy in 1998 that envisioned a wide range of reform initiatives. The reforms introduced include implementing revenue retention and use at health facility level, systematizing a fee-waiver system for the poor, standardizing exemption services. Setting and revising user fees. Introducing a private wing in public hospitals; outsourcing non-clinical services and promoting health facility autonomy through the introduction of governance system (Zeleelew 2012:1).

Health care financing reform goals were to: Identify and obtain resources that can be dedicated to preventive, promotive, curative, and rehabilitative health services, increase absolute resources to the health sector, increase efficiency in the use of available resources, promote sustainability of health care financing and improve the quality and coverage of health services.

Ethiopia has a tradition of paying for health services that dates back to the introduction of the modern health service delivery system. Ethiopia follows a consolidated revenue collection and budgeting system in which all public institutions that are collecting revenue are supposed to channel their revenue to the central treasury and receive their operational funding in the form of a government budget.

## **2.11 SUMMARY**

In this chapter literature was analyzed on dimensions of quality, factors influencing health care service quality, improving the delivery of health service, Donabedian's model of quality, health centers and primary hospitals service standards, regulatory systems, health systems and policy and health service strategic themes of global and Ethiopian context. The chapter described the available evidence and gaps on health service delivery.

It can be concluded that there is a problem in all determinant intervention, health workers and facilities are not available, majority of the people are not accessed, even those who have an access are not utilizing, those utilizing do not utilize adequately and effectively. Therefore, health actors of Gindabarat District should work across the identified causes of the bottlenecks in rendering quality health services. Though the coverage cannot identify the nature of the problems, however, it can guide to identify the possible reasons and health staff can investigate problems linked to the supply of the services (availability, accessibility, and effective coverage), while the community focuses more on the problems linked to demand (utilization and adequate coverage). The next chapter presents research design and methods.

## CHAPTER 3

### RESEARCH DESIGN AND METHODS

#### 3.1 INTRODUCTION

This chapter outlines the study design, research methods and ethical issues related to the study. Issues of validity and reliability of quantitative methods as well as trustworthiness of qualitative approaches are described. The purpose of the study was to develop guidelines to enhance the quality of service delivery; and the objectives of the study were to:

- Describe the quality of health services delivery in Gindabarat district.
- Explore the barriers to quality health service delivery at Primary hospital and health centers in Gindabarat district.
- Describe health care providers' satisfaction with services provided at Gindabarat district
- Identify practice gaps in the delivery of health services at the public health facilities in Gindabarat district.

Methodology refers to the choice of methods used by the researcher to conduct the study depending on the problem and purpose of the study, the researcher's expertise in generating information, and whether or not a need exists to generalise information generated (Brink, van der Walt & van Rensburg 2009:53). The study followed a mixed method approach as indicated in chapter 1. Mixed methods involve combining or integration of qualitative and quantitative research data in a research study. The aim of using a mixed method was to increase the possibility to achieve findings that are more trustworthy and relevant than using the approaches unconnectedly. The findings of the study were used to develop the guideines to enhance the quality of service delivery. In this regard, it was necessary to understand the barriers, gaps and satisfaction of health care providers on quality health service delivery.

According to Creswell and Plano-Clark (2011:61), the major reason for using mixed methods is for triangulation and complementarity. Mixed method is chosen because of its strength of drawing on both qualitative and quantitative research and minimizing the limitations of both approaches, comparing different perspectives drawn from quantitative and qualitative data and combining qualitative and quantitative data for a better understanding (Creswell 2014:264).

A concurrent mixed methods approach was used (Creswell 2014:106). Concurrent approach was less time consuming because both qualitative and quantitative data were collected on the same day of a visit to the field. Data were collected, analysed and integrated using both quantitative and qualitative research approaches in a single study (Teddlie & Tashakkori 2009:7). Generating and collecting data through both methods allowed for the research problem to be explored from different perspectives after which data were integrated (Creswell & Plano Clark 2011:86). The guidelines to enhance quality of the health service delivery were developed based on the findings from the data collected in both approaches.

### **3.2 RESEARCH DESIGN**

Research design is the methodology that is used to collect information to address the research question. It is a plan and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis (Creswell 2014:3).

The research design was the plan that the researcher used in conducting the research. The aim of the research design was to align the pursuit of a research goal with the practical considerations and limitations of the project, enable the researcher to anticipate research decisions in such a manner that the eventual validity of the research findings was maximised, and articulate required data, methods to be used to collect and analyse this data, and how all of these were going to answer research question.

The researcher applied explanatory and descriptive research designs in a quantitative method and exploratory research design in a qualitative method. The quantitative research design was based on making, making predictions, quantitative data collection method included survey method. While qualitative research designs provides an in-depth understanding of the perspectives and experiences of various issues from the participants themselves.

- **Descriptive study design**

The purpose of a descriptive design was to describe health care providers' satisfaction with services provided at Gindabarat District. According to Grove et al (2013:215), a descriptive study is designed to gain more information about the characteristics within a particular field of study. Its purpose is to provide a picture of a situation as it naturally happens. In this study, the researcher obtained in-depth rich information from health professionals who spent most of the time with the patients and experienced the impact of shortage of resources for quality patient care on a daily basis.

- **Exploratory study design**

Exploratory research focused on a phenomenon of interest and pursued the factors that related to the study. In this study, exploratory design was used to explore the barriers to health service delivery at the public health facilities in Gindabarat District. Exploratory design was a means to gain insight into the phenomena under study. The design assisted the researcher to ask probing questions used in the interview guide (De Vos et al 2005:134).

- **Explanatory study design**

The main aim of explanatory research is to identify any causal links between the factors or variables that pertain to the research problem. In this study, a quantitative research approach, with an exploratory and descriptive design, was applied. Explanatory research

was conducted in order to identify practice gaps in the delivery of health services at the health centers and primary hospital in Gindabarat District in Oromia Regional state. The purpose was to explore the barriers to health service delivery at the health centers and hospital in Gindabarat district. It was used to uncover trends in thought and opinions. The researcher conducted individual interviews with health care providers of the district using an interview guide.

## **PHASE 1**

### **3.4 RESEARCH METHODS FOR PHASE 1**

Research methods involve the forms of data collection, analysis and interpretation that the researcher proposed for this study (Creswell 2014:31)

#### **3.4.1 Study setting**

The study was done in Oromia Regional State, West Shewa zone at Gindabarat district. The district has an estimated population of 137365 people. The availability of health services in the district include 1 primary hospital, 6 health centers and 31 health posts. The primary hospital and health centers were selected as the target site population or setting. The health sector mainly demands to bring a better result of health outcomes and impacts through ensuring dramatic change on equity and quality health care, and caring, respectful and compassionate health workforce (HSTP 2015/2016:117).

The hospital is an establishment that provides general medical care round the clock. It is equipped with a basic laboratory, X-ray and basic treatment facilities; and serves an estimated 100,000 people (MOH 2015). Gindabarat hospital is one of the primary hospitals in Oromia regional state. Gindabarat district was purposively selected for the study because it represents those rural districts areas outside cities and generally is regarded as under-developed in terms of infrastructure and specialised services.

In this study 7 health institutions, that is, one primary hospital and six health centers were the settings for the study.

### **3.4.2 Population of the study**

The study population included at this level (health facility level) were all health workers working in Gindabarat District Public Health Office. Participants' populations were all health care providers working in one primary hospital and six health centers at Gindabarat District. In this study, population (census) comprised all health workers who were at work during data collection in the catchment area of the selected public health facilities.

### **3.4.3 Sample and sampling methods**

According to Strydom (2013:492), a sample comprises the elements or a subset of the population considered for actual inclusion in the study. A sample was defined as a group of relatively smaller number of people selected from a population for investigation purpose. The members of the sample are called participants (Mohsin 2016:11).

Sampling involved selecting a group of people with which to conduct the study. A sampling method or plan defines the selection process, for the selected group of people (Grove et al 2014:249). Purposive and convenience sampling strategies were used to select health care professional from all departments. From all facility, twenty nine (29) health care providers were selected. These health care providers were medical doctors, emergency surgical officers, health officers, nurses, pharmacy, laboratory, midwifery, environmental sanitation, x-ray and anaesthesia workers who were working at different points of service delivery in their respective health facilities.

Purposive sampling was a method where data was collected from participants chosen because they illustrated some features that were of interest for this particular study (De Vos et al 2012:328). Convenience sampling was used to include participants who were available at the time of data collection.

- **Inclusion criteria**

Grove et al (2012:352) explain the inclusion criteria as the characteristics that a subject or element must possess to be part of the target population. The researcher believed different professionals who had adequate work experience, different gender and different managerial levels had different views and perspectives on quality health service delivery. In determining potential subjects the following inclusion criteria were applied:

- Health care workers who are 22 years old and above due to their experience,
- Both males and females to accommodate all gender,
- Managers of the hospital and primary health care directors of health centers due to their involvement in the services,
- Health professionals of different profession like Medical Doctors, Nurses, midwives, pharmacy technicians, and laboratory and x-ray technicians were included to ensure diverse information.

- **Exclusion criteria**

The exclusion criteria were those characteristics that might cause a person to be excluded from the target population (Grove et al 2013:352). In this study, the exclusion criteria were those who were not willing to participate in the study.

### **3.4.4 Ethical issues related to sampling**

The researcher had an obligation to respect the rights, needs, values, and desires of the participants. The following safeguards were employed to protect the participants' rights:

- the research objectives were articulated verbally and in writing so that they are clearly understood by the informant (including a description of how data would be used),
- written permission to proceed with the study as articulated was received from the informants,
- the participants were informed of all data collection devices and activities,

- verbatim transcriptions and written interpretations and reports were made available to the participants,
- the participants' rights, interests and wishes were considered first when choices were made regarding reporting the data.

### **3.5 DATA COLLECTION**

Grove et al (2012:45) define data collection as a precise, systematic gathering of information relevant to the research purpose or the specific objectives, questions or hypotheses of a study. Both quantitative and qualitative data collection instruments were designed and developed (Annexure F & G). To ensure quality and validity of these tools, a pre-test was conducted in health facilities outside of the study sites at Gedo primary hospital and Babich health center that are found in West Shewa zone. Collection of both quantitative and qualitative data neutralised the weakness of each form of data collection method. The researcher merged quantitative and qualitative data in order to provide a comprehensive analysis of the research problem. Both forms of data were collected at the same time.

In this study, the researcher compiled a structured questionnaire as a data collection instrument. A questionnaire is a self-report form designed to elicit information through written, verbal, or electronic responses of the subject. The information obtained from questionnaire is similar to that obtained by an interview, but the questions tend to have less depth. The participant is not permitted to elaborate on responses or ask for clarification of questions, and the data collector cannot use probing strategies. According to Saunders et al (2016:436) questionnaire is where the person answering the question actually records their own answers, where it is self-completed. The health care providers used a questionnaire for hospital and Health Centers quality health service delivery. The questionnaires were designed in line with the objectives of the study and were self-administered by the participants. The questionnaire was used to elicit information from the research participants in order to assess the gaps in quality health services delivery in the health institutions.

For qualitative data, semi structured individual interviews were conducted with the health care providers (Annexure F). The interviews were audio recorded, verbatim transcription was done afterwards. The information from the questionnaires, the individual interviews were analysed separately, and the results were compared.

The advantages of this data collection method were that large amounts of data were gathered in a relatively short period. Having ensured the validity and the reliability of the instrument, the researcher was confident of the quality of data produced. The anonymity offered by the data collection instrument, was presumed to have improved the honesty with which the study respondents answered the questions.

The disadvantages of the data collection method were that not all questions were answered. Standardised questionnaire items often represent the least common denominator in assessing people's attitudes, orientations, circumstances, and experiences.

The researcher ensured that they were supplied with detailed instructions for completing the questionnaires, and were provided with the relevant information they needed in order to be able to produce the requested data. This included a comprehensible description of the research, its aims and purpose, what would happen to the data, how data would be used, discussion on issues of confidentiality, as well as the development of standard operating procedures of recommendations that would be given to different levels Health Department with regard to the study findings.

### **3.5.1 Development and testing of the data collection instrument**

In this study, the questionnaire contained items that measured the aspects under study appropriately and adequately. The questions were developed in line with the study objectives, the theoretical framework and the literature review. The researcher pre-tested the data-collection instruments in hospital and in the health center not included in the study. The rationale for testing the instrument was to determine the validity and reliability

of the instrument, how long it took the respondents to complete the questionnaire, and whether they understood all the questions.

In this study, the data collection instrument underwent pre-testing before data were collected in order to ensure its validity. The reliability of the method of measurement used was examined. The pre-test was conducted in health facilities outside of the study sites at Gedo primary hospital and Babich health center that are found in West Shewa zone.

### **3.6 DATA COLLECTION PROCESS**

Data were collected from the respondents by means of a written questionnaire. Data collection took place at the respondents' places of work. They were all recruited verbally, during which the researcher explained the purpose of the study, how the data would be collected, their right to privacy, anonymity and confidentiality, and that participation was voluntary to the respondents. The respondents then signed the informed consent form. The respondents were given time to complete the questionnaires. The questionnaires were collected on the date that was set with the contact person.

Data were collected for a period of 3 months from February 2017. The health workers were given invitations to participate in the study (Annexure G) and consent forms were signed. The researcher explained the purpose of data collection to the health workers before the signing of informed consent for voluntary participation. The researcher distributed and collected the questionnaire self.

- **Qualitative data collection**

The researcher conducted face-to-face interviews with participants. These interviews involved unstructured and generally open-ended questions that were intended to elicit views and opinions from the participants. The interviews were audio taped and transcribed verbatim. The management of data was done using ATLAS.TI 8 software.

Interviews involved verbal communication during which the subject provides information to the researcher. Approaches to conduct interviews was unstructured interviews in which participants control content to interviews in which participants respond to a questionnaire that the researcher has designed. The researcher used the interview guide to collect data. According to Polit and Beck (2012:136), unstructured interviews are conversational and interactive. The researcher interviewed people who are most knowledgeable about the study. The researcher allowed the participants to tell their stories (Polit & Beck 2012:422).

The researcher used an in-depth face to face interview. An interview is one method of data collection by which individual of participants are asked questions verbally (Babbie 2013:250). Section A contained the biographic information, Open-ended questions related to the quality health service delivery probes were used the participants. Section B had open-ended questions related to quality health service delivery. (Annexure F). Permission was sought from the participants before the interview commenced. Permission was also requested for the use of the audio tape recorder. All participants were volunteer to be audio recorded.

**Transcription of Interviews:** At the end of the interviews, the transcription of the interviews was done verbatim and captured on computer using ATLAS.TI.8 Researcher transcribed the data from the audio tapes. After the transcriptions, each interview was sent back to the participants to confirm whether what they said during the interview is what was indeed recorded. This process was meant to ensure conformability and credibility of the findings.

**Challenges during the interview:** The qualitative research is labour-intensive, costly, time consuming, and demands the highest level of expertise to undertake the research and interpret the findings.

**Positive aspects of the interview:** Interview encouraged the participant to tell “the story” in their own words. This is most beneficial for this research. It enabled the researcher to uncover factors that can affect health care services quality.

### **3.6.1 Ethical considerations related to data collection**

The appropriate ethics committee reviewed the proposal. Permission to conduct the study was requested and obtained from the regional, zonal and district health departments. The researcher obtained ethical clearance from the Research and Ethics Committee of the Department of Health Studies at the University of South Africa (Unisa). In addition, permission was obtained from zonal and district health department including informed consent from the study participants. The research participants were informed of the intention to conduct the study and its benefit to contribute to the improvement of the quality of care delivery.

Informed consent was obtained from each participant prior to interviews or completing the questionnaire. They were assured of confidentiality and anonymity. The participants were requested to sign a consent form following a thorough explanation or reading to understating of the leaflet. The consent forms were kept separate from the questionnaire and the interview transcripts to maintain confidentiality of shared information. The researcher further ensured that the research was in line with all ethical guidelines, by obtaining informed consent from the participants prior to conducting the study but after providing them with detailed information about the aim and objective of the study. This was done to ensure that participants were aware and willing to be involved in the study, without coercion.

### **3.7 DATA ANALYSIS**

Data analysis was an ongoing process during research. It involved analysing participant information, and researchers typically employ general analysis steps as well as those steps found within a specific design. More general steps included organising and preparing the data; an initial reading through the information; coding the data; developing from the codes a description and thematic analysis; using computer programs; representing the findings in tables, graphs, and figures; and interpreting the findings. These interpretations involved stating lessons learned, comparing the findings with past literature and theory, raising questions, and/or advancing an agenda for reform.

Quantitative data were entered into a computer and were analyzed using SPSS program version 24. Frequencies, group differences, proportional tests (Z-test) and Chi-square test were done.

The chi-square test determined whether the views on specific matters were different. The Chi-square test is a nonparametric test of statistical significance used to assess whether there is a relationship between two groups of variables. The Chi-square test was used to test frequencies about group differences in quantities when contingency tables have been created (Polit & Beck 2012:107). For reliability, which means that the research instrument will produce the same data after time on each occasion that it is used, the researcher would ensure that any variations in the results obtained through using the instrument were due to variations in the phenomenon being measured. A pre-test of both the questionnaire and the interview guide was conducted to establish if the questions were clear and valid. The pre-test assisted to achieve validity of the questions. Audio recorded qualitative data was transcribed verbatim and analyzed by thematic coding.

According to Grove et al (2013:46), data analysis is the process by which the researcher reduces, organizes and gives meaning to the research data. In this study, a formal data-analysis plan was designed before the study was conducted. The two databases were analysed separately and then brought together.

- **Quantitative methods**

The statistician assisted the researcher to analyse the data using the Statistical Package for Social Sciences (SPSS Version 24). A computer was used to perform the statistical analyses. The data were compared in the form of frequencies and cross tabulations and subsequently expressed in the form of percentages (Grove et al 2013:46). A data entry template with values was designed to capture questionnaire data. Data were checked for completeness, coded and checked for accuracy. Missing data were addressed by calculating the mean score of the total number of responses. Descriptive statistics including frequencies were computed for all items and are presented in tables and graphs.

- **Qualitative methods**

This method included interview data, themes, patterns interpretation and text analysis. During data analysis the data were organized categorically and chronologically, reviewed repeatedly, and continually coded. Audio recorded interviews were transcribed verbatim. Field notes were regularly reviewed, and used to support the information in the transcripts.

### **3.8 INTERNAL AND EXTERNAL VALIDITY OF THE STUDY**

- **Reliability**

Reliability refers to whether scores to items on an instrument are internally consistent, that is, if the item responses are consistent across constructs. Table over time (test-retest correlations), and whether there was consistency in test administration and scoring (Creswell 2014:295) were used. The researcher strived to ensure reliability and validity of quantitative data by ascertain its dependability, consistency, truthfulness or correctness thereof. Reliability is a matter of whether a particular technique, applied repeatedly to the same object, yields the same result each time.

- **Validity**

Whilst validity refers to the extent to which an empirical measure adequately reflects the real meaning of the concepts under consideration (Babbie 2013:191). Validity in quantitative research refers to whether one can draw meaningful and useful inferences from scores on particular instruments (Creswell 2014:297). Botma et al (2010: 174) define a study's validity as "the approximate truth of an inference". As validity is said to be always a matter of degree, not an absolute, it therefore indicates whether the conclusions of the study are justified based on the design and interpretation. Study validity provides a major basis for making decisions about which findings are sufficiently valid to add to the evidence base for research (Grove et al 2013:197). In this study, the researcher sought to understand if the theoretical proposition indicated an accurate reflection of the reality

that the study was measuring, as well as whether the study was adequately designed to be able to provide a valid test of the proposition (Grove et al 2013:197).

Grove et al (2013:199) define internal validity as the extent to which the effects detected in a study are a true reflection of reality rather than the result of extraneous variables. In this study, the respondents were exposed to the questionnaire once and after completing it, they were not later allowed to modify their responses as this would have altered the outcomes.

Internal validity is the ability of research design to adequately test the hypothesis is known as its internal validity (Kenneth et al 2011:114). To ensure internal validity, all participants were given the same questionnaire, which contained the same questions.

External validity is the degree that the study results can be extended (generalized) beyond the limited research setting and sample in which they were obtained (Kenneth et al 2011:114).

Content validity was assured in this study through the following means:

- An extensive review of the literature was conducted to enrich the tool.
- The draft tool(s) were discussed with my supervisor.
- The questionnaire and interview guide were pre-tested in one selected hospital and one health center that did not take part in the main study. However, these two settings had similar characteristics with the settings for the study.

### **3.9 TRUSTWORTHINESS**

Trustworthiness of the study was achieved through adhering to the requirements of credibility, dependability, confirmability and transferability (Polit& Beck 2012: 584).

**Credibility** refers to confidence in the truth of the data and interpretation. It means that the researcher attempts to demonstrate that a true picture of phenomenon under scrutiny

is being presented (Kumar 2011). In this study, credibility was ensured through multiple reviews of the field notes and audiotaped transcripts, the neutrality of the researcher during the interviews by not judging the participants (bracketing), member checking, careful handling of emotional expressions, and the examination of findings by the supervisor.

Activities that increased the credibility of findings are triangulation, peer review or debriefing, member checking, iterative questioning, background qualifications and experience of the investigator, as well as examination of previous research findings. This assertion was also mentioned in Creswell (2014:252). In this study, approaches that were used to assure credibility were:

- Methods triangulation - semi-structured interviews and field notes were used to elicit and record data. In addition, the study sought to compare views from different perspectives such as doctors, midwives and nurses, and clients. These enhanced data source triangulation.
- Member checking - interview transcripts were discussed with all interviewees to check accuracy of facts and observations.

Credibility requires that findings are true interpretations of the lived experiences (Fain 2015: 249). In this study, this was achieved through various processes that involved prolonged engagement with the participants, ensuring the availability of reliable materials to document data, use of unstructured interviews, member checks, negative case analysis, and peer debriefing.

Prolonged engagement with the prospective participants involved spending two hours a day with them, for 1 week prior to commencement of the data collection. This depended on the availability of time that the participants were able to spend with the researcher. The period was used mainly for self-introduction of the researcher to the prospective participants, planning with them how the investigation should proceed, and responding to their questions about the study and the identity of the researcher. During this period, researcher-participant trust relationships were established, the prospective participants

were ensured reasonable time to unease tensions while digesting the request of participating before the date of the formal study.

More short discussions were engaged in with the participants immediately prior to and after the interview to ensure the mutual understanding regarding the interview process and to summarise and thank the participant respectively. After data collection sessions at each targeted hospital, telephonic calls or visits became later means of contacting participants for confirming certain areas of data, which further stabilised the researcher-participant relationships.

Ensuring the availability of reliable materials to document data was ensured through the pre-testing of the data collection process at two settings. Member checks were considered for verifying the participants' input and to correct any distorted interpretation by the researcher, which would render the results inaccurate.

Peer debriefing required the researcher to employ the advice of a peer or colleague for scholarly guidance to ensure credibility. This involved one professional within the same status as the researcher in terms of professional ranking and academic qualifications. In order to ease the task, the researcher targeted a peer member involved with a qualitative research study for own advancement. The first aim was to obtain a feedback of a critical review from a neutral opinion regarding the researcher's method selected to collect data and its relevance for use to achieve the purpose of the study. The main concern was to know whether the method was seen as capable of accommodating the unpredictable situations in the health service while the study continued. This matter was addressed verbally. The second aim was to have the transcripts checked if they did not contain obvious errors, and that codes matched well with the sections of data for which they were assigned. From this process, there were no changes made on the study.

**Transferability** is defined as the extent to which the results of a qualitative study can be generalized or transferred to other settings (Kumar 2011). In the study, the researcher enhanced the reader's transferability judgement through providing a detailed description

of the health services and their peculiarities in the literature review. The thick description of methodology indicated the context within which the study took place and how participants were recruited using purposive sampling. According to Babbie and Mouton (2011:277) purposive sampling in qualitative research is used to maximize the range of specific information that can be obtained from and about the context within which the study takes place.

**Neutrality** in the interviews was achieved by encouraging participants to talk freely about all the topics, to tell stories in their own words, while avoiding leading questions, using active listening, remaining judgemental always, and enforcing an equitable interviewing relationship. The researcher did not allow personal values to influence the conduct of the research and the research findings. Member checks were done in face-to face discussions with a subgroup of participants in order to verify and validate the findings.

**Dependability** refers to the stability of data over time and conditions (Polit& Beck 2012: 585). According to Streubert and Carpenter (2011:49), dependability is a criterion that is met once credibility has been demonstrated. Polit and Beck (2012: 585) agrees with this statement by arguing that credibility cannot be attained in the absence of dependability.

**Confirmability** involves the keeping of a record of findings that leaves the readers with no doubt that they are linked to the sources of information. According to Polit and Beck (2012:585), the participants and not the researcher's inventions concern it with establishing that the data and its interpretation represent the information that was provided. Hence, Fain (2015:248) adds that the line of proceedings, which led to the findings, must be clear to follow. In this study, confirmability was established through identifying the relevant research approach and design, bracketing, and maintaining an audit trail.

Identifying the relevant research approach involved the researcher's understanding of the appropriateness of the approach in relation to the study. Bracketing was used as a means of establishing confirmability of the findings of the study. This involved the identification

and suspension of all the foreknowledge about the health services based on the researcher's previous work experience and literature gathered prior to the study so that they would not influence the outcome. All the information was documented in the way the participants expressed themselves, that is, there were no modification of the words or phrases used by the participants. In accordance with the recommendations in Fain (2015:248), an audit was conducted. This involved obtaining a reader to study the research process followed by the researcher from data collection towards the findings.

## **PHASE 2**

### **3.10 RESEARCH METHODS FOR PHASE 2**

Phase 2 was the development of the guidelines. The steps to compile the evidence for the development of the guidelines included integrating and synthesising the findings from Phase 1, both the quantitative and the qualitative results. Data collected were the evidence from Phase 1, literature review and summary of the key findings, problematizing the key findings and formulation of the guidelines for the key findings. The population or sample in this phase 2 included a group of experts who were recruited to validate the guidelines formulated by the researcher based on evidence from Phase 1. Data were analysed from the recommendations by experts using inductive and deductive reasoning, as well as integrating and synthesising information. Development of guidelines, the approach and methods for Phase 2 are explained in details in chapter 5.

### **3.11 SUMMARY**

This chapter described the research design, research method, population, sampling, ethical issues related to sampling, inclusion and exclusion criteria. Additionally, the sample, data collection, development and testing of the data collection instrument, characteristics of the data collection process, ethical considerations related to data collection and data analysis were discussed. Finally, the internal and external validity of the study were presented.

## **CHAPTER 4**

### **ANALYSIS, PRESENTATION AND DESCRIPTION OF FINDINGS**

#### **4.1 INTRODUCTION**

In this chapter, the data analysis and interpretation are presented. This chapter is organised as follows: response rate, data analyses and the results for Phase 1, quantitative approach as well as qualitative approach. This study was conducted to assess the quality of health care provided to patients in Gindabarat District primary hospital and health centres setups and explored the need for quality improvement in the area.

#### **4.2 PHASE 1 QUANTITATIVE APPROACH**

##### **4.2.1 Quantitative data management and analysis**

The study was conducted in Gindabarat primary hospital and the six health centres. SPSS version 24 was used for data entry and analysis. The total number of questionnaire distributed to the health professionals was 127 and the number of questionnaires returned was 127. That made the response rate 100 % which is considered to be very good. The software that was used to analyse the data for this study was the SPSS program version 24. The researcher collaborated with the statistician to analyse data.

Data analysis was done using both descriptive, analytical and inferential statistics. Health care providers working at the health facilities after verbal and written instructions were given to the respondents completed the questionnaires.

##### **4.2.2 Quantitative results presentation**

This section presents the description of the participants involved in the study. This information includes the gender, age, profession, years of experience and health facilities.

**Table 4. 1: Demographic characteristics of the research participants (N=127)**

<b>Variables</b>	<b>Frequency</b>	<b>Percentage</b>
<b>Gender</b>		
Male	78	61.4%
Female	49	38.6 %
<b>Age</b>		
22-30 years	113	89.0 %
31-40 years	10	7.9 %
41+ years	4	3.1 %
<b>Profession/ Discipline</b>		
Laboratory	9	7.1 %
Nurse	66	52.0 %
Pharmacy	9	7.1 %
Midwifery	15	11.8 %
Medical Doctor	12	9.4 %
Health Officer	3	2.4 %
Emergency surgical officer	2	1.6 %
Anesthesia	1	0.8 %
Environmental science	1	0.8 %
X-ray technician	1	0.8 %
<b>Year of experience</b>		
0-5 Years	108	85.0 %
6-10 Years	13	10.2 %
11+ Years	6	4.7 %
<b>Facility</b>		
Gindabarat Hospital	80	63.0 %
Abuye Roge Health center	6	4.7 %
Kachisi health center	9	7.1 %
Gura jarjara health center	6	4.7 %
Kare dobi health center	8	6.3 %
Chulute health center	9	7.1 %
Muka dima health center	9	7.1 %
<b>Facility level</b>		
Hospital	80	63.0 %
Health center	47	37.0 %

As shown in Table 4.1 majority of health workers that participated in the study were male (n =78; 61.4%). Most of the participants (n=113; 89%) were aged between 22-30 years. There were more nurses (n=66; 52%), who participated in the study than the rest of the

health professions. This is consistent with what is already known that the nursing professionals are biggest proportion of the human resources in the health institutions. There was (n=1; 0.8%) environmental sanitation worker only in the primary hospital. This is because there is no structure within the health centers for this profession to be allocated even though health sectors are expected to perform prevention, disease control and health promotion activities.

Regarding the distribution of health workers, most participants (n=80; 63%) were from the primary hospital, followed by Kachisi Health center (n=9; 7.1%), Chulute health center (n=9; 7.1%), Mukadima health center (n=9; 7.1%), Kare Dobi health center (n=8; 6.3%), Abuye Roge health center (n=6; 4.7%) and Gura Jarjara health center (n=6; 4.7%). This indicates that there were very few in number health workers allocated for health centers. It is therefore, assumed that not all health centers found in this district fulfilled the minimum standard required in health workers staff allocation. According to ESA3611 (2012), the health center shall have minimum of 18 health professionals as a requirement.

**Table 4.2: Distribution of workers in each facility according to their profession (N=127)**

Profession/ Discipline	Facility							
	Gindabarat Hospital	Abuye Roge Health center	Kachis health center	Gura jarjara health center	Kare dobi health center	Chulute health center	Muka dima health center	Total
Laboratory	7	0	0	0	1	1	0	9
Nurse	39	4	4	5	4	4	6	66
Pharmacy	6	0	1	0	1	1	0	9
Midwifery	8	0	2	0	1	2	2	15
Medical Doctor	12	0	0	0	0	0	0	12
Health Officer	1	2	2	1	1	1	1	9
Emergency surgical officer	3	0	0	0	0	0	0	3
Anesthesia	2	0	0	0	0	0	0	2
Environmental science	1	0	0	0	0	0	0	1
X-ray technician	1	0	0	0	0	0	0	1
<b>Total</b>	<b>80</b>	<b>6</b>	<b>9</b>	<b>6</b>	<b>8</b>	<b>9</b>	<b>9</b>	<b>127</b>

The results indicate that of the N=127 health care providers practicing in Gindabarat District nurses are the largest in number (n=66) contributing 52 % of the entire health workforce.

**Table 4.3: Distribution of workers according to their agreement level on quality of services given in their facility (N=127).**

<b>Statement</b>	<b>Agree (%)</b>	<b>Disagree (%)</b>
The facility provides all the required services	7(5.5%)	120(94.5%)
Quality of outpatient services is acceptable	20(15.7%)	107(84.3%)
The facility has policies and procedures of access	66(52.0%)	61(48.0%)
The facility's premises, structure and layout is acceptable	23(18.1%)	104(81.9%)
The facility is manned by fully licensed professional	112(88.2%)	13(11.0%)
The facility has adequate materials and equipment	10(7.9%)	117(92.1%)
The facility include all requirements for inpatient services	15(11.8%)	112(88.2%)
The facility has separate maternal and child health	117(92.1%)	10(7.9%)
The facility has emergency services	27(21.3%)	100(78.7%)
The facility has staff	14(11.0%)	113(89.0%)
The facility provides in-service training sessions	8(6.3%)	119(93.7%)
The facility has clear standards or protocols (SOPs)	13(10.2%)	114(89.8%)
The facility has food and dietary delivery services	21(16.5%)	106(83.5%)
The facility has maintenance service and housekeeping service	8(6.3%)	119(93.7%)
The facility has pharmaceutical services	25(19.7%)	102(80.3%)
The facility has laboratory services	50(39.4%)	77(60.6%)
The facility has patient flow programme	28(22.0%)	99(78.0%)
The facility has rehabilitation services	21(16.5%)	106(83.5%)
The facility has management protocol	14(11.0%)	113(89.0%)
The facility has organization management and quality indicators	24(18.9%)	103(81.1%)
The facility has infection control and prevention services	35(27.6%)	92(72.4%)
The facility has sterilization room and equipment	33(26.0%)	94(74.0%)

The facility has sanitation and waste management services	89(70.1%)	38(29.9%)
The facility has water source	103(81.1%)	24(18.9%)
The facility has overall quality services	19(15.0%)	108(85.0%)

**Table 4.4: Classification of participants' agreement level according to their characteristics**

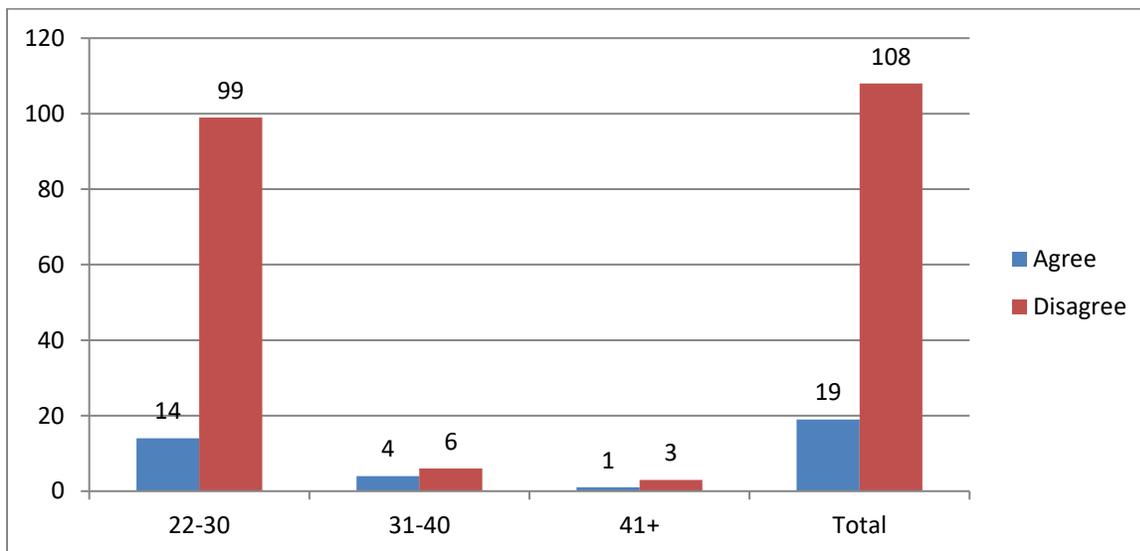
Characteristics	Do you agree that your facility is providing overall quality services?		Total
	Agree	Disagree	
<b>Gender</b>			
Male	15(19.2%)	63(80.8%)	78(100%)
Female	4(8.2%)	45(91.8%)	49(100%)
<b>Total</b>	<b>19</b>	<b>108</b>	<b>127</b>
<b>Age</b>			
22-30 yeas	14(12.4%)	99(87.6%)	113(100%)
31-40 years	4(40%)	6(60%)	10(100%)
41+ years	1(25%)	3(75%)	4(100%)
<b>Total</b>	<b>19</b>	<b>108</b>	<b>127</b>
<b>Facility level</b>			
Hospital	16(20%)	64(80%)	80(100%)
Health center	3(6.4%)	44(93.6%)	47(100%)
<b>Total</b>	<b>19</b>	<b>108</b>	<b>127</b>
<b>Year of experience</b>			
0-5 years	14(13.0%)	94(87.0%)	108(100%)
6-10 years	3(23.1%)	10(76.9%)	13(100%)
11+ years	2(33.3%)	4(66.7%)	6(100%)
<b>Total</b>	<b>19</b>	<b>108</b>	<b>127</b>

As can be seen from Table 4.4, 63 (80.8%) out of 78 male participants disagreed on overall quality services and 45 (91.8%) female disagreed. Chi-Square test of association showed that there exist statistically significant association between gender and agreement level on overall quality services of facilities at 90% confidence level (Table 5, Chi-square value=2.897, df=1, p-value=0.089). This result shows that a larger proportion of female professionals was dissatisfied with overall quality services of their facility than their male professionals. Out of 113 participants in the younger age category (22-30 years) n=99 (87.6%) were dissatisfied with overall quality services (Table 4.4). This shows that younger professionals are more sensitive to quality services compared to the older professionals. There is statistically significant association between age and agreement level on overall quality services of facilities at 90% confidence level (Table 5, Chi-square value=5.832, df=2, p-value=0.054). The older professional may compromise quality services with service coverage.

A greater proportion of health center professionals (44, 93.6%) compared to hospital professionals (64, 80%) was dissatisfied with overall quality services (Table 4). The level of facility and agreement level on overall quality services was also statistically significant at 95% confidence level (Table 5, Chi-square value=4.315, df=1, p-value=0.038). This might be because of the shortage of basic facilities currently existing in health centers than hospital. Additionally, the shortage of professional workers is serious in health centers than in the hospital. As can be seen from Table 2, the maximum number of professionals in the health centers is 9 while 80 in the hospital.

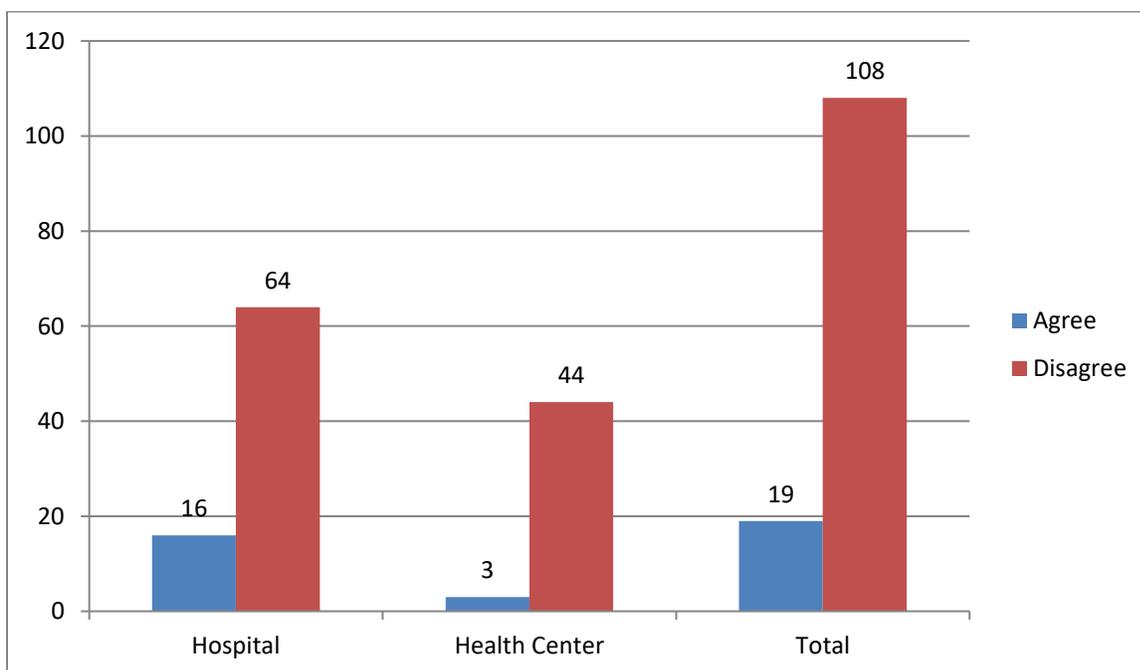
Year of experience and level of agreement on overall quality services had no statistical significant association (Table 5, Chi-square value=2.604, df=2, p-value=0.272).

Health care provider's agreement level assessed on their age, facility and years of experience are depicted in the figure 4.1 that follows.



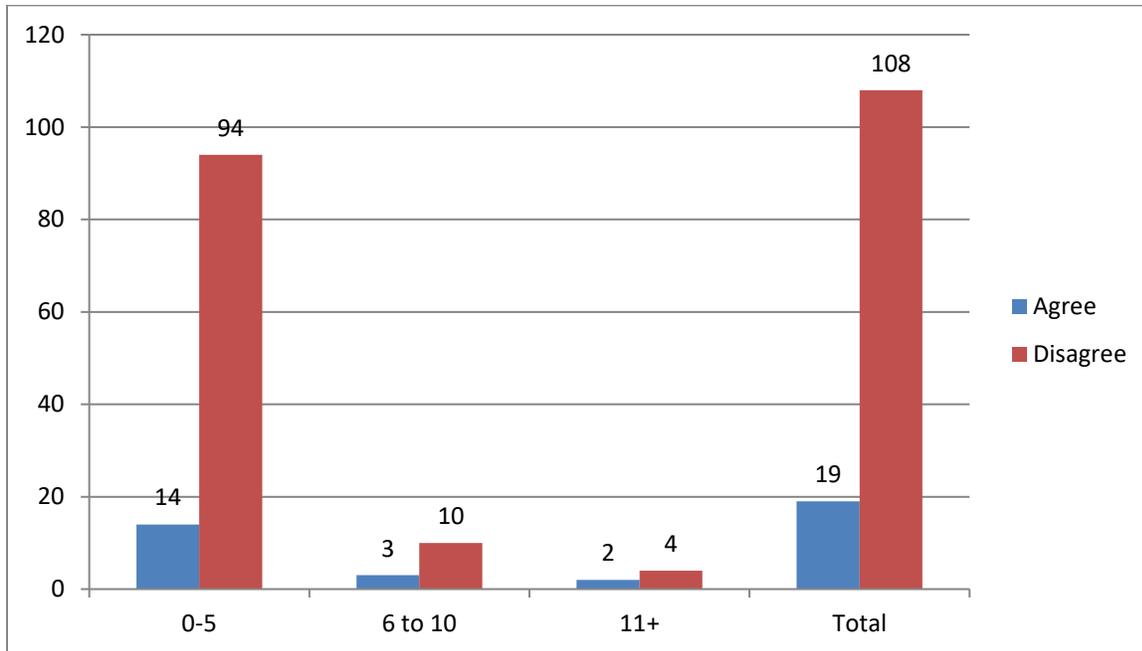
**Figure 4.1: Participants' agreement level by age**

Most of the participants (n=113; 89%) were aged between 22-30 years. Out of 113 participants in the younger age category (22-30 years) 99 (87.6%) were dissatisfied with overall quality services (Table4.4). This shows that younger professionals are more sensitive to quality services compared to the older professionals. There is statistically significant association between age and agreement level on overall quality services of facilities at 90% confidence level (Table 5, Chi-square value=5.832, df=2, p-value=0.054).



**Figure 4.2: Participants' agreement level by facility**

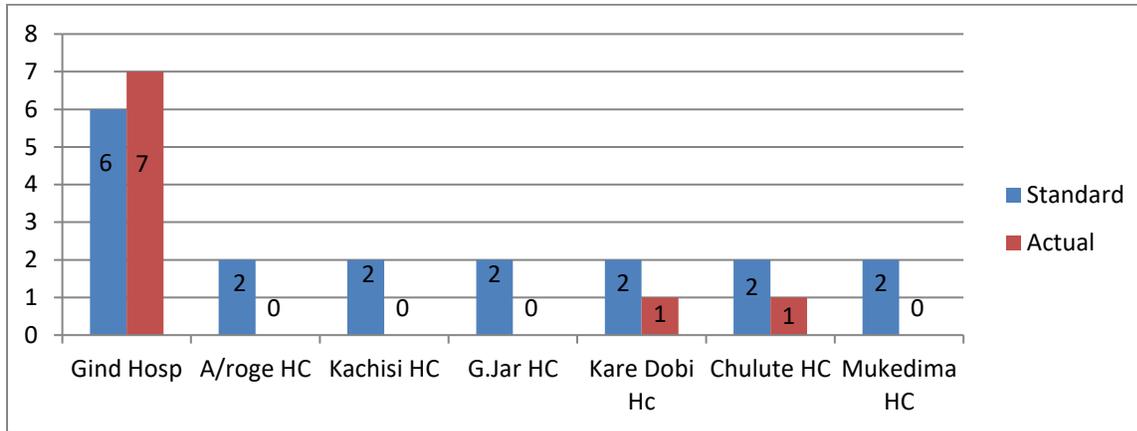
A greater proportion of health center professionals (i.e. 44 out of 47, 93.6%) compared to hospital professionals (64 out of 80, 80%) were dissatisfied with overall quality services (Table 4).



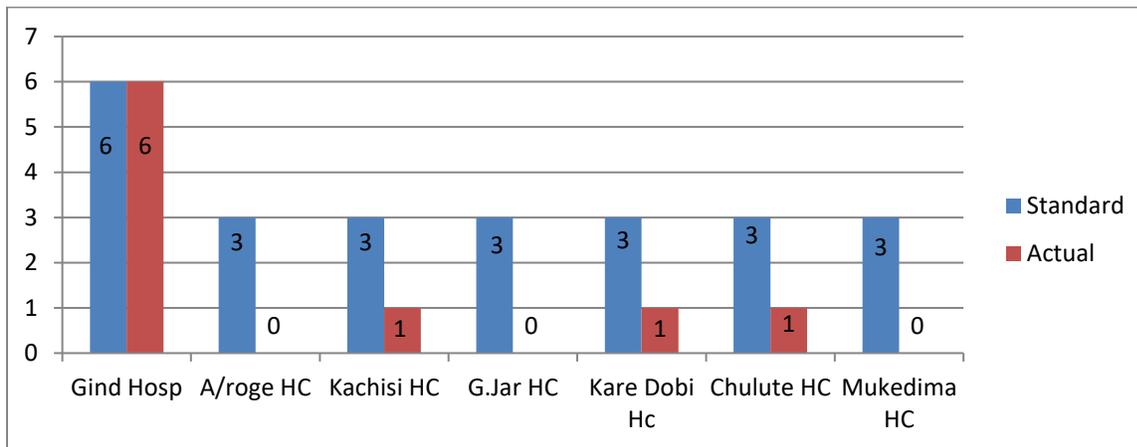
**Figure 4.3: Participants' agreement level by years of experience**

Overall, the majority of the participants (n=108; 85%) are those with 0-5 years work experience. This indicates that most of the health workers are with less experience because at rural district there is high turnover with less staff retention. The participants described various factors that influenced health workers to leave, such as poor working conditions, lack of staff development, health workers needs to improve their professional knowledge and skill for career progression. Year of experience and level of agreement on overall quality services have no statistically significant association Table 5 shows Chi-square value=2.604,df=2,p-value=0.272).

### Laboratory



### Pharmacy



### Midwifery

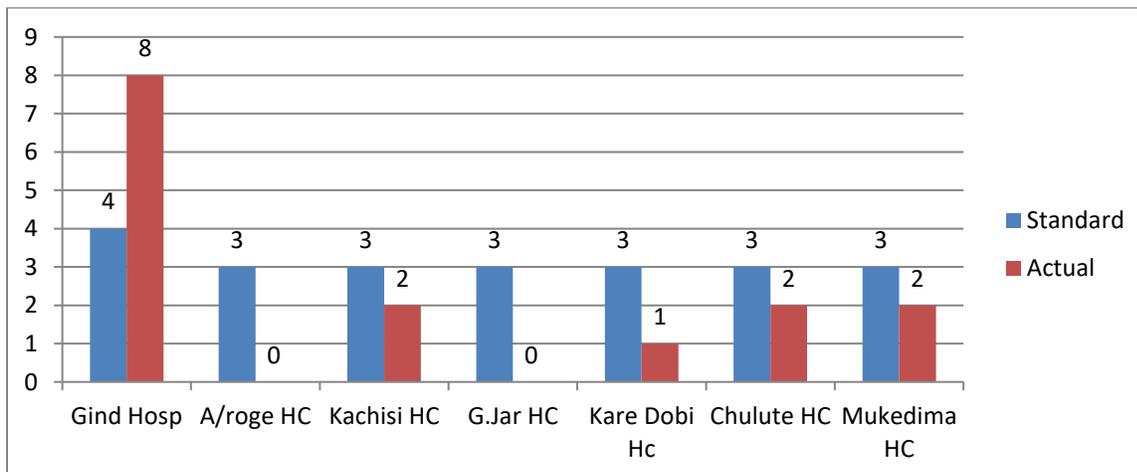


Figure 4.4: Distributions of health workers in each facility

These shows that all health centers found in this District did not fulfill the minimum standard required in health workers staff allocation.

**Table 4.5 Chi-Square test of association between workers related characteristics and agreement level on overall quality of their facility’s services.**

<b>Characteristics</b>	Agreement Level on overall quality of services (agree or disagree)		
	Chi-Square value	Degrees of freedom (df)	P-value
<b>Gender</b> Male Female	2.897	1	0.089
<b>Age</b> 22-30 years 31-40 years 41+ years	5.832	2	0.054
<b>Facility level</b> Hospital Health center	4.315	1	0.038
<b>Year of experience</b> 0-5 years 6-10 years 11+ years	2.604	2	0.272

#### 4.2.3 Interpretatiopn and discussion of quantitataive data

The quantitative data discussed in line with the structure standards. Job satisfaction in health care workers has a great impact on quality, effectiveness and work efficiency and at the same time on health care costs. Besides its importance for patients and health care system as a whole, professional satisfaction in health care workers is directly connected with absence from work, human relations and organization of work (Nikic et al 2008:9).

As shown in Table 4.1 majority of health workers that participated in the study were male (61.4%) while 38.65% were female. The fact that female health care workers in Gindabarat District constitute 38.6 % of the workforce may attribute to the difficult environmental conditions and particularly in the hard to-reach areas within the District. This gender imbalance has serious cultural implications for service delivery especially large barrier to

skilled delivery in health facilities is the unwillingness of women to be examined and have their child delivered by a male service provider. With 61.4 % of health workers being male, has a barrier to health service delivery. Studies done in Kenya and Turkana had similar findings, where 30 % of the workforce were female (Ojakaa et al 2014:12).

Quality is a strategic differentiator tool for sustaining, competitive advantage. Improving quality through improving structures and process leads to a reduction of waste, rework, and delays, lower costs, higher market share, and a positive company image (Mosadeghrad 2014:77). Health systems can only function with health workers; improving health service coverage and realising the right to the enjoyment of the highest attainable standard of health is dependent on their availability, accessibility, acceptability and quality.

Mere availability of health workers is not sufficient. Only when the health workers are equitably distributed and accessible by the population, when they possess the required competency, and are motivated and empowered to deliver quality care that is appropriate to the population, and when they are adequately supported by the health system, can this theoretical coverage translate into effective service coverage (WHO 2016:10).

Structure related gaps identified at Gindabarat public health facilities were as follows:

- **Staffing structure**

Table 4.2 showed the staffing within all health facilities were not satisfactory in the health centers. According to ESA3611 (2012) the minimum number of nursing staff in one health center is supposed to be 5 whereas 4 of the health centers nursing staff was below 5, and all health centers.

In this district a total workforce of 127 (physicians, health officers, nurses, midwives, laboratory and, pharmacist) were deployed within the public health sector for a population of 134365, which means there were only 0.9 health workers per 1000 population in Gindabarat District in 2016. This can negatively affect the performance of quality health service delivery, as the sufficient health workforce is a significant component of a strong

health system. This can be explained by organisational constraints such as the low staffing levels, heavy workload and poor workflow structures. Ethiopia is considered to have one of the lowest ratios of doctors to population in the world. Recent analysis by the World Bank has also indicated problems in human resources for health in Ethiopia with regards to distribution and performance that have negative implications on access to health services (Hailemariam 2013:1). Gindabarat District has 134,365 populations it has 1: 11210 doctor to population ratio, which is below the WHO standard, which is 1:10,000 population. A review of medical doctors profile in Ethiopia with regard to production, attrition and retention over the hundred years of the country's medical history has shown high annual attrition rate, fast population growth, governmental and non-governmental health institution expansion, how production and increased graduate enrollment over the recent years leading to extremely low physician to population ratio.

Even though the government as well as the private sector has worked much in terms of health infrastructure expansion and health professional training, mechanisms for retention of medical doctors does not appear to have been properly sorted out. As a result, even despite salary equivalent top-up payments in some regions, more than 80% of public hospitals outside the capital were understaffed with physicians implying that the push factors are not correlated with remuneration alone (Hailemariam 2013:1).

This finding is less on the issue of overall quality health service as 15 % of the participants agreed while 85% disagreed. According to the results, Gindabarat primary hospital has 80 health workers, which are similar to Ethiopian standard agency (2012:28. From the results it is clear that the quality of patient care is compromised by the shortage of staff.

Health centres in rural has areas had new staff with less experience assigned from year to year. Prevention, promotion and environmental sanitations practices are important programs at health centres; however, there is no human resource for such. The minimum standard of midwifery in health center is supposed to be 3 but in this health centre only one midwife is assigned. Health Professionals are below minimum standard, which is only 6 health workers assigned to serve a population about 25,000 Regarding professionals: there were no trained health workers to manage emergency cases.

At Gindabarat hospital there are no anaesthetist, social worker, physiotherapist, radiologist and experienced scrub nurses. There is a problem of timely renewal of professional license. It was also stated in HSTP (2015:118) that in the Ethiopian health system, there are many health professionals who have dedicated their entire career to public service and are respected by the public they serve. .

Beside accommodation, lack of access to good schools for themselves and for their children, poor accesses to necessities affect their quality health service delivery. Health workers need transport facility to conduct supervision for health institutions under their catchment area and also referring patients to higher health institutions. There are no pharmacy and laboratory workers, at Abuye Roge and Gura Jarjara health centres without pharmacy and laboratory worker that can prone to poor quality health service delivery. Eighty eight percent of health professionals agreed that facility is directed by fully licensed professionals for all required categories and specialties, even though there was no mechanism that requires licensure for public health organization except in private health organization it is mandatory to have license to give health services for the public health organizations.

The results in Table 4.3 Shows that 89% disagreed that the facility has adequate staff. According to Ethiopian Standard Agency each health centre shall have at least 3 pharmacists or pharmacy technician. In this study the staffing pattern of pharmacy workers in this district from 6 health centers 3 health centers 50 % of the health centre do not have pharmacy workers. Good dispensing practices ensure that the correct medicine is delivered to the right patients, in the required dosage and quantities, with clear information, and in package that maintain an acceptable potency and quality of the medicine. Dispensing is carried out by pharmacist. The professional's failure, in the dispensing process can seriously affect the care of the patient (FMHACA 2014:3). In this district because of it is being rural setup there is high turnover of health professionals; government is employing new staff as they leave every two years continuously.

- **Health services structure**

Ethiopia's health services are structured into a three-tier system, namely primary, secondary and tertiary levels of care. The primary level of care includes primary hospitals, health centres and health posts (HPs). The primary health care unit (PHCU) comprises five satellite HPs (the lowest-level health system facility, at village level) and a referral health center. This is the point where PHC is administered and primary services facilitated under the health service delivery structure.

A primary hospital provides inpatient and ambulatory services to an average population of 100,000. A primary hospital provides emergency surgical services, and is a referral centre for the HCs (WHO 2017:4). There seemed to be challenges with facility materials and equipment. 79 % (of the health care providers disagreed that the facilities had functional equipment and lifesaving supplies. High quality output requires high quality inputs. Working with low quality material decreases employee's productivity. Facilities did not have readily available equipment and supplies.

- **Health services infrastructure**

In all health care services, providers involved in the study (92 %) agreed that the facility had a separate maternal and child health services unit with the minimum requirements. This shows that there were separate rooms dedicated for maternal and child health services when compared to other service delivery practices. This means there was high attention given by government, community based fund generation to buy ambulances and different stakeholders for maternal and child health services. This findings also similar to the community based generation of funds for transportation also had an effect on access to maternal and children health care in resource limited settings of India and sub-Saharan Africa (Bhutta et al 2014:1).

Standard health centres have 3 blocks of buildings, but all health centres found at Gindabarat District has only 2 blocks which can hinder quality of health service delivery. This health facility has no separate room for adult and child health services for example, adult

and paediatric OPD is in one room. The health center should provide cafeteria, green area, library and adequate toilet and shower for both patients and health workers. Standard said: A Medicine shelf is shelved of 20 cm above the floor 1 m wide between shelves and 50 cm away from the wall and ceiling. Health Centre of this District is not in this line. The pharmacy premises location is not convenient and eases loading and unloading of medicines.

The design of Gindabarat hospital has a problem because this hospital is upgraded to primary hospital from health centre design. The hospital has inadequate storage and dispensary premises are available. The emergency department should serve as the definitive specialised care area, equipped and staffed to provide rapid and varied emergency care to all people with life-threatening conditons.

Emergency room has no separate room as an emergency department, there is no adequate space for each procedures and different tests, emergency room door is narrow, and it has only one door and no trained health workers to handle emergency cases. There is no separate room for sterilisation and there are shortages of functional autoclaves, there is no functional incinerator and placenta pit in health centre. There is no inpatient room in all health Centrs.

During emergency, any problems identified with critical body functions (airways, breathing or circulation) should be treated immediately. Management protocols should be posted on the walls of triage areas as an "aide memoire" for emergency staff. The emergency officer should be trained in emergency case management.

The emergency department should be equipped with the lifesaving medical equipment. All emergency clinical staff should be trained to conduct emergency treatment and established protocol management.

The emergency services should be organised so that ambulances and patients can easily access the emergency service's entrance. This means that the emergency unit should be located on the ease of access and should be clearly labelled in a way that is visible from the health facility gate. Health facilities should have ambulance service for inter-hospital or interfacility transfer of patients and should utilize for advanced life support to assist the pre hospital providers. The ambulance should be used only for transportation and management

of emergency patients. All ambulances in health facilities should be equipped with equipment and supplies to render minimum basic life support. (MOH 2016:43). However, from this study all health centers here are no protocol management for emergency case management. This finding is alin Gindabarat District there is no separate unit, and there is no adequate medical equipment and supplies for lifesaving and there are no trained emergency workers assigned and tso similar to the study conducted at Cnnaught Hospital, Sierra Leone (Hedda et al 2017:115).

According to Ethiopian primary hospital standard (ES3617 2012:80), the primary hospital emergency service shall have protocol for the initial management of emergency cases located in a place where it is easily recognisable to the public and shall be labelled in bold and all health professionals working in the emergency room shall be trained on the management of emergency cases.

#### **4.3 SERVICE DELIVERY PRACTICE GAPS IDENTIFIED AT GINDABARAT PUBLIC HEALTH FACILITIES**

Primary hospital and health centers are supposed to be diagnostic facilities. The participants (60.6%) disagreed on the facility has laboratory services. In Gindabarat District 67% of health, centers do not have laboratory workers. Primary hospital and health centers are supposed to be diagnostic facility but without laboratory service, health service delivery will not be of quality services.

The quality chasm report details six guiding aims for improvement that should be adopted by every individual and group involved in the provision of health care, including health care professionals, public and private health care organizations, purchasers of health care, regulatory agencies and organizations, and state and federal policymakers. These six guiding aims are collectively referred to by the acronym STEEEP. Individually, these aims are for health care to be

- safe: preventing injuries to patients from the care that is intended to help them.
- timely: reducing waits and sometimes harmful delays for both those who receive and those who give care.
- effective: providing services based on scientific knowledge to all who could benefit, and refraining from providing services to those not likely to benefit.
- efficient: preventing waste, including waste of equipment, supplies, ideas, and energy.
- equitable: providing care that does not vary in quality because of personal characteristics, such as gender, ethnicity, geographic location, and socio-economic status.
- patient centred: providing care that is respectful of and responsive to individual patient preferences, needs, and values and ensuring that patient values guide all clinical decisions. Therefore a set of principles and skills necessary to implement improvements and move toward a system of health care that is safe, timely, effective, efficient, equitable, and patient centred (Creswell 2014:378)

Seventy three percent (73%) of the participants disagree that facility has infection control and prevention services. This shows that if the environment around the patient is not kept clean, hygienic and conducive it would compromise the patients' quality of care and healing while recovery of the patient would be prolonged.

The results in Table 4.3, shows that 88.2% of the participants disagreed on the facility inpatient services included all the services required for admitted patients. Health centers have an inpatient capacity of 10 beds for emergency admission. Rural health centers serve populations up to 25,000 people. Inpatient services were not given by all health centers found in this District. This means facilities do not provide all the required inpatient services.

Job satisfaction depends on the employee's evaluation of the job and the environment surrounding it. The employees evaluated their actual experience and performance against their job. Ninety four percent (94.5%) of the participants disagreed on facility premises, structure and layout fully functional for all required quality health services. Other than curative health services one of the required role of health centre is activities like health

promotion (health education) is not given as a service in almost all health centers and primary hospital.

Underpinned by theories of social sciences and guided by principles of social justice, human rights, collective responsibility, and respect for diversities social work engages people and structures to address life challenges and enhance wellbeing. A social work service in a health facility is organised to provide services such as case management (linking clients with agencies and programs that will meet their psychosocial needs including finance), counseling and psychotherapy services (FMOH 2016).

There was the need to provide an information or complaints desk to help clients, no price and type of services by the institution level posted, there is no compliance handling system implementation, there is no functional triage system and there is no service directory indicators where the services are located in the compound of health institutions. To give quality health service delivery there must be patient screening but in these health Centres there is a poor triage system, there is also poor networking systems with best performing health centers and primary hospital. There is no in this health centre systems developed and implemented to solve the questions and grievances from the clients within a reasonable period of time. No indicators within the compound that shows where the services are and type of health services posted for transparency purposes. There are no written protocol of patient flow how to get pharmacy, laboratory and other diagnostic services. There is a maintenance officer assigned as the staffing structure of this health center. Mukadima health centre was built more than 50 years back but no maintenance service system developed. This shows that no systems developed for for health institutions maintenance services.

There is maintenance officer for electrical and water but not assigned for medical equipment at primary hospital level. The existing structure does not address or include staff like maintenance officer

Barriers of quality health services are poor triage system. There is no SOP for selection of cases for referral. There is no referral tracing mechanism (linkage) not adequate. There is no feedback providing mechanisms. Referral system from HPs and HCs to this hospital is

very poor because hospital is usually busy on those patients that can be seen at health centres level. As there is no strong and functional regulatory system, it is very difficult to regulate expired drugs disposal. Infection prevention practice is not as per the standards. In general, there were tendencies to give more attention for coverage than for quality improvement activities. The quality of health service delivery is severely limited by lack of resources. One of the required activities to be carried by health professionals is to practice infection prevention as per the standards.

The results indicate that 83% health care providers disagreed on the facility has food and dietary delivery services except for mother who gave birth in health institution. In addition, the diet given for inpatients in primary hospital is not as per the patient needs it is not variety type, but regular diet routinely. The result revealed that almost 94% of the participant disagreed on that the facility has maintenance services, housekeeping and laundry services. It is important to maintain clean and safe health facilities to provide quality care for patients. Proper cleaning will reduce the number of microorganisms in patient care areas and will help to minimize the risk of exposure to infectious agents to patients, families, caregivers, visitors and health facilities' staff. However, there was no housekeeping unit both in hospital and health centers found in Gindabarat District.

Seventy-eight percent of the participants disagreed that the facility has patient flow. The results in Table 4.3 indicate that 83.5 % of health care providers disagreed that the facility has rehabilitation services. All seven health facilities did not have rehabilitation services..

There are four main instrument-processing steps: decontamination, cleaning, sterilization and high-level disinfection (ESA 3617, 2012:109). These findings show that 30 % of the participants revealed that quality health care is always linked to patient safety. Significant improvement in health services coverage and access have been achieved. Eighty-five of the participant disagreed on the facility has overall quality health service delivery.

Health facilities should strive to provide a good working environment for employees, with opportunities for training and development and equitable remuneration. Employees who are satisfied with their working environment are more productive and provide higher quality care.

In contrast when workers are dissatisfied in the workplace their productivity tends to be low and the attrition rate is high (FMOH 2017:78). Eighty-five of the participants disagreed on the facility has overall quality health service delivery.

Infection control in health services comprises a set of principles and guidelines to improve quality of care to patients. Infection control is part of risk management in any health service. In the general population, infection control concerns itself with food and water supplies and effective waste disposal, which all contribute to an increased life expectancy for community members. In healthcare facilities, these basic concerns also apply. In addition to general infection controls that apply to the community at large, health and food legislation and various control mechanisms further impose obligation on hospitals and healthcare services to ensure a safe environment for patients and staff (Jooste & Sibiyi 2015:312).

Based on guidance given in infection prevention guidelines for health care facilities in Ethiopia, the health facilities should outline clear procedures on how instrument processing should be done. Instrument processing protocols should be posted in procedure rooms, and all staff responsible for instrument processing should be trained /oriented on the process (FMOH 2016).

The results also show that most of the participants 82 % disagree their health facilities premises, have good structure and layout and 18.1% agreed. About 92% of the participants disagreed that their facilities have adequate materials and equipment necessary to do their work, while 8% agreed. This finding is in contrast with a study done in Jima where 62.8 % of major equipment required were against the national standard (Beyene et al 2011:49).

In Ethiopia, lack of proper management of medical equipment has limited the capacity of health institutions to deliver adequate health care. Poor equipment handling and utilization, frequent power surges, the age of the equipment, lack of operator training, lack of preventive maintenance, lack of spare parts, lack of maintenance capacity, and minimal knowledge regarding sophisticated equipment are factors that contribute to equipment breakdowns.

To ensure that equipment is used correctly and safely standard operating procedures (SOPs) should be developed and attached to each item of equipment. The SOP should be a simple “how-to” guide that describes how to use the equipment, instructions for care of the equipment, and basic safety and troubleshooting procedures.

All staff, including maintenance technicians, should be trained to follow the SOPs and should follow infection prevention procedures when handling medical equipment. Proper use of medical equipment is essential to maintain optimal performance of medical devices. Given the variation in technical characteristics of medical equipment, all clinical staff should be trained to operate each medical device that they use (MOH 2016). With regard to adequate pharmaceutical supplies, 80 % disagreed, and 19.7% agreed. The availability of hospital specific vital and essential drugs is a measure of service availability. Tracer drugs should always be available at the hospital. If there is any stock out of vital and essential drugs the hospital should take action to identify and address the cause.

A 94 % of the health workers disagree with the facility has in-service training sessions. A comprehensive and equitable continuous training program for health workers is important. This finding reveals that a much smaller proportion of health care providers in Gindabarat reported feeling not adequately trained for their jobs. Inadequate skills among health workers, therefore, not only affect quality of services provided, but also have direct implications on the motivation and retention of health workers. This study concurs with a study conducted in Kenya (Ojaka et al 2014:12).

- **Policies and Procedures (SOP) of health service delivery**

To render quality health service delivery there should be standard operating procedures and protocol management developed as guidelines but not developed in these health facilities. There is no Internal Quality Assurance and External Quality Assurance for quality control system.

Table 4.3 indicate that 52% of the participants agreed that the facilities had policies and procedures regarding access, availability of services and networking but they indicated that

there is a problem in implementing the existing policies. this is in line with the findings by Yibeltal et al (2017:64) who stated that access to and quality of health care for patients is very low in developing countries including Ethiopia. Hospitals and health centers are the main sources of health care for such patients in Ethiopia.

The “Quality of health services” component of the Health sector Development Programme IV applies a three-pronged approach to improving the quality of health services. These comprise supply side interventions, demand side interventions and regulatory measures. The supply side intervention include providing adequate number of skilled and motivated professionals and strengthening the supply chain management system to ensure an adequate and uninterrupted supply of pharmaceuticals at the point of service delivery. An internal quality assurance mechanism would help ensure effective implementation of performance monitoring and quality improvement standards and tools at all levels of the health system.

Other plans include placement of community members on health facility governance boards; development of a patients ‘rights charter, and conducting regular surveys on client satisfaction (WHO 2017:10). Regulatory measures were not implemented to regulate the quality of health services in this district.

Health policy is in place but the existing policy is not implemented. According to health policy of the transitional government: development of the preventive and promotive components of health care, developments of an equitable and acceptable standard of health services system that will reach all segments of the population within limits of resources, assurance of accessibility of health care for all segments of the population, provision of health care for the population on the scheme of payment according to ability with special assistance mechanisms for those who cannot afford to pay. The National Health Policy endorsed in 1993 committed to fulfill the needs of the less-privileged majority rural population focusing on the development of effective preventive, promotive and curative services of health care. It also emphasized on the democratization and decentralization of the health system, ensuring access of health care to all the population, promoting and enhancing national self-

reliance in health development by mobilizing and efficiently utilising internal and external resources including community participation (TGE 1993:6).

If there were an internal quality assurance mechanism it would help ensure effective implementation of performance monitoring and quality improvement standards and tools at all levels of the health systems. However, there is no implementation of IQA and EQA in the health facilities. Health service reform not implemented fully. Employees were not recognised by their residential problems. Health care providers of the the health facilities claim that they have been working at health centre for the last five years until now they did not get house to live in and that causes them anxiety and stress.

No coordination and integration approach among the workers of district health office and health centres. The budget allocation is not at health Centre level it is at district health office level so; health centers cannot buy things that are important for health services. Regulatory bodies are not in a position can support and regulate the quality health services like registering professionals for licensing and setting standards and “SOP” for each activities. There is no clear guidelines to treat poor patients therefore there is no equity health services for all citizens. There is no quality improvement focal person assigned as a structure of health centres. There is no system for budget support for these activities.

Ethiopian standard agency indicated that no person shall operate a health centre in Ethiopia, whether governmental, non-governmental or private without being licensed as required by appropriate law and standards but here health centre and primary hospital function with few health workers and few equipment and supplies. This practices that does not fulfil the required minimum standards can prone to poor quality health service delivery. There is no practice of giving license for public health center and primary hospital as a requirement to give health services.

The outpatient clinic shall have clinical protocols for management of at least common disease and locally significant diseases in line with the national and or international guidelines. The inpatient service shall have clinical protocols for management of at least common causes of admission in the hospital (ESA 3617, 2012:38-40). A 90% of the

participants disagreed that the facility has standard operating procedures (SOP), and protocol management for quality health service delivery. Effective management was mentioned as an important enabler of quality from the perspective of providers, managers, policy-makers and payers (Mosadeghrad 2014:84).

#### **4.3.1 Organization management and quality improvement services.**

A 81.1% of the participant disagreed that the facility has organization management and quality improvement services, compliance services of quality health services delivery. Provision of care should be timely and equitable across populations, coordinated across the continuum of care and throughout the life course, while minimizing resource waste. Quality of care therefore underpins and is fundamental to universal health coverage (World Bank 2018:16).

#### **4.4 OUTCOME RELATED GAPS IDENTIFIED AT GINDABARAT PUBLIC HEALTH FACILITIES**

Quality of care is the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge. This definition implies that quality of care can be measured, is ultimately aimed at health improvements rather than simply increasing service inputs or refining system processes, and should reflect the desires of key stakeholders, including service users and communities (World Bank 2018:30).

There are poor health providers with poorly satisfied with their performance as there is lack of transportation means and geographically in accessible areas at Gindabarat district. Quality of health service delivery was hampered when there is overload of patients and shortage of health care providers. It was as well difficult to render quality health service as there was no adequate practices, premises, product and professionals. Failure to solve these barriers led to continuous poor quality of health service delivery.

Regarding hospital staff the barriers predisposes to high staff turnover every two years specialists are absent, pharmacy workers are inadequate there is poor incentive

mechanisms, that can hamper motivation to come from within. Most health workers says that living conditions in this rural set up affects their morale motivations and on giving quality health service delivery.

- **Provider Satisfaction**

Job satisfaction is very important factor of productivity and job quality, especially in health care workers (Nikic et al 2008:47). Overall, the majority of the participants (85%) are those with 0-5 years work experience. This indicates that most of the health workers are with less experience because at rural district there is high turnover with less staff retention. The participants described various factors that influenced health workers to leave, such as poor working conditions, lack of staff development, health workers needs to improve their professional knowledge and skill for career progression.

Overall, the staffing within the health facilities is not satisfactory. This can negatively affect the quality of health service delivery. According to this findings health workers that are currently working in six health centres ranges from minimum 6 while the maximum is 9 which is below minimum standard of Ethiopian Standard Agency health centre shall have at least 18 health workers (ESA 2012).

Nurses who are satisfied with their work generally provide higher-quality, more cost-effective care. Staffing systems should address the quality of work life for the nursing staff as equally important as the quality of patient outcomes. Attention to staff schedules is a major responsibility for the nurse manager, especially in light of the 24-hour/day, 365-day/year staffing needs in many health care facilities (Barbara 2014:363). On the contrary, the study conducted in Serbia reveals that perceiving work as interesting and stimulating increases with qualification so, the greatest number of masters and doctors of science replied that their job was interesting and stimulating (Nikic et al 2008:9).

Health facilities should strive to provide a good working environment for employees, with opportunities for training and development. Employees who are satisfied with their working environment are more productive and provide higher quality care. In contrast, when workers

are dissatisfied in the workplace their productivity tends to be low and the attrition rate is high (MOH 2017:78). It is of critical importance that the staff members available to provide patient care have the educational preparation, skill, and experience necessary to meet patient care needs. Another consideration in staffing is the clinical competencies that are required to care for the population being served. The nurse who is responsible for making staffing decisions must be aware of each individual staff member's educational level, competencies, experience, skill, and training (Barbara et al 2014:363).

Issues that need immediate attention were good structure to increase the likelihood of good process, and outcome. (Donabedian 1988:1745). When care is ineffective, that is, when providers do not adhere to evidence-based guidelines, this may reflect a lack of knowledge of guidelines or a lack of compliance regardless of knowledge. (World Bank, 2018:34).

In conclusion, high quality health care is the right care, at the right time, in a coordinated way, responding to the service users' needs and preferences, while minimising harm and resource waste. High quality health care ultimately aims at increasing the probability of desired health outcomes. Quality health care recognises that such improvement is a continuous rather than a static process. Regardless of the income level of a country, if there is room for improving health outcomes, the quality of care can also be increased.

#### **4.5 PHASE 1 QUALITATIVE APPROACH**

In this section qualitative approaches, interview guide, data management and analysis, research findings, major themes and subthemes, presentation and discussion of results is presented. Qualitative research is development of concepts which help us to understand social phenomena in natural (rather than experimental) settings, giving due emphasis to the meanings, experiences and views of the participants (Pope & Mays 2006:42).

The researcher analysed the words of the participants, found meaning in the words, and provided a description of the experience that promoted deeper understanding of experience (Burns & Grove 2014:68).

- **Topic guide**

The interview guides were developed and the researcher used interview guide for face to face interviews conducted. The researcher interviewed health care providers on quality health service delivery. The researcher asked the study participants five broad questions. The questions were as follows:

1. Please share your views on the delivery of health services in Gindabarat District.
2. What are the barriers to quality health service delivery?
3. In your own observation, are there issues that need immediate attention with regards to health service delivery in your hospital/health centre? Please share with me.
4. What do you wish could be done in regard to these issues?
5. Please share the gaps you have identified concerning service delivery at your health centre in relation to for example the following: premises, staffing, equipment, supplies, maintenance service, practice protocols and standards, food and dietary delivery service, housekeeping and lauddry. How does shortage of resources affect provision of quality patient care?

The broad questions were followed by probing questions, which were guided by participants' responses. Brink et al (2012:158) explain that semi structured interviews will produce more in-depth information on the participant's beliefs and attitudes than can be obtained through any other data gathering procedure.

#### **4.6 DATA MANAGEMENT AND ANALYSIS**

Data were collected in Gindabarat District Primary hospital and six health centers from health care providers; using in-depth face-to-face interview with 29 participants. The researcher used field notes and audio tape to record the information. To protect participant anonymity and confidentially, participants were interviewed in a private room, participant's names were not used, and the researcher used codes. The audio tape and transcribed data were kept in a safe place and were only accessible to the researcher.

Data were collected until no new information emerged (data saturation). Interviews were conducted for approximately 45 minutes with each participant. Participants were asked open-ended question following the interview guide and flexibility was allowed. To obtain clarity from participants' response, probing questions were asked. Data from the opened-ended questions in section B of the interview schedule were coded and analyzed by using ATLAS.TI.8.

**Methods of analysis:** The tape-recorded interviews were transcribed to local language and were later translated into English. That is, all audio recorded data from individual interviews were transcribed verbatim in Oromiffaa language, and then translated to English. Translation to English was done as the study should follow the medium of instruction, being English. The researcher conducted the interviews in Oromiffaa language, then transcribed and later translated Oromiffaa language transcripts to English before analysis. Data consisted of interview transcripts, and expanded field notes. The researcher followed the 6 phases of conducting thematic analysis (Ncongwane 2018:14).

1. Becoming familiar with the data- Initially, the researcher familiarized himself with the data through listening of all audio record; then reading and rereading of transcripts before translation.
  1. Generating initial codes - Data were coded on the transcripts following the objectives.
  2. Searching for themes - Grouping of similar information were done to derive emerging themes from the data.
  3. Reviewing themes. - Code book was prepared, and categorizations were done of common themes and emerging subthemes.
  4. Defining and naming themes - Similar themes and subthemes were grouped together based on the meaning units provided.
  5. Producing the report - Themes and subthemes were summarised in a table

The findings were categorized into themes and sub-themes. Interpretations of the significance of each variable followed the respective themes; and each subtheme was supported with verbatim quotes that captured dominant views or meaning units appropriate to substantiate the findings. Finally, discussion of data is presented.

## 4.7 QUALITATIVE RESULTS PRESENTATION

The presentation of the findings of the study begins with the demographic characteristics of the participants.

### 4.7.1 Demographic characteristics

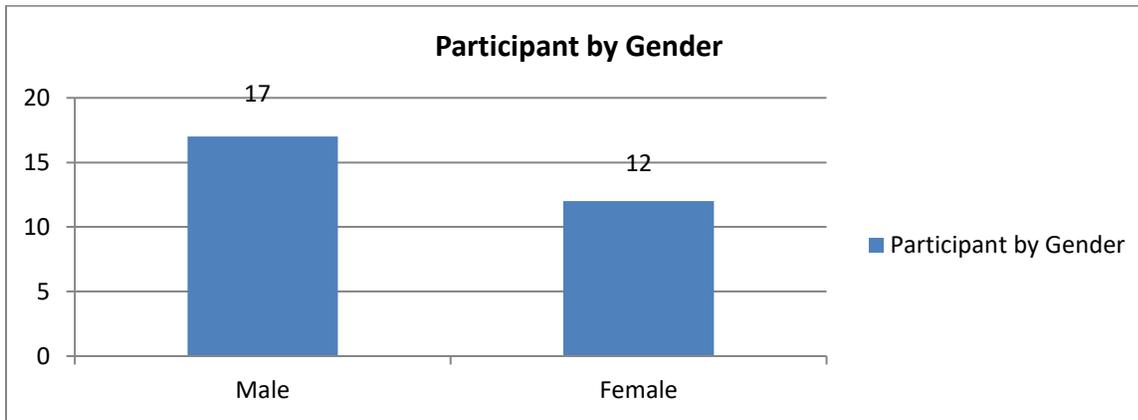
Purposive sampling was used. This type of sample is entirely on the judgment of the researcher, in that a sample is composed of elements that contain the most characteristic, representative or typical attributes of the population that serve the purpose of the study best (De Vos et al 2012:232). The purposive sample of this study consisted of twenty nine health care providers who met the inclusion criteria. There were (N=29) health care providers who participated on the in-depth interview. The participants' characteristics are described in terms of age, gender, professions; work experience and facilities where they are working.

**Table 4.6 Age categories of participants (N=29)**

Age category	Frequency	Percentage
22-30 years	23	79.3
31-40 years	6	20.7
Total	29	100

Table 4.5 shows that most of the participants (n=23; 79.3 %) were aged between 22 years to 30 years. This is an indication that most of the health workers are of young age group because of high turnover at Gindabarat District.

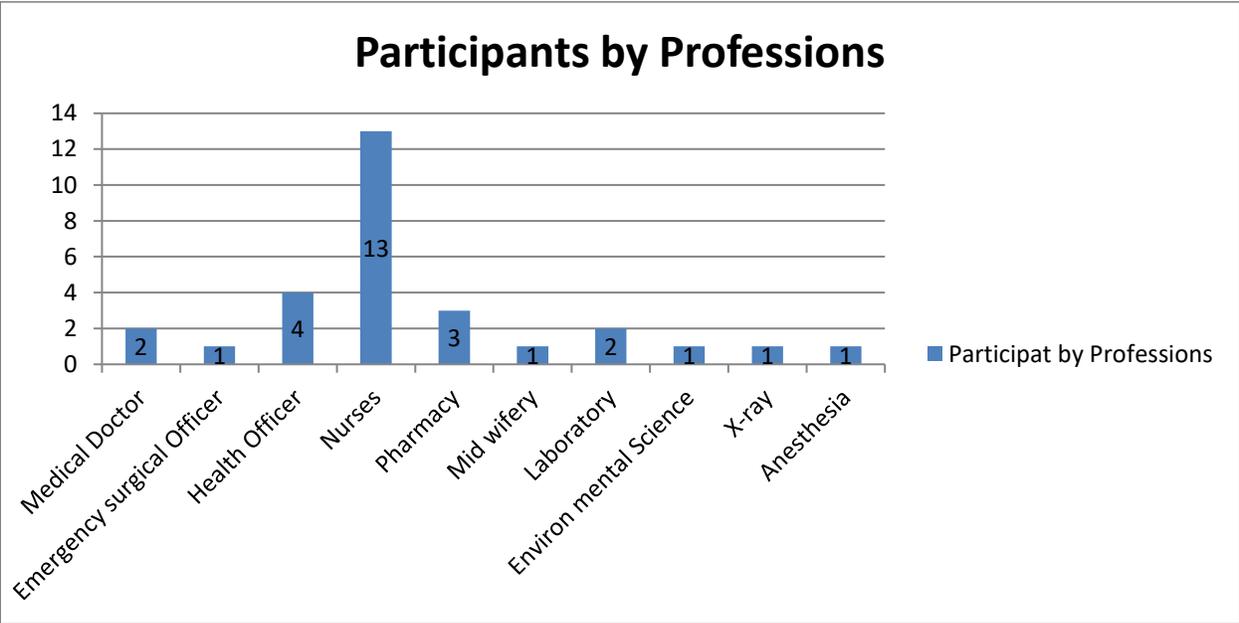
Gender is shown in figure 4.5. Concerning gender, 58.6% (n=17) were male and 41.4 % (n=12) were female. Having a mix of both genders was important to give a chance to observe gender related challenges on quality health service delivery system.



**Figure 4.5: Participants characteristics by gender (N=29)**

**Table 4.7 Profession of the participants (N=29)**

Profession	Frequency	Percentage
Medical Doctor	2	6.9
Emergency surgical Officer	1	3.5
Health Officer	4	13.7
Nurses	13	44.6
Pharmacy	3	10.4
Mid wifery	1	3.5
Laboratory	2	6.9
Environ mental Science	1	3.5
X-ray	1	3.5
Anesthesia	1	3.5



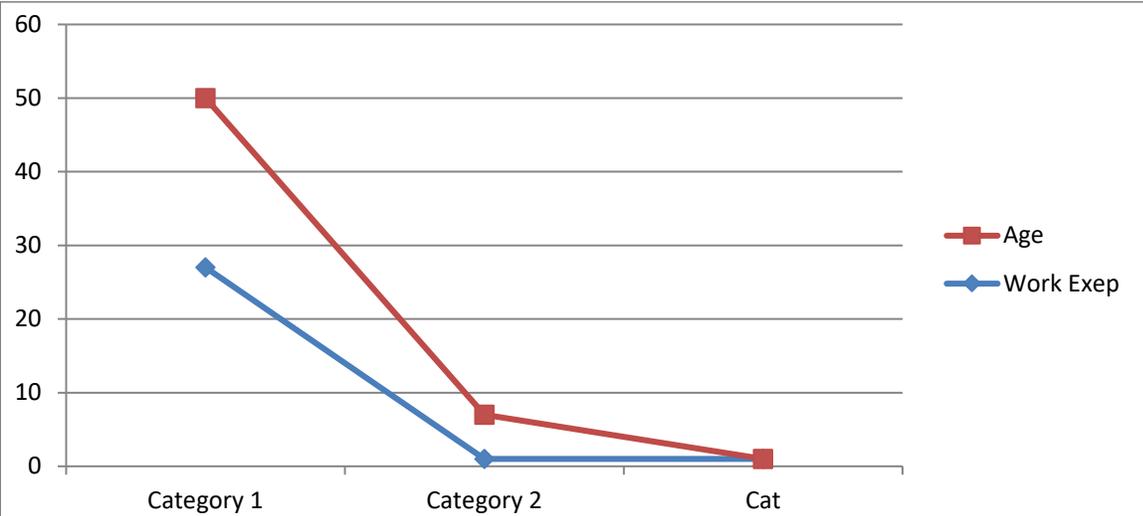
**Figure 4.6 Participants by professions (N=29)**

As shown in figure 4.7, different types of health care providers participated in the study. The professional mix helped to have different views from a specific professional point views, on quality health service delivery. The findings indicated that the participants were included from different service delivery points with different profession. The services delivery points had unique characteristics related to quality health service delivery and perspective of each department would help to have different ideas on the system. Figure 4.7 shows that above 44.6 % (n=13) of the participants interviewed were nurse in profession.

**Table 4.8 Participants' years of experience (N=29)**

Years of experience	Frequency	Percentage
0-5 years	27	93.2
6-10 years	1	3.4
11+ years	1	3.4

Table 4.8 shows that 93.2% (n=27) of the participants have 0-5 years of experience. This is an indication that shows high staff turnover.



**Figure 4.7: Participants' age and work experience (N=29)**

Age and work experience of the participants were analyzed together in the form of mapping. Figure 4.7 depicts the findings of age and work experience respectively. The findings indicate that the participants' age ranged 22-40 years. Similarly, the work experience of participants ranged between 0 and 11 years. Knowing the age and experience of participants would help to view different perspectives and experiences during individual interview.

**Table 4.9 Participants by facilities (N=29)**

Facility	Frequency	Percentage
Gindabarat Hospital	10	34.6
Abuye Roge Health center	3	10.3
Kachisi H ealth center	3	10.3
Gura Jarjara Health center	3	10.3
Kare Dobi Health center	4	13.9
Chulute Health center	3	10.3
Muka Dima Health center	3	10.3

Table 4.9 shows that 34 % (n=1) of the participants were from primary hospital.

**Table 4.10 Participants by facility level (N=29)**

Facility level	Frequency	Percentage
Hospital	10	34.5
Health center	19	65.5

Table 4.10 shows that 65% (n=19) of health workers were from health centers, and 34% (n=10) were from the hospital in general when facility level was compared.

#### **4.8 THEMES AND SUB-THEMES**

Thematic analysis was done manually, with the help of codes from the AtlasTi; and it involved the process of identifying themes within qualitative data. The process took place concurrently with data collection. After repeatedly listening to the participants' description of their experiences, the researcher transcribed the audio-recorded participants' verbal responses verbatim. This was done 5 hours following each interview in order to have a good follow-through with the interviews. The listening and transcription allowed the researcher to pick up points for follow-up with the next interviewee, where necessary. All the completed transcripts were then read to obtain the overall sense, reflect on the meaning, and to obtain clues regarding the existence of segments of the data in the form of words, phrases or paragraphs of interest that were outstanding as informative or could be assigned certain meanings/labels/terms or descriptive words referred to as codes. The codes identified during this preliminary reading were listed in a separate sheet of paper for noting how frequently they appeared later during the detailed analysis. Noting that the list of codes identified during the preliminary reading was not likely to be comprehensive enough to give a full interpretation of quality in health services, the researcher aimed to continue discovering new codes during the detailed analysis.

Detailed data analysis involved reading of each transcript according to the arrangement from the simplest to the complicated version. The transcripts were read with the aim of matching the newly identified segments of data with the pre-identified codes from the prepared list or to identify new codes that arose later.

This resulted in each identified segment being assigned an appropriate code or left as originally expressed as a code. The identified segments or assigned matching codes were written next to the original segments in the adjacent column. Unless a new code was assigned, most identified segments were written in the adjacent column as the participant had expressed them originally. During the subsequent phase, the researcher explored the pattern of codes identified, and the relationships with each other. Related codes or the codes that conveyed similar messages whenever they appeared were developed into subthemes. The process was facilitated by the fact that many codes had been identified from the text in the way they had been expressed by the participants. The codes that existed in isolation were closely examined to detect any particularly peculiar type of message or experience. The last step involved concluding that most of the common codes identified conveyed similar message for the participants. Since some of the sub themes were related, they were in turn grouped together to form themes.

The analysis revealed the following four themes and nine subthemes as indicated in Table 4.11.

**Table 4.11 Themes and sub-themes that were identified.**

<b>Themes</b>	<b>Sub-themes</b>
Theme 1. Challenges of achieving comprehensive service delivery	1.1 Types of services rendered 1.2 Facility resources
Theme 2. Identified need to improve health service delivery structure	2.1 Facility Design 2.2. Health facility environment
Theme 3. Organizational systems	3.1 Poor access to transport 3.2 Inadequate financing of health services
Theme 4. Policy implementation	4.1 Processes 4.2 Procedures 4.3 Professionals

## **4.11 PRESENTATION AND DISCUSSION OF RESULTS**

The following subsections provide the detailed presentation and discussion of the results according to the themes and objectives of the study. The presentations of data were supported by narratives from the participants and were described with the support of literature in the discussion section.

### **Theme 1: Challenges of achieving comprehensive service delivery**

The participants mentioned that there were challenges in achieving comprehensive health care delivery in rural areas. These challenges related to three subthemes, namely, types of services rendered and facility resources.

“Beside accommodation, lack of access to good schools for themselves and for their children, poor accesses to basic necessities affect their quality health service delivery, every year we have new staff with low experience as there is high turnover yearly.” (D 32).

#### **Sub themes 1.1: Types of services rendered**

With regard to the types of services rendered, the participants indicated that the primary level of care facilities included one primary hospital, six health centres and 31 health posts. American missionaries established one of the health centers at Mukadima kebele as a clinic in 1963 during Emperor Haile Selassie. A plan to achieve universal access to primary health care was prepared to address shortcomings of service coverage within the health system through expansions of hospitals and health centres. Participants’ expressed their views regarding the types of services rendered as follows:

“Chulute health centre is a type B health centre 15 km away from Kachisi district town giving both curative and prevention services.” (D 12).

“Gindabarat district has one primary hospital both curative and prevention health services are given. There is no adequate general surgery service except emergency cases.”(D 15).

“Health centre is supposed to give admission services with 10 beds.”(D 31).

According to Ethiopian Standard primary hospital shall mean a health facility at primary level of health care which provides promotive, preventive, curative and rehabilitative services with a minimum capacity of 35 beds and provides at least 24 hour emergency service, general medical services, treatment of basic acute and chronic medical problems, basic emergency surgical intervention and comprehensive Emergency Obstetric care (CEOC) including laboratory, imaging and pharmacy services and other related services stated under this standard (ESA3617 2012:7). Health centre shall mean a health facility at primary level of the health care system which provides promotive, preventive curative and rehabilitative outpatient care including basic laboratory and pharmacy services with the capacity of 10 beds for emergency and delivery services (ES 3611 2012:8).

### **Sub-theme 1.2 Facility resources**

Inadequate mechanisms to ensure human and material resources availability, availability of supplies, procurement and maintenance of equipment were facility resources related challenges encountered with quality health service delivery. Despite shortage of resources, health professionals were expected to provide quality patient care. With regard to human resources shortage, the following was mentioned:

“Difficulties associated with frequent staff turnover. Every year staff move from this district to the other, this mean staff seems not doing active work. There is a shortage of qualified staff to render the service. Nurses complained that they worked as doctors and pharmacist.” (D 28).

Shortages of equipment was a major constraint to patient care. Participants mentioned the gaps by stating the following:

“Regarding equipment: there is no autoclave for sterilization purposes” (D 9).

“There are no services due to lack of chemistry machine not installed.” (D 18).

“There should be sustainable medical supply, electric power interruption should be addressed. Issues that need immediate attention with regards to health services delivery are availing patient monitoring medical equipment, appropriate patient beds, and adequate supply with BP apparatus, stethoscopes, otoscopes, patient medication box, and patient locker. There should be furnished with shower facility for bathing, sheets, linen, wheel chairs, pajamas and blankets.” (D 23).

“The maternal and child health service should have adequate coaches, stethoscope and sphygmomanometer. There is no vacuum extractor, suction apparatus and resuscitation set in delivery services, there are no ambulance services in our health centre as it is only one ambulance for the District.” (D 25).

“Installation of the existing chemistry machine, to utilize effectively the existing GenXpert machine, installation of emergency shower, labelling and identification of male and female toilets. Avail autoclave machine for sterilization purposes and supply of laboratory reagents.” (D 18).

“Electric power could have been supplied from adjacent areas. Generators could have been supplied. Telephone line could have been availed for office for health services.” (D 14).

“There is no product like medical equipment and different supplies that hinder quality of health service delivery. There are no laundry machine, no sustainable supplies drugs and laboratory reagents. There is no electricity supply, and there are no generators for health centres.” (D 22).

Drug shortages posed serious challenge for health care institutions, often interfering with patient care. Concerns from participants were identified as follows:

“Availing ABCD of life saving drugs, medical equipment and supplies. Wheelchairs and stretchers should be purchased for emergency rooms.” (D 20).

“Availability of resources like adequate laboratory reagents could have been done. If health centre owned telephone line for the office communication with district office and health posts will be facilitated.” (D 12).

“No references for pharmacy department, no DIC, no standardized prescription papers.” (D 23).

The findings of this study revealed lack of basic amenities. More efforts were needed to supply adequate supplies for the health institutions to give quality health services delivery:

“Inputs like materials and equipment and drug supply should get attention to bring good outcome of the services for the community.” (D 10).

“Essential power system: Hospitals and health centers shall have an automatic power generator for all care and treatment locations” (D 24).

“Availing water and electricity for the health centre is a critical resource.” (D 26).

## **Theme 2 Identified need to improve health service delivery structure**

This theme related to health systems such as design of the facility, facility buildings and environment at the facility.

### **Sub-themes 2.1: Facility design**

The participants indicated the requirement of design for health facilities construction. The following were responses from the participants:

“Gindabarat primary Hospital could have been designed for primary hospital from the very beginning rather than upgrading health centre.” (D 24).

“The facility premises has poor layout as the hospital is upgraded from health centre design, therefore the current set up needs renovations. Hospital premises have no adequate rooms that forced us to share one room for the management of ART and TB rooms. This conditions needs to be addressed by availing additional block construction. There are no separate toilet rooms for patients and staffs. There are no identified toilets for male and female patients. These need immediate attention to correct.”(D 16).

Concerning construction requirements, the appropriate organ shall be consulted before commencement of any facility plans and specifications for any hospital and health center construction. All hospital and health centers shall be designed, constructed and maintained in a manner that is safe, clean, and functional for the type of care and treatment to be provided.

Every primary hospital subject to these minimum standards shall be housed in a safe building, which contains all the facilities required to render the services contemplated in the application for license: The minimum size of a primary hospital premises shall be 5,000-10,000 m<sup>2</sup> with at least one side adjacent road access.

For the building space and elements, the minimum size of a health centers premises shall be 2,000-5,000 M<sup>2</sup> with at least one adjacent road access. The health center shall be landscaped, therapeutic, appealing, scenery, attractive with trees (ES 3611:2012:112). All health facilities room size and space allocation shall consider room loadings based on the current staff, clients involved, usable medical equipment, furniture and applicable functions. The participants viewed the challenges in rendering quality health services due to shortages of space in the premises and indicated the following:

“Health centre could have been built as type A to have enough space for different services. The health centre laboratory should have specimen collection area, bacteriology, serology, parasitology, haematology, and urinalysis rooms.” (D 13).

“The facility premises, structure and layout are not adequate and fully functional for the delivery of health services. There are no separate emergency rooms and trained health workers to handle emergency cases. The door of emergency room is very narrow for structure and purpose of emergency cases.” (D 25).

The following were participants’ responses regarding lack of inpatient services at health centers level:

“There is no inpatient room in our health Centre.” (D 26).

“The hospital is upgraded from health centre design to primary hospital, therefore, the current design needs modification for hospital set up.” (D 18).

## **Sub-themes 2.2: Health facility environment**

The participants responded regarding health facility environment as follows:

“There is no separate emergency rooms and trained health workers to handle emergency cases. The door of emergency room is very narrow for structure and purpose of emergency cases. There are no services like shower and recreational area for staff and patients and premises not well designed for disability patient.” (D 31).

“This health center built over 50 years back, health facility infrastructure should be improved and the old building should be renovated or if possible new building for patient care should be constructed.”(D 36).

Amenities include features such as comfort of physical surroundings and attributes of the organization of service provision (Mosadeghrad 2014:77). The working environment affects employee satisfaction. According to Booyens, Jooste and Sibiyi (2015:129), the physical environment in which health care is rendered has an effect on the patients, health care professionals, equipment and supplies. Any obstacle that prevents health care professionals from practicing effectively should be eliminated. The physical environment in which care is rendered is just as important for cost-effective care as the quality of the care itself. Facilities should therefore be kept in good condition. Quality care can only be rendered if there is sufficient equipment of high quality to meet the needs of the patients and to improve the health workers' productivity.

The work environment in which nurses provide care to patients can determine the quality and safety of patient care. The hospital and health centers shall provide and maintain a safe environment for patients, personnel and the public. Sufficient area for performing routine maintenance activities shall be provided and shall include office for maintenance by bio-medical engineer.

Participants revealed the importance of constructing 3 blocks of building of health centers to have adequate space by indicating the following:

“I think, regarding premises standard health centres have 3 blocks of buildings, but this health centre has only 2 blocks which can hinder quality of health service delivery. This health centre has very narrow compound even if government or community want for expansion there is no space for construction. In this health centre from the very beginning health centres could have been type A HC which has 3 blocks; adequate space could have been given for expansion as per the standard of health centre.”(D 11).

“The design of this hospital is a problem because this hospital is upgraded to primary hospital from health centre design. Since this hospital is upgraded from health centre to hospital the building systems are not designed, installed and operated in such a manner as to provide for the safety, comfort and wellbeing of the patients.”(D 16).

“As there are no adequate rooms at OPD level, more than 80 patients seen per day, that can compromise quality health services delivery.”(D 18).

### **Theme 3: Organizational systems**

The findings revealed that the participants described issues of health care system in relation to service accessibility and availability. This theme included access to transport and financing of the healthcare service.

#### **Sub-themes 3.1: Poor access to transport**

The following was a response from a participant:

“As road is the main entry for all development government and community had to work on the issue of the road construction then the existing health problem will be addressed. As this periphery hospital is very far from information and technology there should be a linkage with general hospital as a network to update the skills and knowledge of the rural hospital.” (D 18).

The health care delivery system in Gindabarat district is poorly organized and managed. The distribution of health institution is unevenly distributed and most of them are located along the major roads and towns, which neglect the majority of the rural population. Health organization define health systems as all organisations, people and actions whose primary intent is to promote, restore, or maintain health.

Concerning the health care system, the participant revealed that health care system was one factor that determines quality health service delivery. Health facilities are structured as referral hospital, regional hospital, health centers and health posts according to the hierarchy.

One participant expressed that better to give attention for quality by saying:

“There should be strengthening referral systems at PHCU level, strong relationship with regulatory system and different sector committee for better medical waste disposal. Infection prevention practice should be implemented as per the guidelines of IP. Immediate attention should be given for quality. Focal person should be assigned for quality. In my observation the issues that need immediate attention are infection prevention practices needs to be improved, rather than giving attention for coverage it is much better to give attention for quality.” (D 20).

### **Sub-themes 3.2: Inadequate financing of health services**

Patients’ financial status may affect the quality of health care services. Sometimes the patient cannot afford the costs associated with his or her treatment and decides to cancel the treatment. One participant expressed the importance of community based health insurance by saying:

“Community based health insurance system needs to be strengthens.” (D 28).

Similarly, in the health sector, health facilities were channelling all revenue that they had been generating internally to the treasury. This caused a lack of sense of ownership by health facility staff and health facilities, and the amount of money health facilities had been collecting and channelling to the treasury was rather insignificant. On the other hand, health

facilities faced a serious shortages of resources to cover their operational costs, and, in most cases, their non-salary operational budget was being depleted by the end of the first quarter causing inefficient use of scarce resources and poor quality of health care. In response to this problem, the health care financing strategy, followed by the respective regional and federal laws, allowed health facilities to retain and use their revenue for health service quality improvements (Zeleelew 2012:4).

The Institute of Medicine (IOM) has defined the quality of health care as “the degree to which health services for individuals and populations increase the likelihood of desired health outcomes and are consistent with current professional knowledge” (Gupta & Rokade 2016:84-94). The requisite knowledge about quality approaches and their implementation are often lacking among health personnel. Therefore, health care quality improvement often remains more of verbal expression rather than a reality in such settings (Agyeman-Duah et al 2014:1).

The participants expressed gaps to treat poor patients by saying:

“In this hospital user fee reduces utilization of health services as there is no systems developed to address the gaps occurred to treat poor patient to address equity. Otherwise if poor patient come this hospital to be treated there is no way to give treatment systems needs to be developed.” (D 18).

The budget allocation is not at health Centre level it is at District health office level so; we cannot buy things that are important for health services.” (D 37).

“District health office needs to decentralize budget for health centre.” (D 10).

The participants state that quality health service needs to be improved:

“The triage system should be functional; SOP standards should be developed as a strategy to enhance quality health service delivery. Expired drugs should be disposed to appropriate area from the shelves of health centre. There should be implementation of IQA and EQA in the HC.” (D 12).

“There should be a Strong referral system within the primary health care unit. There should be quality I/P in place.

“There should be within the structure of health service delivery to have quality focal person at each health tier system.” (D 20).

The client has the right to expect competent, high quality, ethically based care from the health care providers. Quality is basically defined as how good or bad something is. Quality is considered to be care or service that meets specified requirements and, given current knowledge and resources, fulfils expectations for maximizing benefits and minimizing risks to health and well-being of patients

“Equity and quality health service delivery is one of the transformation agenda, but there is no quality improvement focal person in this hospital.” (D 20).

Quality of health care service is a complex issue that needs active engagement of all stakeholders. Health service quality improvement involves consumers, stakeholders, health professionals, health facilities, and administrative structures across all levels of ministry of health, regulatory authorities, donors and other sector organizations.

#### **Themes 4: Policy implementation**

Integrating with its national development frameworks, Ethiopia has implemented the Millennium Development Goals (MDGs) which spanned the period 2000 to 2015 and registered remarkable achievements.

The FDRE accepted and approved the 2030 Sustainable Development Agenda during the UN-member states' meeting held in New York from September 25 to 27/2015. Subsequently, it integrated the Sustainable Development oals (SDGs) with the 2<sup>nd</sup> Growth and Transformation Plan (GTPII). Health policies, strategies and programs are basically preventive rather than curative and addressed the anticipated and present health issues and problems in the country. Health services policies, strategies and programs have been formulated accordingly. The main objective of the National Health Policy is to create reality

where all citizens of the country have easy access to basic health services. Implementing laws, policies programs and projects are critical to ensure healthy-life and well-being. The health sector system in coordination with development partners engages the society with full sense of ownership of the health services, builds capacities at all levels, disseminates results of studies and research and provides higher educational institutes with technological capacities (FDRE 2017:28). The following participant understood that there is a policy but implementation problem by saying:

“Health policy is in place but all health care providers should work hard to implement the existing policy. Implementation of infection prevention as per the IP guidelines.”(D 18).

In Ethiopia, as highlighted in the HSTP, quality and equity are defined together, believing that the two must go hand-in –hand. Through various consultative processes, the domains that have been prioritized in this strategy are safe, effective, patient centered, efficient, accessible, comprehensive, affordable, and timely. With these prioritized domains, quality in Ethiopia is defined to be comprehensive care that is measurably safe, effective, patient centered, and uniformly delivered in a timely way that is affordable to Ethiopian population and appropriately utilizes resources and services efficiently (MOH 2016:49).

#### **Sub themes 4.1: Processes**

One of the issues related to processes was systematising fee waiver. Development of the preventive and promotive components of health care, development of an equitable and acceptable standard of health service system that will reach all segments of the population within the limits of resources and provision of health care for the population on a scheme of payment according to ability with special assistance mechanisms for those who cannot afford to pay are some of the general health policy of Ethiopia (Health policy Ethiopia 1993).

Despite the fact that equity is the underlying principle of all major global health policies, difficulties have emerged in providing proper care for the poor with the introduction of user fees for health services. However, the criteria used to determine eligibility for free health

services at public health facilities are either unclear or nonexistent in most sub-Saharan African Countries (Woldie, et al 2005:184).

The following participant recognised that there is no system developed for implementation for those patients who cannot afford to pay:

“Patient cannot afford the costs associated with his or her treatment especially those who cannot afford to pay.” (D 9).

The study conducted on assessment of the free health care provision system in Jimma town, southwest Ethiopia reveals that the absence of clearly defined criteria for waiving user fees at public health facilities care provision system difficult for both the providers and users. (Woldie et al 2005:184-194).

Ethiopia institutionalised mechanisms for providing services to the poor free of charge through a fee-waiver system, as well as through free provision of selected public health services (through exemption) such as health education and treatment of tuberculosis patients, and through services targeting selected groups (e.g. immunization of children under one age of life). However, a strong need existed to systematize and standardize these services. For instance, local authorities had been issuing fee waiver certificate to the poor as verified through local social justice systems at the time of sickness. This resulted in cumbersome procedures that caused delays in the poor’s ability to access care. This was not the case for individuals in higher income categories, and the system therefore created health care inequities.

#### **Sub themes 4.2: Procedures**

These procedures included human resource development. The participants were aware of human resource shortages as major constraints to patient care:

“I have been assigned in this health centre for the last five years until now I did not get house to leave in it that causes us anxiety and stress.” (D 9).

“According to the policy there will be developing attractive career structure, remuneration and incentives for all categories of workers within their respective systems of employment but, health professionals assigned in rural set up Gindabarat District are suffering of lack of residential.”(D 12).

According to health policy of Ethiopia there will be training of community based task-oriented frontline and middle level health workers of appropriate professional standards, and recruitment and training of these categories at regional and local levels, but there are no environmental sanitation, and focal person for quality improvement workers assigned in all six health centers found in Gindabarat District.

Referral system was found to be one of the barriers related to procedures for quality health care delivery. A participant mentioned the following concerning referral system:

“There is no functional intra and inter facility referral system.” (D 24).

Referral is a process by which a health worker transfers the responsibility of care temporarily or permanently to another health professional or social worker or to the community in response to its inability or limitation to provide the necessary care. According to the FMOH referral is a two way process and ensures that a continuum of care is maintained to patients or clients. A referral may be for temporary, permanent or partial transfer of responsibility for the care of a patient. The receiving health professional communicates back to the referring health professional with information and plan for continuum of care thereby completing the referral process.

Referral can be vertical as in the hierarchical arrangement of the health services from the lower end of the health tier system to the higher ones. It also can be horizontal between similar levels of facilities in the interest of patients for cost, location and other reasons. Referrals can also be diagonal when a lower level health facility directly refers patients to a specialized facility without necessarily passing through the hierarchical system.

A good referral system increases the efficiency of the health system by maximizing the appropriate use of health care facilities. It also creates opportunities for balanced distribution

of funds, services and professionals while at the same time improving the effectiveness of the health system.

In addition, a good referral system helps to promote cooperation among primary, secondary and tertiary levels of care (MOH 2010:2). This is also supported by an excerpt from participants who said:

“The main problem of health center is patient referral as the health centre is located where there is geographical access problem (Under a big plateau). There is no means of transportation.” (D 36).

“Health workers needs transportation facility to supervise their performance and to refer their patients to higher health institution, there should be means of transportation allocated otherwise giving service by walking on foot can hinder the quality of health services.” (D 10).

Referral system should be developed by optimising utilisation of health care facilities at all levels, improving accessibility of care according to need, assuring continuity and improved quality of care at all levels, rationalising costs, for health care seekers and providers for optimal utilisation of health care facilities at all levels and strengthening the communication within the health care system. However, in all Gindabarat health centers there is no single ambulance assigned at health center levels. Participants indicated that:

“Procurement of ambulance by government and community could have been done since it is geographically where there is no transportation means.” (D 28).

“Ambulance could have been assigned for its own as it is situated inaccessible area.” (D 36).

The participants described feedback as one component of referral process. It is usually attached with the referral paper in both internal as well as external. However, they pointed it out as a weakest point on the process. There is no SOP for selection of cases for referral. There is no referral tracing mechanism (linkage) not adequate. There is no feedback providing mechanisms. There are no written protocol of patient flow how to get pharmacy, laboratory and other diagnostic services. There should be standard referral systems within

the health institutions otherwise hospital workers will be overloaded with the activities that could be addressed by health centres levels.

Concerning the issue of service availability and accessibility, the participants indicated that there needs to be a direction to resolve this issue. The participants discussed issues of policy, guidelines, and directions where it was mentioned that policy, guidelines or direction helps health care provider to provide service in a scientific way. Moreover, these help to standardise the referral and linkage system all over the nation by protecting health care providers implementing the service haphazardly. As a result, these minimise the clients suffering. The findings were based on statements made by participants such as:

“The facility has no organization management and quality improvement services, compliance services, no clear guidelines to treat poor patients, there is no IQA and EQA system and Health professionals do have professional license but not renewal timely. We are serving the community with a total of six health professionals of this health centre which is below the standard; this problem needs to be solved.” (D 25).

“Regarding policy implementation the quality of health services component of health sector development program applies a three pronged approach to improving the quality of health services. These comprise the supply-side intervention, demand side intervention and regulatory measures. The supply-side intervention include providing adequate numbers of skilled and motivated professionals, and strengthen the supply chain management system to ensure an adequate and un interrupted supply of pharmaceuticals at the point of service delivery. An internal quality assurance mechanism would help ensure effective implementation of performance monitoring and quality improvement standards and tools at all levels of the health systems.”(D 9).

“Regulatory body should be strengthened at all levels to regulate quality health services. Standardized IP practices should implement at health centre.” (D 27).

“Ethiopian standard agency said: No person shall operate a health centre in Ethiopia, whether governmental, non-governmental or private without being licensed as required by appropriate law and standards but here health centre function with few health workers and few equipment and supplies. This practices that does not fulfil the required minimum standards can prone to

poor quality health service delivery.” There is no license given for health center. There are no systems like EQA and IQA for ensuring the quality of health service delivery.” (D 37).

“The health Centre has professional licensed health officer but the health Centre has no permission license. According to health policy of Ethiopia there will be developing quality control capability to assure efficacy and safety of products, but there is no systems developed for internal and external quality assurance systems developed and strengthen. (D 12).

Improving health and health related regulatory system focuses on ensuring safety in the delivery of health services, products and practices as well as accreditation of professionals. Absence of uniformity of the health regulatory structure at regional and District level, low attention to health regulatory systems in some of the regions and focus on limited areas within the health regulatory system are some of the limitations observed in health and health related regulatory areas (HSTP 2015:52). The findings regarding regulation were the following:

“All staff do not have written job description and responsibilities, so that staff are acquainted with their job descriptions and responsibilities. All staff not wear gown with easily readable nametag [badge] that include their name and status.” (D 14).

Quality improvement is an integral part of any service delivery that should be taken as part of the routine work and not as an added task to some group of individuals or units. In any health service delivery, individuals, teams subsystems or unit, need to know each and every aspect of the services they are providing and have periodic planning and monitoring strategies to improve the quality of the services (Oromia Health Bureau 2017).

The following participants are aware of that there is poor infection prevention practice: There were no adequate autoclaves in health centers for preventing transmission of microorganisms to health care providers and clients.

“There is no autoclave i.e. boiling system which is outdated procedures for sterilization.” (D 32).

The participants pointed out that there is poor final disposal system to properly handle within the health facility setting, even before it is taken for incineration, burial, or other disposal to protect health care providers, clients and the community.

“The gaps in this health centres are many, regarding premises: there is no adequate and clean pit latrine for staff and clients, there is no adequate rooms for different program activities.” (D 11).

“Proper implementation of infection prevention practice, proper medical waste should be practiced.” (D 14).

“There is poor disposal of used needles and syringes.” (D 21).

“There is no Infection prevention and quality committee formed at health centre level. There is no quality focal person within the system of health centers. There is no practice like Standard operating procedures (SOP) developed and supplied for health centre for major activities.” (D 10).

Some participants mentioned that there is no IP guidelines are intended for use in all health centers and primary hospital.

“Improve infection prevention as per the IP guidelines. There should be implementation of proper waste disposal system. In order to deliver quality health services standard protocol management, nursing manuals and SOP for each program should be devised.

“Availing sustainable clinical forms and progress notes at hospital level. Infection prevention standards should be practiced.” (D 21).

Infection control is everyone’s business, not the job of a few specialists. Infection control must be mandated at the highest level of management in the hospital. It must be the responsibility of the hospital board, with clear lines of accountability to hospital board level. The hospital should have an infection control committee with an infection control team. This team should have an annual programme with clear objectives and priorities for the surveillance and monitoring of infections. The infection control policy must reflect current

guidelines on infection control and legislative issues and include annual audits of these infection control policies (Jooste & Sibiya 2015:313).

All activities performed for infection prevention shall comply with national infection prevention guidelines. Infection risk-reduction activities include equipment cleaning and sterilization, laundry and linen management, disposal of infectious waste and body fluids, the handling and disposal of blood and blood components, and disposal of sharps and needles (ES 3611 2012:93).

Concerning protocol management, It is necessary that there should be a regular clinical audit on important clinical services provided in health facilities. It helps to ensure whether services provided in hospitals are being provided based on the agreed international, national or local standards that are known to improve the quality of the service. This in turn ensures that patients /clients get evidence based up to date care (MOH 2017:92). The general medical service shall have clinical protocol for management of at least common diseases. The following statements were stated by participants:

“Regarding standard service practice: To render quality health service delivery there should be standard operating procedures and protocol management developed as guidelines but not developed in this health centre.”(D 11).

“Most of the health workers are not familiar with common cases management as there are no standard operating procedures and protocol managements and guidelines and manuals.” (D 21).

According to Plunkett et al (2013:6) protocol management of outpatients’ services sets out a suite of processes that will enable the provision of quality outpatient services. The protocol forms the core guidance of the outpatient services performance improvement programme.

Participants’ responses were as follows regarding working manuals:

“There is no nursing guidelines and nursing manuals in our hospital as a reference. Most of the health workers are not familiar with common cases management as there are no standard operating procedures and protocol managements and guidelines and manuals.” (D 21).

“In order to give quality health services protocol management for common case should be developed to give standard nursing care there should be available nursing manuals for references, to bring quality health services delivery at this hospital there should be a system for external and internal quality assurance that needs immediate attentions.” (D 24).

“Nursing and safety manuals could have been developed. Standard protocol management for common cases could have been developed.” (D 28).

“Protocol management, nursing manuals, and job aids should be prepared and issued for health centres as a guidance for fresh staff as high turnover of staff every two years” (D 32).

According to Ethiopian standard (ES 3611:2012) there should be written copies of nursing manual should be developed and made available to the nursing staff in every nursing care unit. The manual shall be used to:

- provide a basis for induction of newly employed nurses
- provide a ready reference on procedures for all nursing personnel.
- standardize procedures and practice.
- provide a basis for continued professional development in nursing procedures.

Concerning internal and external quality control, quality health care is always linked to patient safety. The Institute of Medicine described quality as the degree to which health services for individuals and populations increase the desired health outcomes which are further linked to quality indicators or standards (Mitchelle 2012:288-304). Significant improvement in health services coverage and access since 1994 have been achieved. However, there are still notable quality problems, among the commonly cited and experienced by public are cleanliness, safety and security of staff and patients, long waiting times, staff attitudes, infection control and drug stock-outs. Given that there are concerns about quality at public sector facilities, there is preference by the public for services in private sector, which may largely, be funded out of pockets. Various members of the public cannot

afford to make these payments. This type of arrangements is not suitable for the country's level of development. Therefore, improvement of quality in the public health system is at the Centre of health sectors reform endeavors (South Africa 2011b:9).

The steps towards changing status quo for improved quality care required critical self-assessment, the willingness to change as well as determined commitment and contributions from clients, staff and management (Agyeman-Duah et al: 2014:8). One participant expressed that SOP should be developed:

“SOP should be developed for nursing staff; quality control systems should be developed.”  
(D 33).

Quality control (is a normative process that includes quality assurance, where a system seeks to ensure that quality is maintained or improved, and errors are reduced or eliminated. QC programs evaluate current health care quality identify problems areas, create a method to overcome issues, and monitor the method taken to improve quality. Processes consist of both internal and external quality assurance.

For instance, these monitoring and improvement activities may be internally motivated (problems are identified and addressed from within a health care facility by a facility based QI team) or externally required (standards are set, and problems are identified through inspection by government agencies (Woreda, Zone, region, federal). (Ethiopian National Health care Quality strategy 2016). The findings regarding internal and external quality control were the following:

“Issues like unit for rehabilitation services and developing standard protocol management and different job aids for different common cases are mandatory, there should systems and structures developed for improvement of internal and external quality assurances.” (D 28).

Quality control refers to all those functions or activities that must be performed to fulfill the company's quality objectives. Quality control begins long before products and services are delivered to the customers. Quality control involves the establishment of quality standards, the use of proper materials, the selection of appropriate manufacturing processes and the

necessary tooling to make the product, the performance of the necessary manufacturing operations and the inspection of the product to check on conformance with the specifications. Quality control is a staff function concerned with the prevention of defects in manufacturing so that the items may be manufactured right at the first time and not have to be reworked or rejected. In order to achieve this, there must be inspection and control of incoming raw materials to ensure that they meet the specifications, in-process inspection of manufacturing processes and final inspection and testing of the finished product to ensure satisfactory performance.

The laboratory should follow standard operating procedures (SOP) and conduct routine quality assessments to ensure reliable and cost-effective testing of patient's specimens. Quality assured test results shall be reported on standard forms to the general medical practitioner. Standard operating procedures for dispensing and medication use counselling shall be established to ensure patient's safety and correct use of medications. Sanitation techniques shall be regularly reviewed by the infection prevention committee and documented as per infection prevention standard (ES3617 2012:81). Some participants mentioned the following regarding standard operating procedures.

“There are no emergency cases handling guidelines. There are no protocols for managing queue to ensure efficient patient flow. There is no quality improvement plan or practice within the hospital structure. There is no manual for diet detailing nutritional and therapeutic standards at our hospital. The diet instruction provided to the patient and responsible person is not well organized. Drug and therapeutic committee not following the dietary services.” (D 17).

“There is no standard operating procedures guideline for all tests. There is no documentation of quality control program [there is no internal and external quality control]. There is no SOP or criteria developed for acceptance or rejection of clinical samples.” (D 18).

The hospital has a drug procurement policy approved by the DTC that describes methods of quantification, prioritization, drug selection, supplier selection and ordering of pharmaceutical supplies and is in line with national guidelines. The hospital conducts a

physical inventory of all pharmaceuticals in the store and each dispensing unit at a minimum once a year.

The hospital ensures proper and safe disposal of pharmaceutical wastes and expired drugs. The hospital has adequate personnel, equipment, premises and facilities required to store pharmaceutical supplies and carry out compounding, dispensing, and counseling services (PFSA 2016).

The health center shall have a separate pharmacy case team for dispensary and medical store each directed by a registered pharmacist/pharmacy technician. The health center shall have a medicine list that contains all drugs, medical supplies, medical instruments and reagents that can be used in the facility. The list shall be reviewed and updated annually. The health center ensures that all types of drug transactions and patient-medication related information are properly recorded and documented. The health center shall have policies and procedures for identifying and managing drug use problems, including; monitoring adverse drug reactions, prescription monitoring and drug utilization monitoring. The health center shall have a drug procurement policy approved by the DTC that describes methods of quantification prioritization, drug selection, supplier selection, and ordering of pharmaceutical supplies and is in line with national guidelines. The health center shall conduct a physical inventory of all pharmaceuticals, in the store and each dispensing unit at a minimum once a year. The health center shall ensure proper and safe disposal of pharmaceutical wastes and expired drugs. All units of the pharmacy service shall have adequate personnel, equipment premises and facilities required to store pharmaceutical supplies and carry out dispensing, and counseling services (PFSA 2016).

The basic medical laboratory shall have written policies and procedures and include at least the following: Procedure manuals (Standard Operating procedures, SOP) or guidelines for all tests and equipment. Report times for results (Established turn around time). Quality assurance and control processes. Inspection, maintenance, calibration, and testing of all equipment. Management of reagents, including availability, storage, and testing for accuracy. Procedures for collecting, identifying, processing, and disposing of specimens, laboratory safety program, including infection control. There shall be documentation of

quality control (internal and external quality control) calibration report, refrigerator readings and so on. (ES 3610:2012). The following were the participants' response recognized that Basic Medical Laboratory service Standards is not available.

"There is no SOP criteria developed for acceptance or rejection of clinical sample in this health centre." (D 13).

"There are no report times for results (TAT)." (D 18).

According to Ethiopian standard agency there shall be Report times for results (Established turn around time) (ESA, 3610:2012).

For an organization to function effectively, it has to identify and manage numerous linked activities. An activity using resources, and managed in order to enable the transformation of inputs into outputs, can be considered as a process. Often the output from one process directly forms the input to the next. (ES ISO 13485:2016).

Federal ministry of Health Hospital transformation guidelines 2015 outlines the need for hospitals establish, implement and monitor the implementation of a quality improvement strategy which focuses on outcomes and the quality standards that deliver them, and states "improvement in quality process and outcomes measures as the primary purpose of all public hospitals care. Participants noted that health service reform not implemented fully:

"There are also problems in procurement, purchasing and drug selection problem. There is a problem of push system which forces to accept near to expiry drugs." (D 23).

"Health service reform not implemented fully." (D 19).

"There was the need to provide an information or complaints desk to help clients, no price and type of services by the institution level posted, there is no compliance handling system implementation, there is no functional triage system and there is no service directory indicators where the services are located in the compound of health institutions." (D 25).

“Practically functional liaison officer could have been assigned. Patient flow could have been revised.” (D 24).

“Referral system from HPs and HCs to this hospital is very poor because hospital is usually busy on those patients that can be seen at health centres level. As there is no strengthened regulatory system it is very difficult to regulate expired drugs disposal. Infection prevention practice is not as per the standards of IP guidelines. There are no adequate stretchers to move patient to emergency room from emergency room to wards. The prescription paper of this hospital has missing to write what is on the standard prescription paper. There is no DIS [drug information system] within the hospital. There is no stock card and bin card utilization as per the standard. In radiology department there are no radiation safety protocols.” (D 20).

“Barriers of quality health services are poor triage system. In sanitary condition around toilet area and there is no identification which is for male and which are for female patients. Nurses are not wearing their caps during working hours.” (D 16).

“Laboratory reagents should be available from time to time. Emergency room should be separated from other activities and equipped with necessary materials.” (D 12).

Patient flow not designed, triage system not implemented. There are no IPD services by this health centre.” (D 25).

“There was the need to provide an information or complaints desk to help clients. No price and type of services by the institution level posted. There are no service directory indicators where the services are located in the compound of health institutions.”(D 29).

“There is a need to establish information desk.”(D 17).

Some of the participants stated as follows:

“Patient flow of the health centre is not good.” (D 10).

“And there is no triage system applied for screening.’ (D 11).

In the service sector, despite speed and courtesy in addressing customers, customer's hostility persists due to the inability of the service provider to maintain consistency in delivery and service. Another frequent problem is delay, due to the inability of the service employee to make pertinent and satisfying decisions when confronted by an impatient customer. Work systems must be designed not according to their internal logic or any external definition of efficiency, but according to how well they satisfy customer needs. This sometimes requires substantial structural changes in an organization-changes that do more than just revamp job descriptions. It may mean setting up work teams to perform all the functions once divided among several departments or combing several individual jobs to create, one "multi-skilled customer service professional.' In every case, total reevaluation of the management's role in the organization comes into play and lower level workers typically assume far greater responsibility for service quality (Bhat, 2010:597). The participants indicated that triage system needs to be functional:

"Poor practice at triage area, isolation room, emergency pharmacy and emergency laboratory." (D 17).

"No functional triage to facilitate patient screening." (D 18).

"There is no a written protocol of patient flow which describes triaging patients, how to get pharmacy, laboratory, and other diagnostic services and other procedures." (D 31).

"To give quality health service delivery there must be patient screening but in this health Centre there is a poor triage system, there is also poor networking systems with best performing health centers and primary hospital." (D 31).

The health facilities shall have a written protocol of patient flow which at least describes the following: the presence, roles, and responsibility of a receptionist at the gate, triaging of patients, how to get into emergency and delivery services, how to get into regular outpatient case teams and chronic illness case teams, how to be admitted if admission is needed, how to get pharmacy, laboratory and other diagnostic services, the process of discharge and the procedures of payment for services (ESA 3617 2012:125).

#### **Sub theme 4.4: Professionals**

The crisis in human resources' in the health sector has been described as one of the most pressing global health issues of our time. The world Health Organization (WHO) estimates that the world faces a global shortage of almost 4.3 million doctors, midwives, nurses, and other healthcare professionals. A global undersupply of these threatens the quality and sustainability of health systems worldwide. This undersupply is concurrent with globalization and the resulting liberalization of markets, which allow health workers to offer their services in countries other than those of their origin (Aluttis et al 2014:1).

Health workers have been defined by world Health Organization (WHO) as people whose job is to protect and improve the health of their communities. They are an essential input into the delivery of health services and a critical component in health policies. There is a consensus that despite their importance human resources have been neglected component of health system development in low-income countries. Currently human resources are in a very short supply in the health systems of low and middle-income countries compared to high income countries or with the skill requirements of a minimum package of health interventions (Gebremedhinand Teferi 2013:27).

Regarding staffing structure, health worker motivation defined as the extent an individual is willing to exert and maintain effort towards the achievement of an organization's goals, has frequently been cited as a critical barrier to effective health service delivery and contributor to the HCW shortage. In this regard, several themes characterize motivation and these include financial aspects, career development, continuing education, health facility infrastructure, availability of resources, relationships with the management of the health facility, and personal recognition (Ojaka, olango & Jarvis 2014:33).

Nearly all health centers found at Gindabarat district are challenged by shortages of health care providers' skill imbalances misdistribution, and negative work environment.

Skill imbalances misdistribution and negative work environment. The participants shared the same sentiment as follows:

“Health centre is expected to perform prevention than curative aspect but there is no environmental sanitation health worker within the health centers as structure, the minimum standard of midwifery in health center is supposed to be 3 but in this health centre only one midwifery is assigned.’ (D 9).

“Prevention, promotion and environmental sanitation practices are important program at health centre on the other hand there is no human resource i.e. there is no environmental sanitation worker assign in the health centre. However, there is no environmental sanitation worker within the HC structure staffing pattern.” (D 11).

“There is no quality focal person and environmental health professionals.’(D 12).

The health center shall have at least one ophthalmic nurse, psychiatric nurse, environmental health professional, quality improvement focal person, maintenance officer, trained professional for laundry machine (ESA 2012). According to Ethiopian standard agency (ESA 2012) Primary hospital shall have at least one ophthalmic nurse, psychiatric nurse, radiologist, physiotherapist, medical equipment maintenance officer, food and dietary professional, social worker, trained worker for laundry machine and housekeeping professional. In Gindabarat District all facilities do not fulfill the above standard. Participants stated that:

“Laboratory staff not presents at the health Centre to provide laboratory services at all times (24 hours)”. (D 13).

“There is no environmental health personnel assigned for housekeeping that plan organize, coordinate, control, and monitor all housekeeping activities. Shortage of human resource like social worker emergency worker.”D 17

“The total number and types of staff currently available in this hospital is not as per the standard. There is no schedules and health professionals assigned to coordinate health promotion activities.” (D 19).

“The other barriers includes at this hospital there is no radiologist, no physiotherapist, and machines for this purposes, no social workers to solve different social problems of the patients.” (D 22).

The participants believe that high turnover hinder quality health service as was captured by an interviewee who said:

“There are no health workers like health officer. There is lack of skilled and experienced personnel as there is high turnover from year to year. There are no trained health workers for emergency cases. There is no liaison officers. There is no general technician for health institutions as a structure. There are no environmental sanitation professionals in all health Centre.” (D 27).

“The facility has no environmental health worker even though, the majority of health centre are promotion, preventive, and disease control, no focal person for those activities as a structure, of health centre staffing, low human resource recruited that should be met minimum standard.” (D 32).

“No social workers to solve different social problems of the patients, as there is no surgeon surgical service are limited to emergency cases.” (D 22).

In Ethiopia, even if the health services organisation and management is decentralised, there are still a shortage of health professionals in different discipline. This has a great deal of undesirable impact on efficiency and effectiveness of the health of delivery services. High turnover is one of the major factors contributing to shortage of health workers. In Ethiopia 20% of health workers quitted from public hospitals and health centers and the first reason for high attrition rate was low salary.

Health care workers are the core members of the front- line and referral health teams in South Africa, assisted by the rehabilitative professional therapists in the health care (Booyens et al 2015:250). Lack of laboratory and pharmacy workers were expressed by the interview participants as stated as follows:

“Health centre shall maintain a sufficient number of staff with the qualifications, training and skills necessary to meet patients need in this health center, there is no laboratory worker even though minimum requirement of laboratory worker in one health center is 2 and there is no pharmacy worker even though the minimum requirement pharmacy worker in one health centre is 2. Therefore there should be adequate staff needs to be assigned to give quality

health service delivery. In addition to the low ratio of health professionals to population lack of quality health service delivery and lack of competency among health professionals needs immediate action to address these problems.” (D 37).

One of the interviewees emphasized that there is a critical shortage of health care providers in Gindabarat District public health facilities. Poor infrastructure does not inspire confidence among health workers working in health facilities as well as from the clients who use those facilities. The minimum requirement of health workers for one health center is 18 health professionals whereas from the six health centers of Gindabarat District health workers range from 6 to 9 health workers which means the staffing pattern ranges from 33 % to 50%. This shows that there is a critical health workers shortage that can hinder quality health service delivery. Available data from 2005 to 2015 indicate that over 40 percent of all countries have less than one physician per 1,000 people, and around half have fewer than three nurses or midwives per 1,000 people. Almost all least developed countries have less than one physician and fewer than three nurses or midwives per 1,000 people. In this study, health care providers perceive shortage of staff as an obstacle for the provision of quality patient care. Participants put it in relation to staff adequacy as follows:

“On staffing pattern the required nurse for one health centre is expected to be 5 but in our health centre nurses are 6 which shows that there is mal distribution of health professionals because even though this health centre has adequate nurses there are no laboratory and pharmacy workers for the health centre. Health workers requirement and allocation could have been balanced.” (D 37).

“Health Professionals are below minimum standard which is only six workers are assigned to serve a population about 25,000.” (D 10).

One of the interviewee indicated that an importance of training to manage emergency cases:

“Regarding professionals: there are no trained health workers to manage emergency cases.” (D 11).

“Pharmacist is not on duty or on call at all times outside working hours.” (D 14).

“In this hospital there is a shortage of anaesthetist and experienced scrub nurses.” (D 16).

“According to the standard 7 pharmacy workers are to be required but only 4 pharmacists are available and required additional 3 pharmacy workers for Gindabarat primary hospital.” (D 23).

“Bio-medical engineers should be assigned at hospital level.” (D 21).

The exodus of skilled health workers from public sector is mainly attributed to lack of career progression, unsatisfactory terms and conditions of service, poor working environment and lack of incentives, including promotions. The productivity of those remaining within the public sector continues to be affected by low morale (Nkomo 2013:31). He further explains that other than inadequacy of the health workforce, there is also a problem of imbalanced distribution of health personnel between the rural and urban areas.

There is a need for continuing Professional Development (CPD) in order to maintain professional competence in an environment of numerous challenges, rapid organizational changes, information technology, increasing public expectations and demand for quality and greater accountability.

“Most high-leveled specialized doctors and master’s holders live and serve in urban areas. In addition to the low ratio of health professionals to population lack of quality health service delivery and lack of competency among health professionals needs immediate action to address these problems.” (D 13).

“The professionals working at hospitals are those who have professional license, but there are health workers who did not renew their professional license timely these issues should be corrected by regulatory bodies.” (D 16).

The participants expressed basic in-service training as the critical component to ensure proper quality health services. The participants’ pointed out basic and refresher training; supportive supervision, mentoring and meetings were used to build the capacity of health care providers for better provision of quality services.

“There should be basic in-service training which is adequate, modular, practice based orientations type of training are mandatory for new staff every two years transfer like Gindabarat hospital.” (D 21).

“Health workers can only be competent if they have the necessary knowledge and skills and equipment to perform their work. In this health centre nurse would do the work of pharmacist and that of medical doctors. This generally results in a substandard quality health services.” (D 32).

Some of the participants mentioned that health workers are assigned without given orientation of routine work of the organization as indicated in the following statement:

“Orientation to health centre staff with regard to health centre policies, infection control and quality improvement activities could have been given.” (D 37).

“There is no trained focal person for nutrition and there is no nutrition manual.” (D 21).

“There are no incentives like training for career development for those staff like us in rural areas.” (D 21).

“In this health institution new staff and fresh professionals are working from year to year because there are no experienced staff retention mechanisms.” (D 24).

Some of the interviewees mentioned that there is no health Science college at Gindabarat District for staff to upgrade their knowledge and skills, as indicated in the following extracts:

“There is no health science college nearby for staff to upgrade their knowledge and skills.” (D 22).

“There are no references like books, journals electronic information for health care professionals.” (D 23).

The participants stated the issues of low staffing levels with high employee turnover as major factors that hinder to deliver quality health services. Poor working conditions are another

reason why nurses leave their current jobs to work at other institutions. The long and inconvenient working hours make it difficult for nurses to stay passionate and motivated in their jobs (Chikudu 2016:60). Inadequately staffed facilities due to staff attrition / turnover, absenteeism, lack of motivation or incentive can attribute for poor quality health services. In relation to issues of health care providers the participants described the challenges affecting proper implementation of quality health service delivery as knowledge gaps and not having a manual for implementation of the service. Health care providers were busy with routine activities, and in addition to health care providers' motivation to work, problem of high turnover of staff were challenges mentioned by the participants. High turnover of staff affected the quality of the service. The participants mentioned the following:

“There is high turnover therefore yearly new health workers assigned. The number of staff is not adequate as per the standards, Since it is rural health centre in set up there is high turnover therefore yearly new health workers assigned (skill gap)” (D 12).

“High turnover and low retention of skilled staff, since it was upgraded from health centre design there is a problem for hospital level service.” (D 20).

“Regarding hospital staff the barriers predisposes to high staff turnover every two years specialists are absent, pharmacy workers are inadequate there is poor incentive mechanisms” (D 20).

“In this district, there is no nearby college to improve the knowledge and skills of health professionals, there is high staff turnover. They will be transferred to other areas as they serve for the maximum of two years. In this health institution, new staff and fresh professionals are working from year to year because there are no experienced staff retention mechanisms”. (D 24).

“By improving incentive mechanisms to make high staff retention rate should be in place” (D 20).

“The staffing level of our health centre is below the minimum standard in addition to this low allocated staff there is high staff turnover as a major factor that hinder quality health service delivery” (D 32).

The participants indicated that people were resigning based on various reasons. They left the current workplaces to go where they would be paid well.

Health workers must have good skills to communicate effectively. Communication problems exist among health care provider and clients and community, health posts and health centers, health centers and district health office, district health office and primary hospital. Poor working relationships between health care providers' and their employer affects quality health service delivery. This is consistent with what the participant stated:

“Implementation of the reforms, to notify the gaps of human resources for regional health bureau from time to time, to assign quality FP at hospital level, to notify the importance of preventive medical equipment maintenance” (D 17).

“Language barrier is also a problem to address this problem in addition to the existing shortages of health workers one health worker will be assigned for language translation at each OPD. At OPD there is a problem of both visual and audio privacy which leads to confidentiality breach.” (D 18).

“No coordination and integration approach among the workers of district health office and health centres. There is no caring, respecting and compassionate health care providers.” (D 32).

“There is poor interpersonal communication between health provider and client.” (D 19).

When health care providers, administrators, patients and families work in partnership, the quality and safety of health care rise, costs decrease, and patient care experience improves.

Concerning provider satisfaction, satisfied and committed employees deliver better care, which results in better outcomes and higher patient satisfaction. Medical care without compassion cannot be truly patient-centered. Compassion, which lies at the intersection of empathy (in this case, understanding patients' concerns) and sympathy (here feeling patients' emotions) combines a response to the distress of others and a desire to alleviate that distress. Compassionate care addresses the patients' innate need for connection and

relationship and is based on attentive listening and a desire to understand the patients' context and perspective.

Compassion is considered to be crucial and the foundation of a health care system that provides caring, safe, and high quality care and is described as holistic, non-judgmental, empathetic, respectful, and empowering. A significant proportion of health professionals see patients' as just (cases) and do not show compassion. Lack of respect to patients and their families is also a common complaint. In many of our hospitals, senior physicians cancel their outpatient clinics without informing their patients; elective surgeries get cancelled; admitted patients are by default getting the care they need from relatives as nurses, for various reasons, have limited their role to providing injections and securing IV lines. Proper counseling during dispensing of drugs is also becoming a rarity. The quality of lab tests and the quality assurance process that lab professionals have to take before issuing results is not practiced as expected (HSTP 2015:118).

For provider motivation CRC has to be a culture, self-driven inner motive and a legacy that the current generation of practitioners leaves to their successors. One can make a safe assumption that health professionals have chosen their profession because they want to help people, stop suffering of the poor and save lives. Being a health professional is a very stressful job as professionals may face life and death situations in any minute. However, at the same time, it is also a rewarding job as so much satisfaction can be obtained by saving lives and touching the lives of many in one's professional career (HSTP 2015:119).

The attrition rate (turnover) of hospital/health center staff is an indicator of the quality of the working environment for staff. A high turnover indicates that employees are not satisfied with their working environment. When employees are not satisfied in the workplace they tend to be poorly motivated and are less efficient in their work, and less motivated to provide quality healthcare (MOH 2017:77).

Health workers are susceptible to "push" factors, such as pay and working conditions, and "pull" factors, such as job satisfaction and economic prospects. Ensuring that staff receives adequate pay for their work is key to retention. However, salary is not the only important

dimension. In many contexts, the low numbers of trained health staff in remote areas is due to the lack of supporting infrastructure and opportunities for staff and their families. (Ojaka et al 2014:33).

Work motivation is regarded as the drive to become the best, a desire for personal growth and development is a requirement for personal fulfillment. Motivation ensures that workers thrive well where there is a challenge and involvement in problem solving and decision-making.

Staff development which is maximising the strengths of each individual and helping them to identify and develop their talents and skills, engaging staff in formulating policies and decision making, increase wages, benefits and probably introduce hiring and retaining bonuses, financial support towards education and training staff will also help in retaining and attracting new personnel and reducing the salary gaps between organisations. In the health care industry, the challenges to retain professional nurses is ongoing because of global nursing shortage and factors that are related to the health care environment, these include working hours, increased workload, poor salaries and working conditions, which make retention efforts more challenging than in other industries (Chiduku 2016:61).

The high cost that comes with turnover has highlighted the need for organisations to make retention of staff their number one priority, retention entails preventing people from leaving an organisation to work elsewhere.

This is not an easy task. It requires organisations and management to give attention to employee market and understand what people are seeking from work environment in order to retain them. Organisations will need to identify the reasons why employees leave, and address them (Mokoka & Ehlers 2010:2).

Providers' job satisfaction is very important in delivering high quality services to patients. Health care providers identified organizational factors they believed influence their motivation and consequently job satisfaction. These were lack of premises, product, process, procedures, professionals and practices. The participants highlighted the following:

“There is poor health provider with poorly satisfied with their performance as there is lack of transportation means and geographically in accessible areas.” (D 16).

“Due to these obstacles and barriers there was poor quality health service delivery.”(D 17).

“Most health workers says that living conditions in this rural set up affects their morale motivations and on giving their quality health service delivery. As there is no access to good schools for their children and there is no nearby college for themselves that is why most of our health workers transferred to other areas yearly. Every year new staff no retained experienced health workers that hinder quality health service delivery.”(D 19).

“Regarding hospital staff the barriers predisposes to high staff turnover every two years specialists are absent, pharmacy workers are inadequate there is poor incentive mechanisms.” I wish every staff to have motivation comes from within.”(D 20).

“There are poor safety measures. Unless otherwise the above barriers solved there is a poor quality health services will continue. There is no health care providers’ satisfaction.”( D 22).

“I think we could not give quality health services.” (D 26).

“Generally we are not in a position to give what we are supposed to give.” (D 28).

“Difficult to render quality health services.”(D 29).

“Quality of health service delivery is hampered when there is overload of patients.”(D 30).

Inadequate access to electricity, medical equipment and transportation was found to be most critical in Gindabarat district. Lack of housing, inadequate payment of support staff and poor physical state of the health facility contribute to a non-conducive working environment. Inadequate working conditions, coupled with low job satisfaction and stability, are bound to demotivate health workers and impact retention. This study is in line with the study conducted in Turkana (Ojaka et al 2014 12-33). In this study, some participants said the following:

“Difficult to render quality health service as there is no adequate practices, premises, product and professionals.”(D 30).

“Generally we find it difficult to achieve to give them the necessary quality health service delivery or we could not give the necessary care that we’re supposed to give.”(D 36).

“We find it difficult to give quality health services deliveries.” (D 37)

Providers’ job satisfaction is very important in delivering high-quality services to patients. Health care providers identified factors they believed influence their motivation and consequently job satisfaction. These were access problem for means of transportation geographical, lack of college for themselves and there is no good school for their children, and working environment.

#### **4.9 CONVERGENCE OF QUANTITATIVE AND QUALITATIVE FINDINGS**

Convergent mixed methods was followed. The researcher collected both quantitative and qualitative data, analysed them separately, and then merged the results to see if the findings confirm or disconfirm each other. The results revealed barriers towards quality health services delivery which were lack of equipment and supplies (inadequacy of blocks, materials, medical equipment; lack of sustainable supplies of drugs); inadequate human resources (low retention of skilled staff; absence of focal person assigned for quality improvement; shortages of health workers); absence of standard operating procedures (protocols, guidelines and manuals); and dissatisfaction of health care providers with services provided at the District. Based on the results, guidelines were developed to enhance quality health care delivery. Guidelines were developed to overcome the barriers. The recommendations were aimed at improvement approaches at all levels of health service delivery.

Issues that needed immediate attention were as follows from both approaches were as follows:

**Facility building:** In this health centre from the very beginning health centres could have been built as type A HC which has 3 blocks; adequate space could have been given for expansion as per the standard of health centre. Additional blocks should be constructed. Emergency room should be separated from other activities. The facility premises has poor layout as the hospital is upgraded from health centre design, therefore the current set up needs renovations. This conditions needs to be addressed by availing additional block construction. There should be separate emergency room as a department there are no separate toilet rooms for patients and staffs. There are no identified toilets for male and female patients.

There could have been bath rooms for patients. Laundry machine could have been maintained. There should be furnished with shower facility for bathing, adequate beds, sheets, linen, wheel chairs, pyjamas and blankets at primary hospital level. There should be separate sterilization room to deliver quality health services; there should be supply of autoclave. Mukadima health center built over 50 years back, health facility infrastructure should be improved and the old building should be renovated or if possible new building for patient care should be constructed.

**Product:** Before starting quality health service inputs like human resources, spaces, medical equipment and supplies should be in place. There should be electricity and water supply for each rooms of the health centre. There should be adequate and clean pit latrine for patients and staff. Inpatient service should get attention to start, Ambulance service needs to be available, guidelines nursing manuals and job aids needs to be developed medical equipment and other materials needs renewal by allocating budget. Health facility infrastructure should be improved and the old building should be renovated or if possible new building for patient care should be constructed. There should be sustainable medical supply, assigning pharmacist, electric power interruption should be addressed. Issues that need immediate attention with regards to health services delivery are availing patient monitoring medical equipment, appropriate patient beds, and adequate supply with BP apparatus, stethoscopes, otoscopes, patient medication box, and patient locker. There should be furnished with shower facility for bathing, adequate beds, sheets, linen, wheel

chairs, pyjamas and blankets. There should be mechanisms to select poor among the poor for free treatment.

Health centre is supposed to give admission services with 10 beds. The “IPD” service should commence at this health centERS. There should be mechanisms to select poor among the poor free treatment. Health centre is supposed to give admission services with 10 beds. The “IPD” service should commence at this health centre level. There should be standardized operating procedures for all routine activities of the health centres health workers. Structure of basic programme needs to be updated.

**Organisational systems:** Immediate attention should be given for quality. There should be strengthening referral systems at PHCU level. Strong relationship with regulatory system and different sector committee for better medical waste disposal needs to be developed. Infection prevention practice should be implemented as per the guidelines of IP. Focal person should be assigned for quality. In my observation the issues that need immediate attention are infection prevention practices needs to be improved, rather than giving attention for coverage it is much better to give attention for quality. The triage system should be functional; SOP standards should be developed as a strategy to enhance quality health service delivery. Expired drugs should be disposed to appropriate area from the shelves of health centers. There should be implementation of IQA and EQA in the HC. There should be (SOP) for all tests, there should be IQA and EQA standards to control quality. Standardized prescription should be utilized; there should be proper disposal of expired drugs. SOP on how supplies of stock should be developed. To avail dietary manual for the hospital, Job description could have been given for each health workers. Guidelines nursing manuals and job aids needs to be developed medical equipment and other materials need renewal by allocating budget. Every health centre shall have license before giving health services as per the standard requirements. Systems should be in place for ensuring the quality of all health care deliveries. There shall be license permission as per the minimum requirement could have been done.

**Relationship:** There should be good interpersonal communication between health workers and patients and there should be good communication between health centers and district

health office. The relation and support of health centres for health posts should be strengthened.

**Service provision:** Information Communication and Technology and Broadcasting corporation services should get immediate attention as most of the activities of health centre lie on prevention and promotion services. To give more attention for quality than coverage needs improvement. Confidentiality like visual and audio should be in place to render quality health services by availing rooms and screen for each diagnostic area. In addition to the low ratio of health professionals to population lack of quality health service delivery and lack of competency among health professionals needs immediate action to address these problems.

**Staff accommodation:** Home should be available either by community or government needs to construct in this scarce condition to alleviate staff stress or anxiety. Problems like lack of accommodation for health workers even for rental, and the existing narrow rooms occupied by health workers as a resident compromising the quality of health service delivery should be solved.

**Staff adequacy:** Serving the community with a total of six health professionals of health centre which is below minimum standard, this problem needs to be solved. Activities that need immediate attention unless professionals like pharmacy and laboratory workers assigned for the health centre health service delivery is incomplete. To notify the gaps of human resources for regional health bureau from time to time, to assign quality FP at hospital level, laundry personnel could have been assigned, absence of social workers can be alleviated if policy makers could have been solved as a health system. Shortage of staff and low experience of the existing staff needs to be solved.

**Staff capacity:** Health workers can only be competent if they have the necessary knowledge and skills and equipment to perform their work. In this health centre nurse would do the work of pharmacist and that of medical doctors. This generally results in a substandard quality health services. Training should be given on the emergency case management for those assigned at emergency unit. There should be basic in-service training which is adequate,

modular, practice-based orientations type of training are mandatory for new staff every two years transfer like Gindabarat hospital. Books and library should be there for reference and competency of health workers. Most high-level specialized doctors and master's holders prefer to live and serve in urban areas than rural set up like Gindabarat district. The professionals working at hospitals are those who have professional license, but there is health workers who did not renewed their professional license timely these issues should be corrected by regulatory bodies. There should be separate emergency rooms and trained health workers to handle emergency cases.

**Staff stability:** Staff retention mechanism should be done to decrease high staff turnover of experienced staff. By improving incentive mechanisms to make high staff retention rate should be in place.

**Transportation access:** Health workers needs transportation facility to supervise their performance and to refer their patients to higher health institution, there should be means of transportation allocated otherwise giving service by walking on foot can hinder the quality of health services. As road is the main entry for all development government and community has to work on the issue of the road construction then the existing health problem will be addressed. As this periphery hospital is very far from information and technology there should be a linkage with general hospital as a network to update the skills and knowledge of the rural hospital. Procurement of Ambulance by government and community could have been done since it is geographically where there is no transportation means.

**Technical guidelines on themes identified:** Quality health service delivery can only effectively implemented when the necessary resources are made available. Resources were required not only to ease difficulties that staff goes through in offering services but also to make clients more comfortable and safe while in the health facility. Infrastructural design should endeavour to provide adequate space for the workload and facilitate patient privacy, comfort and dignity. Waiting areas should be comfortable and have adequate seat for clients. Environmental cleanliness is important. Cleaning should comply inline with the infection prevention and control guidelines of the Ministry of health. The built and aesthetic

environment of health facilities is very important to the well-being of both clients and health care providers.

An important issue to render quality health service delivery is adequate and appropriate levels of full-time staff. It is common knowledge however that the health sector has over the years been suffering with inadequate numbers, and unbalanced skill mix and maldistribution of staff. Major barrier that was identified by health professionals was the inadequacy of the staff to offer quality health services. Low number of staff caused more delays in attending to clients. Leadership from top management, departmental and unit heads, supervisors, physicians and other senior health care providers at all levels is important for the approach to health care to succeed in addition to the health care providers practice.

**Standard guidelines:** A standard guideline is produced in response to a request for guidance in relation to a change in practice or controversy in a single clinical or policy area (WHO 2012:3). Like many developing countries, Ethiopia over the years has consistently been looking for ways to improve the quality of health services delivery. Health workers need guideline that is specifically outlined in documents such as policies, guidelines, standard operating procedures.

**Standards and criteria in healthcare:** The terms standards and criteria are often used interchangeably when quality improvement issues are discussed. Although closely related, they are not synonymous. Standards are statements of what good healthcare should be. In other words a healthcare standard is a description of the desired level of performance for judging the quality of healthcare (Jooste & Sibiya 2015:302).

#### **4.10 SUMMARY**

In this chapter the main findings for the phase 1 were presented and discussed. All the emerged themes were analysed, discussed and confirmed with literature. In the next chapter the implementation of phase-2 which is development of guidelines to enhance quality health services delivery is presented.

## **CHAPTER 5**

### **DEVELOPMENT OF THE GUIDELINES TO ENHANCE THE QUALITY OF HEALTH SERVICE DELIVERY**

#### **5.1 INTRODUCTION**

This chapter presents the development of the guidelines to enhance the quality of health service delivery in Ginbadarat district. The aim of this chapter is to present Phase 2 of the study. the goals of this mixed-methods design study was to triangulate quantitative and qualitative data sources and results. on high-quality services.

#### **5.2 DEFINITION OF GUIDELINES**

Guidelines are directing principles which lay out suggested policy procedure or non-mandatory rule (Johnson & Stoskopf 2013:414). Within the health services, guidelines are standardised specifications developed through a process that uses the best scientific evidence and expert opinion for the care of the typical patient in the typical situation (Grohar-Murray & Langan 2011:184). Guidelines are effective tools for improving the quality of care (Kelly & Tazbir 2014:327). Guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances (Field & Lohr 1990:38).

Quality is resulting from the way resources are used, and not from how many resources are available, carefully developed guideline creates the conditions which providers need to improve quality. There is no one approach or guideline which works in all situations, but there are guidelines which can help to address the problems.

#### **5.3 PURPOSE OF THE GUIDELINES**

The purpose of the guidelines was to enhance the capacity of high performing districts, primary hospital or health centers to undertake with middle performer health facilities so as both organizations will provide standard quality health services.

#### **5.4 SCOPE OF THE GUIDELINES**

The proposed guidelines are applicable to all health care providers employed in Gindabarat District health centres and primary hospital. The guidelines may also be applied to the national health care providers facing similar quality health service delivery problem.

#### **5.5 STEPS FOLLOWED IN THE DEVELOPMENT OF GUIDELINES**

The researcher followed logical reasoning processes in order to develop guidelines for quality health service delivery. The research study was conducted through mixed approach. The process of reasoning involves both induction and deduction. Logical reasoning process: According to Polit and Beck (2011:11), logical reasoning is a problem-solving method that allows researchers to use formal systems of thought.

Inductive reasoning refers to the process of making generalization based on specific observations made out of facts. Inductive reasoning assists researchers in drawing conclusions about phenomena under study (Polit & Beck 2011:730), in this case drawing conclusions based on the views of the respondents.

Deductive reasoning is described as a process of developing specific predictions from general principles (Polit & Beck 2011:725). In this study the researcher drew conclusions from the responses of the participants through analysis of data. Subsequently the study findings were used to develop guidelines and recommendations for the quality health service delivery.

In this study, the guidelines were developed with the purpose of improving the quality health service delivery in six health centers and one primary hospital public institutions within the Gindabarat District, Oromia regional state. The guidelines were based on the findings of the research study and literature review related to the study.

#### **5.6 THE DEVELOPED GUIDELINES**

The results revealed barriers towards quality health services delivery which were

- inadequate human resources,
- lack of equipment and supplies,
- absence of standard operating procedures, and
- dissatisfaction of health care providers with services provided at the district.

Based on the results, guidelines were developed to enhance quality health care delivery. Guidelines were developed to overcome the barriers, The following guidelines were developed for the health centres and primary hospital managers at different levels where the researcher conducted the study, and the researcher will advocate for their adoption by managers and refine the guidelines if necessary with a view to scaling up the adoption of the guideline on a national level.

- **Inadequate human resources**

The Ethiopian FMOH report indicates that the health workforce density in Ethiopia has increased from 0.84 to 1.3 per 1000 population between the year 2008 and 2013 though it is still far behind the minimum threshold required to ensure high coverage with essential health interventions (HSTP 2015:45). It is common knowledge that the health sectors has over the years been with inadequate numbers, and unbalanced skill mix and mal-distribution of staff.

The major barrier that was indicated by health care providers was inadequacy of the staff to offer services. The measure categories mentioned were pharmacist, laboratory workers, health officers and midwives. The participants noted that the low number of staff in Gindabarat District caused more delays in attending to patients.

**Guideline1:** Ministry of health to take measures to develop a national staffing pattern and other innovative ways to improve the efficiency and effectiveness of the available staff.

Rationale: The current shortages of specialists at primary hospital level needs to be solved.

The Government has to intervene on the high staff turnover and set retention mechanisms at rural set up. There is less skilled staff at health centres that needs skill orientation for less experienced staff. In addition to the low ratio of health professionals to population lack of

quality health service delivery and lack of competency among health professionals needs immediate action to address these problems. The shortage of the pharmacy workforce in Ethiopia is more severe than even other African countries, owing to the fact that Ethiopia has a low pharmacist density (2.38 per 100,000) compared to even the African average (8 per 100,000). This highlights the need for training more professionals that would be able providing better pharmaceutical care (Bilal, Tilahun, Beedemariam, Ayalneh, Bisrat, Hailemeskel & Engidawork 2016 9).

- **Lack of equipment and supplies**

From the onset, health centres could have been provided adequate space could have been given for expansion as per the standard of health centre. The facility premises, structure and layout were not adequate and fully functional for the delivery of health services.

**Guideline 2a:** Strengthen the supply chain management system

**Guideline 2b:** Health facility infrastructure should be improved and the old building should be renovated or if possible, new building for patient care should be constructed and supplied with adequate equipment.

Rationale: Resources were required not only to ease difficulties that staff goes through in offering services but also make clients more comfortable while in the health facility. The health system needs to make sure that health facilities are equipped with adequate and functional equipment and supplies. The structure and aesthetic environment of health facilities is very important to the well-being of both clients and health care providers.

- **Absence of standard operating procedures**

In order to deliver quality health services standard protocol management, nursing manuals and SOP for each program should be devised. Documentation systems need to be improved, work done needs to be monitored, and work monitored should be recorded and reported.

**Guideline 3:** Ensure licensing of every health center before giving health services the standard requirements.

Rationale: Systems should be in place for ensuring the quality of all health care deliveries. There should be standard referral systems within the health institutions otherwise hospital workers will be overloaded with the activities that could be addressed by health centres levels.

The health facilities should provide standard operating procedures available for all tests, SOP on how supplies of medical store (PFSA) emergency cases handling guidelines, manual for diet detailing nutritional and therapeutic standards, nursing guidelines and nursing manuals as a reference and SOP on documentation and completion of all patients recording, registers, and reporting formats at health centers and primary hospital.

Issues like unit for rehabilitation services and developing standard protocol management and different job aids for different common cases are mandatory; there should systems and structures developed for improvement of internal and external quality assurances.

Regulatory body should be strengthened at all levels to regulate quality health services. District health office needs to decentralize budget for health centre. The triage system should be functional; SOP standards should be developed as a strategy to enhance quality health service delivery. Expired drugs should be disposed to appropriate area from the shelves of health centers.

- **Dissatisfaction of health care providers with services provided at the district**

Eighty-five percent of health care providers in Gindabarat District disagreed on overall quality health service delivery in their institution. Hence a system should be in place to increase their level of satisfaction.

**Guideline 4a:** Investigate the root causes of dissatisfaction

**Guideline 4b:** Design and implement means of improving the satisfaction

Rationale: Major barrier that was indicated by health care providers was inadequacy of the staff to offer services. The participants noted that the low number of staff in Gindabarat District caused more delays in attending to patients. The Ministry of health has to take measures to develop a national staffing pattern and other innovative ways to improve the efficiency and effectiveness of the available staff. Perceived outcome

Proposing these guidelines to the EFMOH , RHB, Zone and districts health facilities will assist partners and structures of the whole public health system to integrating partnership within the health system as a key tool to transform middle and lower performing organizations to contribute to an increased resources (human resource, equipment drug and supplies guidelines, standards), ensure availability of standardised quality health service, improve health worker motivation by providing clear guidance and continued learning and evaluate and improve the performance of health facilities in quality health service delivery.

Delivering high-quality healthcare services is a corporate social responsibility of an organisation. Therefore, managers are responsible enough towards increasing the productivity of healthcare organisations through the improvement of the quality of services. Regulatory bodies can support accountability through their core functions. This includes maintaining a register of professionals, setting standards for education and training, requiring continuing professional development, and providing guidance on standards and ethics.

Successful quality management implementation requires a significant change in mindsets, attitudes, and beliefs of individuals with regard to quality. Teamwork and collaboration should be fostered. Good communication, cooperation, and collaboration among healthcare providers support providing effective and efficient healthcare services, and promote shared responsibility for patient care. Leadership capital is the leader's ability to direct an organisation forward in a positive direction. It is important that managers develop their leadership skills and demonstrate their commitment to quality by establishing a shared vision and setting a clear direction for the organisation. Managers should transform their organisation's value system and ultimately the organisational culture, policies, and structure in order to meet the needs of their employees and customers.

Healthcare service providers are encouraged to regularly monitor healthcare quality and accordingly initiate continuous quality improvement programmes to maintain high levels of patient satisfaction. Supportive leadership, proper planning, education and training, and effective management of resources, employees, and processes can improve healthcare quality. Healthcare managers should apply techniques and tools to operationalise these quality management constructs. Policy-makers' support, in terms of providing necessary resources and establishing supportive rules and regulations is critical.

Patients are constantly looking for quality healthcare services. Understanding the factors that affect healthcare service quality helps benchmark for best practices, deliver appropriate care, and improve processes to reduce the frequency and severity of medical errors

## 5.7 VALIDATION OF THE GUIDELINES

The presented guideline was sent to experts who had experience in the field to validate guideline. The experts were selected purposively based on their practical and programmatic experience of guideline development. The purpose of validation was to ensure the proposed guideline was feasible, acceptable and practical for quality health service delivery.

A total of six experts were selected from different organization. Two expert from ministry of health who were working on quality and regulatory department, two from Addis Abeba University, one from regional health bureau and one from zonal health department.

**Table 5.1: Biographic information of experts**

<b>Sr No</b>	<b>Qualification</b>	<b>Occupation</b>	<b>Work experience</b>
1	BSc in Nursing	coordinator	7 years
2	BSc in Public Health	coordinator	10 years
3	Medical Doctor	Lecturer	11 years
4	MPH	planning	12 years
5	PHD	Lecturer	15 years
6	BSc, MPH, PHD	Lecturer	16 years

The guidelines were sent to experts. Abstract of the study was attached with the ethics clearance certificate. The participants were expected to evaluate each guideline and requested to score. The experts were requested to score each points from 2 that make the total score from 100 and the researcher considered guidelines would be of acceptable level if the score is (80) and above. The participants were expected to evaluate each guideline and requested to score using Likert scale as described in Table scaleas described in Table 5. All 6 experts sent their feedback to the researcher based on the criteria provided. A score from 0-2 where 0 means not met, 1 partialy met and 2 fully met standards. Total score out of 100. The organization met the quality standard if the score is >80, if the score 50-79 partially met and if the total score is below 50 the organization does not meet the quality standard. There were no changes made on the guidelines as they were found to be relevant.

**Table 5.2: Criteria for validating each guideline**

<b>Criteria</b>	<b>Strongly Disagree (1)</b>	<b>Disagree (2)</b>	<b>Agree (3)</b>	<b>Strongly Agree (4)</b>
<b>Clarity:</b> the specific guideline is simple and easily understandable				
<b>Specificity:</b> The guideline is specifically focusing on quality health service delivery				
<b>Reliability:</b> The guideline can be used consistently by other health care facility				
<b>Flexibility:</b> The guideline can be flexible				
<b>Effectiveness:</b> The guideline is able to achieve the objective, which is to strengthen quality health services.				
<b>Validity:</b> The guideline is justifiable or evidence based				
<b>Relevance:</b> Guideline is appropriate for the strengthening of quality health services.				
<b>Applicability:</b> The guideline users are clearly defined, as described in the scope of the the guideline.				
<b>Acceptability:</b> The guideline is realistic and acceptable by MOH/RHB/ZHD and stakeholders.				
<b>Achievability:</b> can be executed by MOH/RHB on the implementation of quality health service.				

## 5.8 SUMMARY OF GUIDELINE DEVELOPMENT

Quality health service delivery can only effectively implemented when the necessary resources are made available. Resources were required not only to ease difficulties that staff goes through in offering services but also to make clients more comfortable and safe while in the health facility.

Infrastructural design should endeavour to provide adequate space for the workload and facilitate patient privacy, comfort and dignity. Waiting areas should be comfortable and have adequate seat for clients. Environmental cleanliness is important. Cleaning should comply inline with the infection prevention and control guidelines of the Ministry of health. The built and aesthetic environment of health facilities is very important to the well-being of both clients and health care providers.

An important issue to render quality health service delivery is adequate and appropriate levels of full-time staff. It is common knowledge however that the health sector has over the years been suffering with inadequate numbers, and unbalanced skill mix and mal-distribution of staff. Leadership from top management, departmental and unit heads, supervisors, physicians and other senior health care providers at all levels is important for the approach to health care to succeed in addition to the health care providers practice.

Quality in healthcare is a production of cooperation between the patient and the healthcare provider in a supportive environment. Health care service quality depends on personal factors of the healthcare service provider in and the patient and factors pertaining to the healthcare organization and broader environment. Differences in internal and external factors such as availability of resources and collaboration and cooperation among providers affect the quality of care and patient outcomes (Mosadeghrad 2014:77).

The public holds governments accountable for the quality of care services. There is growing evidence of suboptimal outcomes because patients are not provided in a timely way with appropriate treatments and because of poorly organized health care services. Comparisons of quality of care show major differences between countries. Many health providers are dissatisfied with their conditions of work and are ready for changes which allow them to give better care

There is evidence that quality methods can help to solve these and other challenges faced by low and high income countries alike. However, money can be wasted on methods and approaches which are not appropriate for the country or problems, by poor implementation, by inadequate data to assess if actions are working, or by not sustaining efforts which take time to produce results. A carefully developed guideline creates the conditions providers need to improve quality, in part by mobilizing and coordinating many different contributors to the task. It can ensure the right approaches for the circumstances, that there are structures, resources and skills to test and make the changes needed, and that there are regular reviews and renewals (WHO 2008:3).

This perspective focuses on the quality and safety of services received by a patient who is under health care. It is often viewed along the three entry points listed below:

- Patient quality: the service provides patients with what they want and expect, during and after the service.
- Professional quality: the service follows procedures and methods which are thought to be most effective in meeting patient's clinical needs, as assessed by health professionals.
- Management quality: the service uses available resources in the best way to achieve patient and professional quality, without waste and within higher level requirements.
- The three dimensions also give a basis for measuring progress in improving quality- one of the things which a quality strategy needs to do.
- Patient safety and quality can be measured through complaints, level of satisfaction, and claims related data at a service level.

- Professionals safety and quality can be measured by assessing which patient do not get professionally appropriate prevention services or treatments, or by collecting indicators of clinical outcome and error reports.
- Management safety and quality can be measured by unit costs, length of stay, and measures of waste. Many error reports indicate lack or failure of dedicated management systems.

These three key features are usefully combined with three other ways of considering quality:

- The inputs and structure of quality (e.g. how many personnel and which skill mix, how responsibilities are distributed etc),
- The process (e.g. which actions are taken); and the outcomes (e.g. results for patients and others). It takes time to see results of quality actions on patient outcomes, so there is a need to also assess whether there are inputs and structures, as well as whether the right things are done (processes) which are likely to lead to patient outcomes (Donabedian 1980).

In this study, the Donabedian's model was used as a framework to explore and describe factors that were associated with the structure, process and outcome of quality health service delivery. Themes were identified in relation to structure, process and outcome. Among the most famous saying of Deming is his statement that 85 percent of problems come from the systems and only 15 percent from the workers. Through a systematic approach to measuring current performance and identifying those areas that need to be targeted for improvement, ideas are generated to identify the best solution to the problem. (Jooste & Sibiyi 2015:293).

When an organization decides to embark on a quality improvement journey, it must start out by conducting a quality audit. This is rather like looking into the mirror and asking what is happening or not happening in the organization. According to ISO 9001:2000. Quality means giving complete satisfaction to the customer through the utilization of standards that are accepted by both supplier and the customer. Quality also involves complying with an agreed standard at an accepted specification and at an acceptable cost (Jooste & Sibiyi 2015:302).

## **5.8 SUMMMARY**

This chapter presented the Phase 2 of this study. It was deduced that providers relied on their rather “old” knowledge, varying opinions, and personal experiences with certain interventions in their daily practice. Thus, the need arose to develop guidelines that providers are expected to follow with uniformity during the provision of primary care services to their clients.

## CHAPTER 6

### CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

#### 6.1 INTRODUCTION

This chapter presents the link between the research objectives and views obtained from the literature study. The methods employed in answering the research questions were mixed methods research design, where data were gathered from both a qualitative and a quantitative perspective. The population consisted of health workers working in public hospital and health centers of Gindabarat district. Conclusions were drawn and recommendations were made for further research. Such procedures brought a much richer understanding. The chapter further presents a summary of the findings, conclusions and limitations and provides guidelines for enhancing quality of service delivery.

How to measure quality depends on the context in which the goods and services are offered and the type of industry. In measuring quality, therefore, there is a need to have a sector-specific instrument that meets the requirements of the context. As service quality is a multidimensional construct, this in turn, calls for dimensions that can possibly measure the quality of health service delivery.

#### 6.2 CONCLUSION ON THE FINDINGS

##### PHASE 1 Quantitative approach

As shown in Table 4.1 majority of health workers that participated in the study were male (n = 78; 61.4%) compared to female (n=49; 38.6). The fact that female health care workers in Gindabarat district were less (38.6 %) of the workforce may attribute to the difficult environmental conditions and particularly in the hard to-reach areas within the district .This gender imbalance has serious cultural implications for service delivery. Especially because a large barrier to skilled delivery in health facilities is the unwillingness of women to be examined and have their child delivered by a male service provider.

- **Structure related gaps identified at Gindabarat public health facilities**

Professionals: Human resource is a vital component for health organisation in delivering health services. There were factors that affected employee performance such as working conditions, employee and employer relationship, training opportunity, job security and institutions overall policies and procedures for rewarding employees.

Among those factors, which affected employee's performance motivation, those that came with reward were of the utmost importance. Motivation is an accumulation of different process that influence and direct our behavior to achieve some specific goals (Negussie 2013:107).

The location of the primary hospital and health centre was geographically inaccessible; and that was the reason for high turnover of the staff. There were no trained health workers to manage emergency cases, and there was no environmental sanitation worker in the health centre level staffing structure pattern for prevention and promotion services. In Gindabarat health institutions it was found that there were no anaesthetist, social worker, physiotherapist, radiologist, no liaison officer, experienced scrub nurses and no biomedical engineers. There were no pharmacy and laboratory workers, health centre without pharmacy and laboratory worker prone to poor quality health service delivery. The standard of nursing care was rather low due to lack of human resources; and as there was no surgeon in primary hospital setup, elective surgery was not performed for which patients had to be referred to higher institution on obstructed road.

Difficulties associated with frequent staff turnover: Every year staff moved from this district to the other, and this means staff seemed not to do active work. There was a shortage of qualified staff to render the service. Nurses complained that they worked as doctors and pharmacist on a daily basis. In these health institutions new staff and fresh professionals were working from year to year because there were no staff retention mechanisms.

There was no caring, respecting and compassionate health care providers. Besides, accommodation, lack of access to good schools for themselves and for their children, poor

access to basic necessities affected their quality health service delivery. Health workers needed transport facility to conduct supervision for health institutions under their catchment areas and also referring patients to higher health institutions. Shortage of human resources was an area of concern in health centers. The participants revealed that they were short staffed; and couldnot provide quality patient care. Working in an environment of understaffing and attrition can reduce job satisfaction. The findings indicated that health professionals were leaving their job in large numbers.

**Product:** High quality output [service] requires high quality inputs. Working with low quality material decreased employee's productivity. There were no products such as medical equipment, drugs and different supplies, which hindered quality of health service delivery.

**Premises:**Standard health centres in Ethiopia have 3 blocks of buildings, but all health centres at Gindabarat district had only 2 blocks which could hinder quality of health service delivery. The construction of the health centre was found to be type B of two blocks not enough for all components of health service delivery. The design of Gindabarat hospital was a problem because this hospital was upgraded to primary hospital from health centre design. The facility premises; structure and layout were not adequate and fully functional for the delivery of health services.

Health workers did not have accommodation, and some health workers shared the existing rooms in the health centre as staff residents. The living conditions of health workers affected their morale, motivation and their quality health service delivery. The Mukadima health centre was built more than 50 years back but had no maintenance service system developed.

- **Process related gaps identified**

**Service delivery practice:** There was no unit established as a rehabilitation services within the structure of the health centres, and the ablution areas were not separated.

There was a problem of timely renewal of professional license. Nurses are not wearing their caps during working hours. There were no health education services at all health centers for the clients. Inpatient service was not yet started as a practice and this could be considered

as incomplete package of health services delivered at this health centre level. The health facility had no separate health services, for example, adult and paediatric OPD is in one room. There was low attention given for delivery of quality health services at all levels. Blood transfusion services were not well addressed because to get blood from blood bank hospitals had to go too far distant to the nearest zone. Language barrier was also a problem to address this problem in addition to the existing shortages of health workers.

Referral system from HPs and HCs to this hospital was very poor because hospital was usually busy on those patients that could be seen at health centres level. As there was no strong and functional regulatory system it was very difficult to regulate expired drugs disposal. Infection prevention practice was not as per the standards of IP guidelines. The quality of health service delivery was severely limited by lack of resources. One of the required activities to be carried by health professionals was to practice infection prevention as per the standards that include equipment cleaning, and sterilization, laundry and linen management, disposal of infectious waste, disposal of sharps and needles should be given attention. Therefore, water supply thorough hand washing, use of disinfectants, and standard procedures for using anti-septic was of poor quality in the health centre. Personal protective equipment such as gloves, mask, eye goggles and face shields were not worn by health workers. There was the need to provide an information or complaints desk to help clients

**Procedures (SOP):** There was no quality focal person within the system of health centres, and no IQA and EQA for quality control system. To render quality health service delivery there should be standard operating procedures and protocol management developed as guidelines but not developed in these health facilities. There were no standard operating procedures available for all tests, how supplies of medical store and no emergency cases handling guidelines. There was no manual for diet detailing nutritional and therapeutic standards at primary hospital. The diet instruction provided to the patient and responsible person was not well organized. There were no nursing guidelines and nursing manuals in primary hospital as a reference. There was poor documentation and completion of all patients recording, registers, and reporting formats.

There were no manuals and job aids developed for common cases, no nursing and safety manuals and no implementation of infection prevention procedures and provision of information on IP practices.

- **Outcome related gaps identified at Gindabarat public health facilities**

There are health care providers with poorly satisfied with their performance as there is lack of transportation means and geographically in accessible areas at Gindabarat district. Quality of health service delivery is hampered when there is overload of patients. Regarding health centres and hospital staff the barriers predisposes to high staff turnover every two years specialists are absent, pharmacy workers are inadequate there is poor incentive mechanisms, that can hampered motivation to come from within.

Absence of job satisfaction, motivation, conducive infrastructure, and the required qualified staff were major gaps identified in public health institutions (Ferrara 2013:1622). Health workers indicated that living conditions in this rural set up affects their morale motivations and on giving their quality health service delivery. As there was no access to good schools for their children and there no nearby college for themselves the health workers transferred to other areas yearly.

Since the premises of health centre is only of two blocks, the shortage of spaces was the barrier of quality health service delivery.

**Policy Implementation:** An internal quality assurance mechanism would help ensure effective implementation of performance monitoring and quality improvement standards and tools at all levels of the health systems. Health care providers of the health facilities claimed that they had been working at health centre for the last five years; however, until then they did not get accomodation.

There was no clear policy regarding care and quality assurance. The Ethiopian standard agency idicates that no person shall operate a health centre in Ethiopia, whether governmental, non-governmental or private without being licensed as required by appropriate law and standards. Whilst the health centre had professional licensed health officer, they however, did not have permission license.

This practices that did not fulfil the required minimum standards and was prone to poor quality health service delivery

### **6.3 CONTRIBUTION OF THE STUDY**

This part of the study deals with the possible contributions this study can make to the existing body of knowledge in the fields of quality health services.

This study has contributed to the development of standard guidelines to set standards in quality health service delivery. Health facilities and health care providers at all levels can utilize Donabedian's model of quality the structure-process-outcome conceptual framework model.

The researcher observed poor quality health service delivery during his long years experience in supportive supervision at zonal level. The current study findings and guidelines has contributed for good quality health service. The study has reviewed and consolidated the various provinces approach in the provisioning of essential medicines and considered the best practices for incorporation into the proposed framework to guide future practice. The possibility of a standardized approach across the country's district health services platform in terms of human resource development, management and functions has potential to introduce improved management of the pharmaceutical services personnel within the district health services, cost savings and efficiency in the provision of essential medicines which is expensive health commodities.

Interpretations and summary of the findings are presented below on the basis of the specific objectives. In light of the weak health system in Ethiopia, it is necessary to seek for better health care policies and strategies which could strengthen health service delivery capacity at the ground level. Equally, effective operational, clinical and governance functions of health systems, as well as a motivated and committed health workforce, are important to move reform processes forward

Money and time can be wasted on methods and approaches which are not appropriate for the country problem, by poor implementation or by not sustaining efforts which take time to produce results.

#### **6.4 LIMITATIONS OF THE STUDY**

Limitation of the current research is that data were not collected from the clients. In this study, data were gathered only from health care providers. However, if data had been collected from clients who had direct interaction with health care providers, it would have enabled the researcher to triangulate the findings of the study and to obtain more information. This idea is strengthened by perceived and content quality health service quality. This idea is strengthened by the argument of Parasuraman et al (1990:41) that says employees identify the “why” of the problem whereas customers identify the “what” of the problem. The Geographic scope of the study area was limited to one district of the 22 districts of West shewa zone. Therefore, the findings can be generalized only to districts with similar characteristics.

#### **6.5 CONCLUSIONS**

The main objective of this study was to identify practice gaps in the delivery of health services at health centers and primary hospital and to develop the standard guideline to enhance the quality of service delivery in Gindabarat district. Continuous improvement of service quality is an essential element of success for any service providing organization including health sector.

The first stage of improving service quality is to identify the areas that need improvement. Regarding health centers and hospital staff the barriers predisposes to high staff turnover every two years specialists are absent, pharmacy workers are inadequate there is poor incentive mechanisms, that can hampered motivation to come from within.

Most health workers says that living conditions in this rural set up affects their morale motivations and on giving their quality health service delivery. As there is no access to good schools for their children and there is no nearby college for themselves that is why most of our health workers transferred to other areas yearly. The working environment affects employee satisfaction.

Quality care can only be rendered if there is sufficient equipment of high quality to meet the needs of the patients and to improve the health workers' productivity. Quality is basically defined as how good or bad something is. Quality is considered to be care or service that meets specified requirements and, given current knowledge and resources, fulfills expectations for maximizing benefits and minimizing risks to health and well-being of patients. In this chapter the main findings for the phase 1 were presented and discussed. All the emerged themes were analyzed, discussed and confirmed with literature. In the next chapter the implementation of phase-2 which is development of guidelines to enhance quality health services delivery. Mixed methods strategy in which a researcher collects both quantitative and qualitative data, analyzes them separately, and then compares the results to see if the findings confirm or disconfirm each other.

Poor quality of health care results in loss of customers, lives, revenue, material resources, time, morale, staff, recognition, trust and respect and in individual and communities' apathy towards health services, all of which contribute to lowered effectiveness and efficiency. It envisages that quality of care might be improved through paying more attention to the perspectives of clients, improving the competencies and skills of providers and improving working environment by better management, provision of medical equipment and supplies and motivation of staff.

Clinical effectiveness is the extent to which specific clinical interventions do what they are intended to do, that is, maintain and improve the health of patients securing the greatest possible health gain from the available resources. Clinical effectiveness can be described as the right person doing:

- The right thing (evidence based practice)
- In the right way (skills and competence)
- At the right time (providing treatment/services when the patient needs them)
- The right place ( location of treatment /services/maximizing health gain)

Clinical effectiveness depends on adequate manpower and resources, including equipment and drugs. It also requires that health professionals have up-to-date knowledge of the most effective diagnosis tests, treatment and procedures (MOH 2016). Health care providers were

dissatisfied with their conditions of work and are ready for high attrition rate for change which allows them to give better care. There is evidence that quality methods can help to solve these and other challenges faced by Gindabarat district.

Quality health service is one which organizes resources in the most effective way to meet the health needs of those most in need for prevention and care, safely, without waste and within higher level requirements.

- **Three ways of considering quality**

The inputs and structure of quality (how many personnel and which skill mix, how responsibilities are distributed). The Process (which actions are taken); and the Outcomes (results for patients). It takes time to see results of quality actions on patient outcomes, so there is a need to also assess whether there are inputs and structures, as well as whether the right things are done (process) which are likely to lead to patient outcomes (Donabedian 1980).

- **Basic concepts of quality**

**Effective:** delivering health care that is adherent to an evidence base and results in improved health outcomes for individuals and communities, based on need.

**Efficient:** delivering health care in a manner which maximizes resource use and avoids waste.

**Accessible:** delivering health care that is timely, geographically reasonable, and provided in a setting where skills and resources are appropriate to medical need.

**Acceptable/Patient centered:** health care which takes into account the preferences and aspirations of individual service users and the cultures of their communities.

**Equitable:** delivering health care which does not vary in quality because of personal characteristics such as gender, race, ethnicity, geographical location, or socioeconomic status.

**Safe:** delivering health care which minimizes risks and harm to service users.

## 6.6 RECOMMENDATIONS

The following recommendations are made on the basis of the findings of the study:

To address professionals gaps quality health service delivery guidelines include working conditions that facilitate learning, registering of types and numbers of professionals, revalidation implementation of policy and regulation , development and implementation of practice guidelines, explicit description of professional competencies, and setting standards. To address gaps identified in health care organizations quality health service delivery guidelines include licensing of the organization, performance indicators, accreditation, certification, quality improvement and integrated delivery systems. Based on the findings of the study and the literature review, the following recommendations were proposed:

Accordingly, this study has identified some important points of concern. Therefore, It is recommend that MOH, RHB, Zonal, district health offices, health facilities and health care providers to apply the criteria developed during planning, implementation and monitoring and evaluation of quality health service. In order to raise the quality of health care to an acceptable level of standards and sustain at that level, it is recommended the following institutions do several things:

- **Recommendations for location of the district and facilities**

As road is the main entry for all development government and community had to work on the issue of the road construction then the existing health problem will be addressed.

There shall be all-weather road as there is a problem of means of transportation. The health center and hospital shall be provided with road access, water supply, electric city and communication facilities. The health center shall be landscaped, therapeutic, appealing, scenery, attractive with green areas/beautiful trees (ESA3611 2012:112).

Procurement of Ambulance by government and community could have been done since it is geographically where there is no transportation means. It was evident that geographic inaccessibility and transportation services related problems emerged as barriers to the provision of quality health service. Therefore, it is crucial to develop interventions that

overcome difficulty of these geographic barriers and transportation services related problems. Intervention could be the road construction.

- **Recommendations for product (Facility Resources)**

Before starting quality health service inputs like human resources, spaces, medical equipment and supplies should be in place. There should be sustainable product like medical equipment, drugs and different supplies that hinders quality of health service delivery. For hospital inpatient services for admitted patients there shall be available shower for bathing, adequate beds, sheets, wheel chairs, pajamas, linen and blankets. Ambulance should be available for each health centers. Issues that need immediate attention with regards to health services delivery are availing patient monitoring medical equipment, appropriate patient beds, and adequate supply with BP apparatus, stetesopes, otoscopes, patient medication box, and patient locker.

The maternal and child health service should have adequate coaches, stetescope and sphynomanometer, adequate resuscitation sets like airway, ambu bags, and BP apparatus, in each department, adequate safety boxes and drugs for emergency cases. There shall be functional laundry machine available in all health facilities.

Availability of resources like adequate laboratory reagents could have been done. If health centre owned telephone line for the office communication with district office and health posts will be facilitated. Installation of the existing chemistry machine, to utilize effectively the existing Genxpert machine, installation of emergency shower, labelling and identification of male and female toilets. Avail autoclave machine for sterilization purposes and supply of laboratory reagents.

Availing ABCD of life saving, medical equipment and supplies. Wheelchairs and stretchers should be purchased for emergency rooms. Laundry machine should be available and installed with trained staff. Preventive maintenance schedule should be practiced. Back up electric supply like generators should be installed. There should be sustainable medical supply, assigning pharmacist, electric power interruption should be addressed. There should

be generators for the existing hand pump. There is should be telephone line for office for health services.

- **Recommendations for health system delivery structure (premises)**

Construction of the health Centre should be type A (three blocks) to solve the existing problem for all components of health service delivery. The design of Gindabarat hospital was upgraded to primary hospital from health center design there should be work done to upgrade it by using primary hospital design. This conditions needs to be addressed by availing additional block construction. Most health workers of health centers do not have accommodation, few health workers shares the existing few rooms of health centre as staff resident, therefore District health office or the community around should avail resident house for the staff. Housekeeping for primary hospital needs to be available.

Many concerns were raised about the status of the health facility infrastructures. Inadequate rooms, shortage of beds, unavailability of logistics, sanitary facilities, lack of electricity and water supply, and the unavailability of waiting rooms substantially affected the quality of health service delivery. Attention must be paid to improving the availability of adequate rooms and beds. Furthermore, it is imperative to ensure the availability of continuous supply of electricity and water. Emergency room should be separated from other activities.

The facility premises has poor layout as the hospital is upgraded from health centre design, therefore the current set up needs renovations. Mukadima health center built over 50 years back, health facility infrastructure should be improved and the old building should be renovated or if possible new building for patient care should be constructed.

- **Recommendations for continuous quality improvement**

The current study found that poor quality of care causes of dissatisfaction of health care providers. This calls for a development and implementation of continuous quality improvement interventions at health facility level. Continuous Quality Improvement (CQI) approaches should be strengthened across each case team and department to ensure

internal quality assurance (IQA), external quality assurance (EQA) and capacity at all levels of health services delivery.

Aseptic, sterilization and disinfectant techniques should be improved. Standardized prescription should be utilized; there should be proper disposal of expired drugs. SOP on how supplies of stock should be developed to

- standardise health centres and primary hospital against quality service standards:
- create hospital working environmental conducive.
- strengthen referral systems at PHCU level.
- Create a strong relationship with regulatory system and different sector committee for better medical waste disposal.
- To assign a focal person for quality.

Documentation systems need to be improved, work done needs to be monitored, and work monitored should be recorded and reported. RRF should be filled and reported to PFSA early and laundry personnel could have been assigned. Job description could have been given for each health workers. There should be standard referral systems within the health institutions otherwise hospital workers will be overloaded with the activities that could be addressed by health centres levels. Regulatory body should be strengthened at all levels to regulate quality health services. Standardized IP practices should implement at health centre.

- **Recommendations for policy implementation**

The health facilities staff shall have written job description and responsibilities, so that staffs are acquainted with their job descriptions and responsibilities. There shall be internal quality assurance mechanism available to ensure effective implementation of performance monitoring and quality improvement standards and tools at all levels of the health systems. Curriculum should be designed for quality assurance. There should be strong and functional regulatory system in placed to regulate quality health service delivery activities. The Government has to interven high staff turnover and set retention mechanisms at rural set up. This highlights the need for training more pharmacist, laboratory professionals that would

be able providing better health care. The professionals working at hospitals are those who have professional license, but there are health workers who did not renewed their professional license timely these issues should be corrected by regulatory bodies.

- **Recommendations for procedures (Standard operating procedures)**

It is recommended that standards are enforced and used to ensure quality health services. Health care providers practice needs to be assessed based on the set quality standards. It is also recommended that to render quality health service delivery there should be standard operating procedures and protocol management developed available at all service delivery points. Infection prevention practice should be as per the standards of IP guidelines. More attention should be given for quality improvement activities than for coverage.

Public health institutions in Ethiopia need to improve the quality of care at all levels of the health care delivery system. The public hospitals should develop and disseminate standards of quality health services across all case teams. Services provided under each case should be guided by standard operating procedures and national guidelines.

- **Recommendations for processes**

Organizational system is a collection of related components which are working together to achieve goals and operation of the system is to convert inputs to outputs.

There is a need to provide an information or complaints desk to help clients, price and type of services by the institution level posted, there should be compliance handling system implementation, functional triage system and service directory indicators where the services are located in the compound of health institutions.

It is recommended that aseptic techniques, sterilization and disinfectants before, during and after each procedure need to be improved.

- **Recommendations for professionals**

There should be within the structure of health service delivery to have quality focal person at each health tier system. In these health institutions new staff and fresh professionals are working from year to year. Therefore there should be staff retention mechanisms to retain the experienced staff. Maintenance officer and biomedical engineers needs to be assigned as the structure in this health centre hospital staffing. The health facilities shall have adequate staff; practically functional liason officer could have been assigned.

To assign quality FP health centres and at hospital level, to assign environmental health worker in health structure staffing pattern, to notify the importance of preventive medical equipment maintenance, the relation and support of health centres for health posts should be strengthen.

It is recommended that home should be available either by community around or government needs to construct in this scarce condition to alleviate staff stress or anxiety.

It is recommended that the current serving the community with a total of six health professionals at health centre which is below minimum standard, this problem needs to be solved and immediate attention should be given for professionals like pharmacy and laboratory workers assigned in the health centre set up.

It is further recommended that Laundry machine needs to be installed by biomedical engineers and operator of the machine should be trained and assigned. It is recommended to assign medico bio engineers at hospital and health centre level.

Health workers can only be competent if they have the necessary knowledge and skills and equipment to perform their work.

Books and library should be there for reference and competency of health workers. In-service training should be developed as a strategy to increase the competency of technical staff.

Training should be given on the emergency case management for those assigned at emergency unit. There should be basic in-service training which is adequate, modular,

practice based orientations type of training are mandatory for new staff every two years because of high turnover and transfer like Gindabarat hospital.

Staff retention mechanism should be done to decrease high staff turnover of experienced staff. By improving incentive mechanisms to make high staff retention rate should be in place.

- **Recommendations to practice (Service delivery practice)**

Inpatient service needs to be considered as a complete package of health services delivered at all health centre level. Triage area needs to be improved around areas of diagnosis, isolation room, pharmacy and laboratory for patient flow. It is recommended that further research be conducted on quality health service delivery in the areas of structure, process and outcome.

- **Recommendations for service provision**

Emergency surgery service should be in place at primary hospital level.

As a routine activities health education schedule should be incorporated to hospital and health centres activities. Vaccination activities should be given on the daily basis rather than giving the service on weekly basis. It is further recommended to give more attention for quality than coverage. Confidentiality like visual and audio should be in place to render quality health services by availing rooms and screen for each diagnostic area. Emergency Inpatient services should be commenced by the health centre. Health centre is supposed to give admission services with 10 beds.

- **Recommendation to Provider satisfaction**

Eighty-five percent of health care providers in Gindabarat District disagreed on overall quality health service delivery in their institution. Hence a system should be in place to increase their level of satisfaction. In addition to taking intervention, the root causes of dissatisfaction need to be investigated and means of improving the satisfaction level should be designed and implemented. Motivational components financial rewards, career

development, continuing education, health facility infrastructure, resource availability, health facility management and recognition must be in place.

## **6.7 SUMMARY**

Poor quality of health care results in loss of customers, lives, revenue, material resources, time, morale, staff, recognition, trust and respect and in individual and communities' apathy towards health services, all of which contribute to lowered effectiveness and efficiency. It envisages that quality of care might be improved through paying more attention to the perspectives of clients, improving the competencies and skills of providers and improving working environment by better management, provision of medical equipment and supplies and motivation of staff.

Clinical effectiveness is the extent to which specific clinical interventions do what they are intended to do, I.e maintain and improve the health of patients securing the greatest possible health gain from the available resources. Clinical effectiveness can be described as the right person doing

- the right thing (evidence-based practice)
- in the right way (skills and competence)
- at the right time (providing treatment/services when the patient needs them)
- at the right place (location of treatment /services/maximizing health gain)

Clinical effectiveness depends on adequate manpower and resources, including equipment and drugs. It also requires that health professionals have up-to-date knowledge of the most effective diagnosis tests, treatment and procedures. Quality in healthcare is a production of cooperation between the patient and the healthcare provider in a supportive environment. Health care service quality depends on personal factors of the healthcare service provider in and the patient and factors pertaining to the healthcare organization and broader environment. Differences in internal and external factors such as availability of resources and collaboration and cooperation among providers affect the quality of care and patient outcomes (Mosadeghrad 2014:89).

The majority of health care providers involved in Gindabarat District stressed that quality of healthcare services is severely limited by lack of resources. In such a context, patient concern could not be taken into account. Therefore important changes are required in a number of aspects of healthcare system in Gindabarat District health organizations are to provide high-quality services.

## REFERENCES

- Agyeman-Duah, M, Afrakoma, J, Theurer, A, Noor Alide, C, & Neuhann, F. 2014. Understanding the barriers to setting up a health care quality improvement process in resource-limited setting: a situational analysis at the medical Department of Kamuzu central Hospital in Lilongwe, Malawi. *BMC Health Services Research* 14:1.
- Ahmed, A. 2008. Ontological, Epistemological and Methodological assumptions. Qualitative versus Quantitative. Faculty of education, Helwan University, Egypt.
- Alebachew, A, Hatt, L, kukla, M & Nakhimovsky, S. 2014. Universal health coverage measurement in a low-income context: an Ethiopian case study. Bethesda, MD: USAID. Abt Associates Inc.
- Aluttis, C, Bishaw, T, & Frank, M. 2014. The workforce for health in a globalized context, global shortages and international migration. *Global Health Action*.
- Amiya, Y., Ishijima, H., Hagiwara, A., Takahashi, S., Ngonyani, H. & Samky, E. 2017. Evaluating the impact of continuous quality improvement methods at hospitals in Tanzania: a cluster-randomized trial. *International journal for quality in health care*, 2017, 29(1), 32-39.
- Armstrong, M. 2009. Armstrong's handbook of human resources management practice. 11th edition. London and Philadelphia: Kogan Page.
- Beattie, M. 2012. Do the institute of Medicine's (IOM's) dimensions of quality capture the current meaning of quality in health care? *Journal of Research in Nursing* 18(4) 288-304. University of Stirling, UK. SAGE.
- Babbie, E. 2013. The practice of social Research. Thirteenth edition. International edition. Australia, Brazil, Japan, Korea, Mexico, Singapore, Spain, United Kingdom and United States.
- Beedemariam, G, Tefari, G, & Fenta, G. 2013. Assessment of pharmacists' workforce in Ethiopia. *Ethiop J health dev.* 2013:27.

Growth and Transformation Plan. 2015. Document, Ethiopia.

Behzad-Karami, M., Satar, R., Mehdi, M., Mohammad, M. & Mari, A. 2016. Measurement of quality of primary health services by SERVQUAL model: Evidence from urban health centers in west of Iran. *Research journal of medical sciences* 10(5) 475-480.

Berman, P., Pallas, S., Smith, A., Curry, L. & Bradley, E. 2011. Improving the delivery of health services: A guide to choosing strategies. The International Bank for Reconstruction and Development / The World Bank 1818 H Street, NW, Washington, DC 20433.

Beyene, W, Jira, C & Sudhakar, M. 2011. Assessment of Quality of Health Care in Jimma Zone, Southwest Ethiopia. *Ethiop J Health*. 21(1): 49–58. Jima University.

Bhutta, Z., Salam, R., Lassi, Z., Austin, A. & Langer, A. 2014. Approaches to improve quality of care (QOC) for women and newborns, conclusions, priorities. *Reproductive health*. 11, 2:55.

Bhat, K.S. 2010. Total quality management text & cases. Department of Management Studies B.M.S. College of Engineering Bangalore, Karnataka Himalaya Publishing House Pvt. Ltd.

Bilal, A., Tilahun, Z., Beedemariam, G., Ayalneh, B., Hailemeskel, B. & Engidawork, E. 2016. Attitude and satisfaction of health care providers towards clinical pharmacy services in Ethiopia: Addis Ababa, Ethiopia. *Journal of Pharmaceutical Policy and Practice* 9:7.

Booyens, S., Jooste, K. & Sibiyi, N. 2015. Introduction to health services management for the unit manager. 4<sup>th</sup> edition. Cape Town, Juta and Company (Pty) Ltd.

Botma, Y., Greeff, M., Mulaudzi, F.M & Wright, S.C.D. 2010. Research in health science. Cape Town: Heinemann.

Bowling, A. 2009. Research Methods in Health investigating Health and Health Services. Third Edition. Open University press.

Brink, H., Van der Walt, C., & Van Rensburg, G. 2012. Fundamentals of research methodology for health care professionals (3<sup>rd</sup>ed.) Cape Town, Juta.

- Brent, C.J. 1987. Quality Management for Health care delivery. The Hospital research and educational trust.
- Brown, L., Franco L.M., Rafeh, N., & Hatzell, T. 1992. Quality assurance of health care in developing countries. The quality assurance Project. Bethesda, USA.
- Burns, N. & Grove, S. 2005. The practice of nursing research: conduct, critique and utilization. 5th edition. St Louis: Elsevier/Saunders.
- Chahal, H. & Kumari, N. 2012. Service quality and performance in the public health care sector. *Routledge, health marketing quarterly* 29:181-205.
- Central Statistical Authority (CSA). 2012. Ethiopian National population and housing census. Administrative report. Addis Ababa, Ethiopia.
- Chikudu, S. 2016. Retaining and attracting nurses in the workplace. *Nursing update* 41(3): 60-61.
- Committee on Quality of health care in America. 2001. Crossing the quality chasm: A new Health system for the 21<sup>st</sup> century. Washington, DC; National Academy press.
- Creswell, J.W. 2009. *Research design*. Qualitative, quantitative and mixed methods approaches 3rd edition. Thousand Oaks (CA), SAGE, London.
- Creswell, J.W. 2014. *Research design*. Qualitative, quantitative and mixed methods approaches 4<sup>th</sup> Edition. Sage publication, United States of America.
- Creswell, J.W. & Plano-Clark, V.L. 2007. Designing and conducting mixed methods research. Thousand Oaks, CA: Sage.
- Crotty, M. 2003. The foundations of Social Research: Meaning and perspectives in the research Process, 3<sup>rd</sup> edition. London: Sage publications.
- Ojakaa, D., Olango, S. and Javis, J. 2014. Factors affecting motivation and retention of primary health care workers in three disparate regions in Kenya. *Human resource for health*. 1:12-33.

Das, J., Kumar, R., Salam, R., Lassi, Z. & Bhutta, Z. 2014. Evidence from facility level inputs to improve quality of care for maternal and newborn health : interventions and findings. Division of women & child Health. Aga Khan university, Karachi, Pakistan.

De Vos, A., Strydom, H., Fouche', C. & Delpont, C. 2005. Research at the grass roots for the Social Science and human service professions. Third edition. Van Schaik Publishers, Pretoria.

De Vos, A.S., Strydom, H., Fouche, C.B. & Delpont, C.S.L. 2012. Research at the grass roots for the social Science and human service professions. Van schaik, Pretoria.

Dieleman, M., Cuong, P.V., Ann, V., & Matineau, T. 2003. Identifying factors for job motivation of rural health workers in North Viet Nam. Human Resources for Health 2003, 1:10. 1Royal Tropical Institute, Amsterdam, The Netherlands.

Donabedian, A. 2005. Evaluate the quality of medical care. Milbank Quarterly 83(4): 691-729.

Donabedian, A. 2003. An introduction to quality assurance in health care. New York: Oxford University Press.

Donabedian, A. 1997. The quality of care: how can it be assessed? Archives of Pathology Laboratory Medicine. ProQuest Nursing Journal 260(12):1145

Donabedian, A. 1988. The definition of quality and approaches to its assessment vol1 explorative in quality assessment and monitoring. American Medical Association 260 (12): 1743-1748.

Donabedian, A. 1990. The seven pillars of quality. Arch. Pathol. Lab. Med.114, 1115-1118.

Donabedian, A. 1988. The quality of care: How can it be assessed? JAMA 260: 1743-1748.

Epstein, R.M. & Street, R.L. 2011. The values and value of patient-centered care. Annals of Family Medicine 9(2):100-103.

ES3611(2012) see Ethiopian Standard. Health center requirements.

ES 3615 (2012) see Ethiopian standard. Nursing Home requirements.

Ethiopian National Health care Quality strategy. 2016. Transforming the quality of health care in Ethiopia.

Ethiopian Standards Agency (ESA) ES3611. 2012. Health center requirements. Addis Ababa Ethiopia. Ethiopian standards Agency.

Ethiopian standards Agency (ESA), ES3615. 2012. Nursing Home requirements. Addis Ababa Ethiopia. Ethiopian standards Agency.

Ethiopian Standard ES ISO 9001. 2015. Third edition. Quality Management systems requirements. Addis Ababa Ethiopia. Ethiopian Standards Agency.

Ethiopian Standard ES ISO13485. 2016. Medical devices Quality Management systems Requirements for regulatory purposes. Addis Ababa Ethiopia. Ethiopian Standards Agency.

Ethiopian Standards Agency (ESA), ES3617. 2012. Primary Hospital Requirements. Addis Ababa Ethiopia. Ethiopian standards Agency.

Ethiopian Standards Agency (ESA), ES3610. 2012. Basic Medical Laboratory Requirements. Addis Ababa Ethiopia. Ethiopian standards Agency.

Ethiopian Public Health Association (EPHA). 2006. The evolution of public health in Ethiopia. Addis Ababa, Ethiopia.

FMHACA. 2014. See Food, Medicine and Health care Administration and Control Authority of Ethiopia. Standard treatment guidelines for health centre. 3rd edition.

Freedman, L.P. 2005. Achieving the MDGs: health systems as core social institutions. *Development*, 45(1):19-24.

Federal Democratic Republic of Ethiopia Ministry of Health (FMoH). 2011-2015. Ethiopia health sector development programme Mid-term review. Addis Ababa, Ethiopia.

Federal Democratic Republic of Ethiopia, Ministry of Health (MOH). 2015. Health sector Transformation Plan (HSTP) 2015. Addis Ababa, Ethiopia.

Federal Democratic Republic of Ethiopia Ministry of Health (MOH). 2016. Ethiopian National Health care Quality strategy, transforming the quality of health care in Ethiopia. Addis Ababa, Ethiopia. Institute for Health care Improvement (IHI) through the Bill & Melinda gates Foundation.

Federal Democratic Republic of Ethiopia Ministry of Health (MOH). 2016. Health Sector Transformation in Quality, a guide to support implementation of health service quality improvement activities in Ethiopia health facilities. Addis Ababa, Ethiopia.

Federal Democratic Republic of Ethiopia. 2017. Voluntary National Reviews of SDGs of Ethiopia Government commitments, National ownership and performance trends. National Plan Commission. Addis Ababa, Ethiopia.

Federal Democratic Republic of Ethiopia (FMOH). 2010. Guideline for implementation of a patient referral system. Medical service directorate. Addis Ababa, Ethiopia.

Federal Democratic Republic of Ethiopia. 2015. Health and Health related indicators Addis Ababa, Ethiopia.

Federal Democratic Republic of Ethiopia. 1993. Health policy of the transitional Government of Ethiopia.

Federal Democratic Republic of Ethiopia. 2010/11-2014/15. Health sector Development programme phases (HSDP4) Addis Ababa.

Federal Democratic Republic of Ethiopia. 2016. Ethiopian Hospital transformation guidelines. Ethiopian Hospital management initiative.

Ferrara, M. 2013. Patient satisfaction and occupational health of workers in hospital care setting: Associations and reciprocity. Department of Psychology, University of Turin, Italy.

Fisseha, G., Berhane, Y., Worku, A., & Terefe, W. 2017. Quality of the delivery services in health facilities in Northern Ethiopia. BMC Health services. BMC Health Services Research 17:187.

FMOH. 2014. Leadership, Management and Governance (LMG) project. Addis Ababa, Ethiopia.

FMOH. 2015. HSTP woreda based health sector annual core plan. Transforming the Ethiopian health sector: Realizing equitable and quality health service.

FMOH. 2017. Federal Ministry of health health services quality directorate Hospital performance monitoring and improvement manual second edition. Addis Ababa, Ethiopia.

FMOH. 2015/2016. HSTP woreda based health sector annual core plan. Transforming the Ethiopian health sector: Realizing equitable and quality health service. Addis Ababa, Ethiopia.

Food, Medicine and Health care Administration and Control Authority (FMHACA) of Ethiopia. 2014. Standard treatment guidelines for FEDERAL health centre. 3<sup>rd</sup> edition. Addis Ababa, Ethiopia.

George, J.B. 2011. Nursing theories: the base for professional nursing practice. 6th edition. Upper Saddle River, NJ: Pearson.

Grove, S., Burns, N. & Gray, J. 2012. Practice of Nursing Research. Appraisal, Synthesis, and generation of evidence. Seventh Edition. Elsevier. St Louis, MO, Saunders.

Grove, S., Gray, J. & Burns, N. 2014. Understanding Nursing Research Building an evidence based practice. Elsevier. St Louis, MO, Saunders.

Gupta, K. & Rokade, V. 2016. Importance of quality in health care sector. Journal of Health management 18(1) 84-94.

Hagopian, A., Zuyderduin, A., Kyobutungi, N., & Yumkella, F. 2009. Job satisfaction and morale in the Ugandan health workforce. Health Affairs, 28(5):w863-w875.

Hailemariam, D. 2013. Brief overview of the literature relevant to Human resources for Health (HRM) in Ethiopia. Ethip.J. Health Development. Addis Ababa Ethiopia, 27:1.

Hardeep, C. & Kumari, N. 2012. Service quality and performance in the public health care sector. Routledge Health Marketing Quarterly 29:181-205.

Hedda, B., Nyhus, M. & Kamara, M.M. 2017. Quality improvement in Emergency service delivery: Assessment of knowledge and skills amongst emergency nurses at Connaught Hospital. Sierra Leone. Health policy of the transitional Government of Ethiopia.

Health and Health related indicators. FMOH 2015. Addis Ababa, Ethiopia.

Health sector Transformation Plan (HSTP). 2015. Addis Ababa, Ethiopia.

Health sector Transformation in Quality. 2016. Addis Ababa, Ethiopia.

Hornby, P. & Forte, P. 2002. Guidelines for introducing human resource indicators to monitor health service performance. Keele: Keele University Centre for Health Planning and Management.

Ibrahim, O. 2014. The Ontological, Epistemological and Methodological debates in Information systems Research.

James, B.C. 1987. Quality Management for Health care delivery. The Hospital research and educational trust. SAGE publications.

Julie, P. 2011. SPSS Survival Manual a step by step guide to data analysis using SPSS 4<sup>th</sup> Edition. Allen & Unwin 83 Alexander Street Crows Nest NSW 2065 Australia.

Karion Jooste and Nokuthula Sibiyi 2015. Introduction to health services management for the unit manager Fourth edition. Juta and company (pty) Ltd.

Kelly, P & Tazbir, J. 2014. Essentials of nursing leadership and management. 3<sup>rd</sup> edition. Delmar, Cengage.

Klopper, H. 2008. The qualitative research proposal. *Curationis* 31(4): 62-72. Kumar, R. 2011. Research Methodology: a step-by-step guide for beginners. SAGE Publications, Inc. California: United States.

Lengu, E. 2011. The quality of professional practice by registered nurses and midwives in central Hospital in Malawi. Unpublished thesis. University of South Africa. Pretoria.

- Lundqvist, M.J. & Axelsson, A. 2007. Nurses' perception of quality assurance. *Journal of Nursing Management* (15):51-58.
- Lutwama, GW. 2011. The performance of health workers in decentralized services in Uganda. Unpublished thesis. University of South Africa. Pretoria.
- Marjolein, D, Barend, G, & Gert, J. 2009. Human resource management interventions to improve health workers' performance in low and middle income countries: a realist review.
- Mertens, D.M. 2010. Transformative mixed methods research. *Qualitative inquiry* 16(6) 469-474.
- Manuwa-Olumide, A. 2009. Addressing the human resource challenges in primary health care in Nigeria: evidence-based approaches for improving health workforce performance. An invited paper presented on the 9th June at the National Health Conference on Primary Health Care in Nigeria 30 years after Alma-Ata, in Uyo, Akwa-Ibom State, Nigeria.
- Mokoka, E., Oosthuizen, M.J. & Ehlers, V.J. 2010. Retaining professional nurses in South Africa: Nurse Managers' perspectives. *Health SA Gesondheid* 15(1):1-9.
- Mosadeghrad, Ali Mohammad. 2012. A Conceptual Framework for Quality of Care *Mat Soc Med*. 2012 Dec 24(4): 251-261. British institute of technology and E-commerce. London, United Kingdom.
- Mosadeghrad, Ali Mohammad. 2014. Factors influencing health care service quality. *International Journal of Health policy and management* 2014, 3(2), 77-89.
- Mohsin, A. 2016. A manual for selecting sampling techniques in research. University of Karacchi, Iqra University. Pakistan Institute of living and learning.
- Mosadeghrad, A.M. 2012. A Conceptual Framework for Quality of Care. *Mat Soc Med*. 24(4): 251-261.
- Mosadeghrad, A. 2014. Factors influencing health care service quality. *International Journal of Health policy and management* 3(2), 77-89.

- Ncongwane, H. 2018. Qualitative designs and acquisition: Aid to computer Mediated software Atlas ti. University of South Africa. Pretoria
- Nikic, D., Arandjelovic, M., Nikolic, M. & Stankovic, A. 2008. Job satisfaction in health care workers. *Acta Medica Medianae*; 47(4): 9-12.
- Nkomo, P. 2013. Views of professional nurses regarding proposed National Health Insurance. Unpublished Master's dissertation. Pretoria, University of South Africa.
- Onwuegbuzie, A.J. & Combs, J.P. 2011. Data analysis in mixed research: A primer. *International journal of education*. 3(1):1-25.
- Pamela, H., Mitchel, S.F. & Bonnie, M. 2007. American Academy of Nursing expert panel on quality health care. USA.
- PFSA. 2016. Standard operating Procedures (SOPs) Manual for Drug and therapeutics committee in Health facilities of Ethiopia. Addis Ababa, Ethiopia.
- Plunkett, O., Burke, B., Hegarty, I., Nugent, C. & O' Shaughnessy, C. 2013. Protocol for the management of outpatient services. Addis Ababa, Ethiopia.
- Polit, D.F. & Beck, C.T. 2008. *Nursing research: principles and methods*. 8th edition. Philadelphia: Lippincott Williams & Wilkins.
- Polit, D. & Beck, C. 2011. *Nursing research-generating evidence for nursing practice*, Ninth edition. Lippincott Williams & Wilkins, Philadelphia.
- Polit, D. & Beck, C. 2012. *Resource Manual for Nursing research generating and assessing evidence for nursing practice*. Ninth edition. Lippincott Williams & Wilkins, Philadelphia.
- Pope, C. & Mays, N. 1995. Reaching the parts other methods cannot reach: an introduction to qualitative methods in health and health services. *BMJ* 311:42-45.
- Rowmer, M.I. & Aguilar, C.M. 1998. Quality assessment and assurance in primary health care. For: World Health Organization offset publication No. 105.
- Saunders, M., Lews, P. & Thornhill, A. 2016. *Research Methods for Business students*. Seventh Edition. Pitman Publishing, UK.

SDP Document. Sustainable Development Program (2015-2030). Ethiopia.

Somahela, K.J. 2014. Professional Nurses' perception on quality patient care in one of the Eastern Cape state hospitals. Unpublished Dissertation submitted in fulfillment of degree Nursing Administration. University of Fort Hare, Faculty of Science and Agriculture School of Health science.

Strydom, H. 2013. An evaluation of the purposes of research in social work. Social work/Maatskaplike werk. (Teddlie&Tashakkori 2009:7). Bulletin of the World Organization. 52(2): 295-303. Tanahashi, T. (1978). Health services coverage and its evaluation.

Teddlie, M. & Tashakkori, K. 2009. Bulletin of the World Organization. 52(2): 295-303.

Turkson, P. 2009. Perceived quality of health care delivery in a rural district of Ghana. 43 (2):65-70.

Waju, B., Challi, J., & Sudhakar, M. 2011. Assessment of Quality of Health Care in Jimma Zone, Southwest Ethiopia. Ethiop J Health. 21(1): 49–58.

Wallace D.J. & Jermy, M. 2015. Critical Care Medicine; Florence Nightgale and the conundrum of counting ICU Beds. NHS public access; 43(11): 2517-2518.

Weeks, W. 2002. Quality Improvement as an Investment. Quality Managing Health Care. 10(3).

Wilunda, C., Quaglio, G., Putoto, G., Takahashi, R., Calia, F. & Abebe, D. 2015. Determinants of utilization of Antenatal care and skilled birth attendants at delivery in South west Shewa zone, Ethiopia.

Woldie, M., Jirra, C. & Tegegn, A. 2005. An assessment of the free health care provision system in Jimma town, Southwest Ethiopia. Ethiopian Journal Health Dev 19(3):188-194.

World Health Organization. 2007. Everybody business: strengthening health systems to improve health outcomes: WHO's framework for action. Geneva, Switzerland.

World Health Organization. 2010. WHO healthy workplaces: A model for action, for employers, workers, policy-makers and practitioners. Geneva, Switzerland.

World Health Organization. 2017. Mapping and analysis of capacity building initiatives on human resources for Health Observer series No.23. WHO document production services. Geneva, Switzerland.

World Health Organization. 2012. Handbook for guideline development. Geneva, Switzerland.

World Health Organization. 2008. Guidance on developing quality and safety strategies with a health system approach. WHO Regional Office for Europe. Geneva, Switzerland

World Health Organization. 2017. Primary health care systems (primasys), case study from Ethiopia, abridged version. Geneva, Switzerland.

World Health Organization WHO. 2016. Global strategy on human resources for health workforce 2030. World Health Organization. Geneva, Switzerland.

World Bank. 2018. Delivering quality health services: A global imperative for universal health coverage.

Yibeltal, K., Challi, J. & Dereje, N. 2017. The quality of care provided to patients with chronic non-communicable disease. A retrospective multi-set-up study in Jimma Zone, Southwest Ethiopia. Ethiopian Journal of Health Development 31(2) 64-126.

Zeleeuw, H. 2012. Health care financing reform in Ethiopia: improving quality and equity. United States Agency for International Development, Health Systems 20/20, Abt Associates Inc. MD; United States.

Zuma, S. 2016. Framework for provision of essential medicines for the district health services. Unpublished thesis. University of South Africa, Pretoria.

# ANNEXURES

## ANNEXURE A

Ethical clearance certificate from Department of Health Studies, University of South Africa



**UNIVERSITY OF SOUTH AFRICA  
Health Studies Higher Degrees Committee  
College of Human Sciences  
ETHICAL CLEARANCE CERTIFICATE**

**REC-012714-039**

**MSHDC/499/2015**

Date: 9 December 2015 Student No: 5766-099-9  
Project Title: The quality of health services delivery in Oromia National Regional state, Ethiopia.  
Researcher: Moti Muleta Faji  
Degree: D Litt et Phil Code: DPCHS04  
Supervisor: Prof M Matlakala  
Qualification: D Litt et Phil  
Joint Supervisor: -

**DECISION OF COMMITTEE**

Approved



Conditionally Approved



**Prof L Roets  
CHAIRPERSON: HEALTH STUDIES HIGHER DEGREES COMMITTEE**

**Prof MM Moleki  
ACADEMIC CHAIRPERSON: DEPARTMENT OF HEALTH STUDIES**

PLEASE QUOTE THE PROJECT NUMBER IN ALL ENQUIRES



## **ANNEXURE C**

### **Request to conduct a research study**

Oromia Shewa zonal office  
Ethiopia  
+251 0112364758

The Administrator  
Oromia Regional Health Bureau  
Ethiopia

Dear Sir/ Madam

#### **RE: request to conduct a research study on ‘The quality of health services delivery in Oromia National Regional state, Ethiopia’**

I hereby request for permission conduct a study on the topic ‘The quality of health services delivery in Oromia National Regional state, Ethiopia’.The purpose of the study is to assess the quality of health services delivery in the health centres at Oromia National Regional state, Ethiopia; with a view to develop standard protocols for health care delivery within the district.

This research study is an academic requirement for my degree in Doctor of Literature and Philosophy undertaken with the University of South Africa (UNISA).

Ethical consideration will be well adhered to during data collection. The participants above 21 years will voluntarily take part and will sign consent form prior to participation. Respect for privacy and confidentiality will be observed throughout the study.

I hereby attach a copy of the research proposal and the ethical clearance certificate from the academic institution.

If you require any further information, please do not hesitate to contact me at Moti Faji Muleta: [57660999@mylife.unisa.ac.za](mailto:57660999@mylife.unisa.ac.za) or [motimuleta@yahoo.com](mailto:motimuleta@yahoo.com)

Phone number: +251 0912364754

Cellular number: +251 0911373095

Thanking you in advance for your anticipated co-operation.

Yours Sincerely

Moti Muleta

# ANNEXURE D

## Permission letter from West Shewa Zonal Health Department

BIIROO EEGUMSA FAYYAA  
OROMIYAA



OROMIA HEALTH BUREAU  
የኦሮሚያ ጤና ጥበቃ ቢሮ

Lakk/Ref. No. BEFD/AHB/1-8/124

Guyyaa /Date 28-7-2008

Waaj/Eeg/Fay/God/Shawaa Lixaa tiif

**Amboo**

**Dhimmi: Xalayaa deggersaa ilaala**

Akkuma beekamu Biiron keenya ogeeyyii, dhaabbilee akkasumas namoota qorannoo gaggeessuuf piropoozaala dhiyeffatan piropoozaala isaanii madaaluun akkanumas iddoo biraatti ilaalchisaniif fudhatama argatee (approved) dhiyaateef, piropoozaala isaanii ilaaludhaan waraqa deggersaa ni-kenna. Haaluma kanaan mata dure "Assessment of quality health services in Oromia National Regional State, Ethiopia" jedhamu irratti "Obbo Mootii Muleta" Hospitaala Ginda Baratii fi Buufataalee fayyaa 5 keessatti qorannoo geggeessuuf piropoozaalii isaanii Koree "Health Research Ethical Review Committee" Biiron keenyaatti dhiyeffataniiru.

Haaluma kanaan Koree "Health Research Ethical Review Committee" Biiron keenyaa piropoozaala kana ilaaluun mirkanessesse qorannoon kun akka hojiiroo oolu murteesse jira.

Waan kana ta'eef hojii qorannoo kanarratti deggersa barbaachisaa ta'e akka gootaniif, akkanumas akka hordoftan jechaa, "Obbo Mootii Muleta" qorannoo kun qaaceffamee xumurame fiiriisaa kooppii tokko Biiron Eegumsa Fayyaa Oromiyaatiif akka galii godhu garagalcha xalayaa kanaatiin isaan beeksifna. "Obbo Mootii Muleta" wayitii qorannoon kun qaaceffamee xumurame fiiriisaa kooppii tokko Biiron Eegumsa Fayyaa Oromiyaatiif akka galii godhu mallattoo kiyyaan mirkanessa.

Mallattoo \_\_\_\_\_

Maqaa "**Obbo Mootii Muleta**"

Guyya 28/7/08

Lakk. Bilbila: 0911-37-30-95

**G/G**

"Obbo Mootii Muleta" tiif

**Amboo**



Nagaa wajjin

*Daanteel Kabaa*  
Gaggeesaa Adeemsa Hojii Ijoo Bataa  
Tasaa Fayyaa Hawaasaa, Qo'annoo  
fi Qorannoo Fayyaa (BSc, MPE)

Tessoo: Tel: 011-371-72-77, Fax 011-371-72-27 Box. 24341 E-mail: [ahbhead@telecom.net.et](mailto:ahbhead@telecom.net.et) Address: ADDIS ABABA/FINFINNE-ETHIOPIA



BEFO/4/1-8/1261/gaafa guyyaa 28/07/2008  
W/Eegumsa Fayyaa Aanaa Gindabarat tiif

Lakk REF/A01/0-12  
Guyyaa 30/07/08

W/Eegumsa Fayyaa Aanaa Gindabarat tiif

**Kachissii**

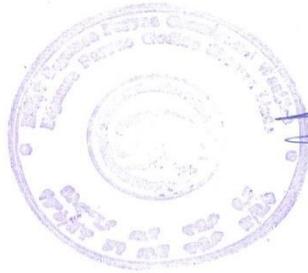
**Dhimmi: - xalayaa deggersaa ilaala**

Obbo Mootii Mul’ataa mata duree “Quality of health service delivery in Oromia regional state at Gindabarat district” Hospitaala Gindabarat fi Buufata Fayyaa Aanaa Gindabarat kessati argaman 5 (shan) irratti qorannoo gaggessuf piropoozaalii isaanii koree “ Health Research Ethical Review Committee” tiif dhiyaatee koreen kun qorannoon kun akka hojiira oolu murteesuu isaani Biiroon Eegumsa Fayya Oromiyaa xalayyaa lakk BEFO/AHBTF/4/1-8/1261/gaafa guyyaa 28/07/2008 nuuf barrefameen nu beeksisani jiru.

Kanaafuu qorannoo kanarratti deggarsa barbaachisaa ta’e akka gotaniif akkasummas oboo Mootii Mul’ataa qorannoo kun qaaccifamee xumurame firiisaa koppii 1 tokko W/Eegumsa Fayyaa Godina Shawaa lixaa tiif akka galii godhu garagalcha xalayaa kanaatiin isaan beeksifna.

Obbo Mootii Mul’ataa wayita qorannoon kun qaaccifamee xumurame fiirisaa koppii 1 (tokko) W/Eegumsa Fayyaa Godina Shawaa lixaa tiif akka galii godhu mallattoo kiyyaan ni mirkaneesa.

Mallattoo 10  
Maqaa Obbo Mootii Mul’ataa  
Guyyaa 30/07/2008  
Lakk.Bilbila: 0911373095



“Nagaa Wajjin”  
Dassaleeny Hundeesaa Tuggee  
1/A/1/C/W/E/Fayyaa  
Godina Shawaa Lixaa  
28/07/08

**G.G**

Obbo Mootii Mul’ataa tiif

**Amboo**



Lakk 1N/E/1F/2260/2008

Guyyaa 04/08/2008

Eegumsa fayyaa Oromiyaatti Qajeelcha  
Fayyaa Godina Shawaa dhihaa Waajjira  
Fayyaa Aanaa Gindabarat  
Qajeelcha Aanaa Gindabarat

Buufata Fayyaa Culuxee tiif

Buufata Fayyaa Guraa Jarjaraa tiif

Buufata Fayyaa Mukadiimaa tiif

Buufata Fayyaa Qarre Dobbii tiif

Buufata Fayyaa W/ Winne Roggee tiif

**B/J**

**Dhimmi: - xalayaa deggersaa ilaala**

Obbo Mootii Mul'ataa mata duree "Quality of health service delivery in Oromia regional state at Gindabarat district" Hospitaala Gindabarat fi Buufata Fayyaa Aanaa Gindabarat kessati argaman 5 (shan) irratti qorannoo gaggessuf piropoozaalii isaanii koree " Health Research Ethical Review Committee" Oromiyaa tiif dhiyaatee koreen kun qorannoon kun akka hojiira oolu murteesuu isaani Qajeelcha eegumsa Fayyaa Godina Shawaa lixaa xalayyaa lakk QEF/401/D-12 gaafa guyyaa 30/07/2008 nuuf barrefameen nu beeksisani jiru.

Kanaafuu qorannoo kanarratti deggarsa barbaachisaa ta'e akka gotaniif akkasummas oboo Mootii Mul'ataa qorannoo kun qaaceffamee xumurame fiirisaa kooptii 1 ( tokko) W/Eegumsa Fayyaa Aanaa Gindabarat tiif akka galii godhu garagalcha xalayaa kanaatiin isaan beeksifna.

Obbo Mootii Mul'ataa wayita qorannoon kun qaaceffamee xumurame fiirisaa kooptii 1 (tokko) W/Eegumsa Fayyaa Aanaa Gindeberet tiif akka galii godhu mallattoo kiyyaan ni mirkaneesa.

Mallattoo 30  
Maqaa Obbo Mootii Mul'ataa  
Guyyaa 04/08/2008  
Lakk.Bilbila: 0911373095

**G.G**

Obbo Mootii Mul'ataa tiif

**Amboo**



"Nagaa Wajjin"

Fayisaa Dandhamaa Gammachion  
Kiti Gafatamaa Waa' Fayyaa  
Aanaa Gindabarat  
Head, Woreda Health Department

## **ANNEXURE E**

### **Permission letter from Gindeberet District Health office**

Oromia Shewa zonal office  
Ethiopia  
+251 0112364758

The Health Centre Manager  
Gindabarat district  
Ethiopia

Dear Sir/ Madam

#### **Re: Request to collect data for a research study on ‘The quality of health services delivery in Oromia National Regional state, Ethiopia’**

I hereby request for permission conduct a study and to collect data for a research on The quality of health services delivery in Oromia National Regional state, Ethiopia. The purpose of the study is to assess the quality of health services delivery in the health centres at Oromia National Regional state, Ethiopia; with a view to develop standard protocols for health care delivery within the district.

This research study is an academic requirement for my degree in Doctor of Literature and Philosophy undertaken with the University of South Africa (UNISA).

The data collection period as accepted by the Higher Degrees Committee at the above mentioned University is hereby attached. Ethical consideration will be well adhered to during data collection. The participants above 21 years will voluntarily take part and will sign consent form prior to participation. Respect for privacy and confidentiality will be observed throughout the period to the data.

I hereby attach a copy of the research proposal and the ethical clearance certificate from the academic institution. If you require any further information, please do not hesitate to contact me at Moti Faji Muleta: [57660999@mylife.unisa.ac.za](mailto:57660999@mylife.unisa.ac.za) or [motimuleta@yahoo.com](mailto:motimuleta@yahoo.com)

Phone number: +251 0912364754

Cellular number: +251 0911373095

Thanking you in advance for your anticipated co-operation.

Yours Sincerely

Moti Muleta

# **ANNEXURE F**

## **Questionnaire and interview**

### **Interview guide**

#### **The quality of health services delivery in Oromia Regional state, Ethiopia**

##### Biographic information

1. Professional position
2. Type of Facility: private or public
3. Years of experience working in the Health Centre

##### Information on the delivery of health services in the health centre

1. Please share your views on the delivery of health services in Gindabarat district.
2. What are the barriers to quality health service delivery?
3. In your own observation, are there issues that need immediate attention with regards to health service delivery in your health centre? Please share with me.
4. What do you wish could be done in regard to these issues?
5. Please share the gaps you have identified with regards to service delivery at your health centre in relation to for example the following: premises, staffing, equipment, supplies, maintainace service, practice protocols and standards, food and dietary delivery services, housekeeping and laundry.

## Questionnaire

### The quality of health services delivery in Oromia Regional state, Ethiopia

Thank you for taking the time to complete this questionnaire. If at any time you wish to discontinue your participation, you are welcome to do so without prejudice.

#### Health Centre /Hospital Assessment Checklist

Please answer the following questions as truthfully as possible.

Please circle the number next to the age group you belong to.

Age	Number
22 - 30	1
31- 40	2
41 – 50	3
51+	4

Please circle your gender

Gender	Number
Male	1
Female	2

Please circle facility type you are working a.

Type of facility	Number
Private	1
Public	2

Please circle your years of service in the health centre.

Years of experience	Number
0 – 5 years	
6 – 10 years	
11 – 15 years	
15 – 20 years	
21+ years	

Please indicate your job description/professional status

--

Below you will find a series of statements with which you may agree or disagree. Using the scale, please indicate your response by ticking the box relevant to the selected number that corresponds with each statement. For the disagree, please indicate the gap or provide a reason next to the tick in the box

Statement	Agree 1	Disagree 2
1. The facility provides all the required services. If not, indicate the gaps in the space provided.		.....indicate the gaps
2. The health centre services provided are of quality.		
3. The Health Centre has policies and procedures regarding access, availability of service and networking.		
4. The Health Centre premises, structure and layout are adequate and fully functional for the delivery of health services.		
5. The Health is directed by fully licenced professionals for all required categories and specialities.		
6. The health centre has adequate materials and equipment.		
7. The inpatient services include all the services for admitted patients.		
8. The health centre has a separate Maternal and Child Health service unit with the minimum requirements for quality care.		Indicate gaps
<b>The health centre has adequate services (Statements 9-16)</b> (Indicate the gaps for disagree)		
9. Emergency services		
10. Staffing		
11. In –service training sessions		
12. Clear practice protocols and standards		

Statement	Agree 1	Disagree 2
13. Food and dietary delivery services		
14. Maintenance services, Housekeeping and laundry services		
15. Pharmaceutical services		
16. Laboratory services		
17. Radiological services		
18. Rehabilitation Services		
19. Management protocols		
20. Laboratory Services		
21. Electric source		
22. Organization Management and Quality Improvement services, Compliance Services		
23. Infection Control and Prevention Services		
24. Sterilization room and sterilization equipment		
25. Sanitation and Waste management services		
26. Water source		

Any other comment about the health centre service delivery which you feel is not covered above? Please share in the space provided.

---



---



---

Thank you very much for giving me your time to complete this questionnaire.

## **ANNEXURE G**

### **Information leaflet and consent form for individual interviews**

Researcher: MOTI MULETA FAJI STUDENT NUMBER 57660999

Title: The quality of health services delivery in Oromia National Regional state, Ethiopia

My name is Moti Faji Muleta and I am currently registered as a student at the University of South Africa, in the Department of Health Studies for the degree of Doctor of Literature and Philosophy. I am required to conduct a research project and would like to invite you to participate in the project.

The purpose of the study is to assess the quality of health services delivery in the health centres at Oromia National Regional state, Ethiopia; with a view to develop standard protocols for health care delivery within the district.

You are requested to voluntarily participate in the individual interview that will be conducted. The interview will take approximately 30 minutes. The interviews will be conducted by the researcher who will not share the information with any other person other than the supervisor of this study. You are free to ask any question if clarity is needed.

Your participation in the study is voluntary and you have the right to withdraw at any time, with no repercussion or penalty. However your participation is highly appreciated and will have no effect on your employment. Your identity will not be revealed during the study, but the findings of the study will be shared in the form of reporting or publishing in accredited journals.

There are no emotional risks anticipated in participating in the interview as the questions are not of a personal nature. However, should you require assistance in dealing with any arising emotions, please contact +251 0912364754. I understand that there may be no direct benefit to you, but I hope that the study will be able to identify the gaps in service delivery and

therefore suggest standard protocols to enhance the service delivery. The date of the interview will be arranged with you in time and you will be notified of the time and venue. If you have any questions about participating, please feel free to contact me on +251 0911373095. Thank you for reading this letter/ listening to this information and for considering participation.

If you require any further information, please do not hesitate to contact me:

Moti Faji Muleta: [57660999@mylife.unisa.ac.za](mailto:57660999@mylife.unisa.ac.za) or [motimuleta@yahoo.com](mailto:motimuleta@yahoo.com)

Phone number: +251 0912364754

Cellular number: +251 0911373095

## ANNEXURE H

### Consent

I \_\_\_\_\_ (full name and surname of participant) have read/heard this consent information and voluntarily consent to participate in this study.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

I have explained this study to the above subject and have sought his/her understanding for informed consent.

\_\_\_\_\_  
Witness/Interviewer's signature

\_\_\_\_\_  
Date

Appendix consent form

### Information leaflet and consent form for questionnaire

Researcher: MOTI MULETA FAJI STUDENT NUMBER 57660999

Title: The quality of health services delivery in Oromia National Regional state, Ethiopia

My name is Moti Faji Muleta and I am currently registered as a student at the University of South Africa, in the Department of Health Studies for the degree of Doctor of Literature and Philosophy. I am required to conduct a research project and would like to invite you to participate in the project.

The purpose of the study is to assess the quality of health services delivery in the health centres at Oromia National Regional state, Ethiopia; with a view to develop standard protocols for health care delivery within the district.

You are requested to voluntarily complete the questionnaire for this study. The questionnaire will take approximately 30 minutes and you will be able to complete at your own time. The information you provide will not be shared with any other person other than the supervisor of this study. You are free to ask any question if clarity is needed.

Your participation in the study is voluntary and you have the right to withdraw at any time, with no repercussion or penalty. However your participation is highly appreciated and will have no effect on your employment. Your identity will not be revealed during the study, but the findings of the study will be shared in the form of reporting or publishing in accredited journals.

There are no emotional risks anticipated in participating in the interview as the questions are not of a personal nature. However, should you require assistance in dealing with any arising emotions, please contact +251 0912364754. I understand that there may be no direct benefit to you, but I hope that the study will be able to identify the gaps in service delivery and therefore suggest standard protocols to enhance the service delivery.

The questionnaire will be self-administered and once you have completed the questionnaire, please seal it inside the envelope provided and put it in the box provided in the secretary's office. The box with completed questionnaires will be collected by the researcher two days after you have been supplied with the questionnaire.

If you have any questions about participating, please feel free to contact me on +251 0911373095. Thank you for reading this letter/ listening to this information and for considering participation.

If you require any further information, please do not hesitate to contact me:

Moti Faji Muleta: [57660999@mylife.unisa.ac.za](mailto:57660999@mylife.unisa.ac.za) or [motimuleta@yahoo.com](mailto:motimuleta@yahoo.com)

Phone number: +251 0912364754

Cellular number: +251 0911373095

## Consent

I \_\_\_\_\_ (full name and surname of participant) have read/heard this consent information and voluntarily consent to participate in this study.

\_\_\_\_\_  
Signature of Participant

\_\_\_\_\_  
Date

I have explained this study to the above subject and have sought his/her understanding for informed consent.

\_\_\_\_\_  
Witness/Interviewer's signature

\_\_\_\_\_  
Date

Ethical consideration will be well adhered to during data collection. The participants above 21 years will voluntarily take part and will sign consent form prior to participation. Respect for privacy and confidentiality will be observed throughout the study.

I hereby attach a copy of the research proposal and the ethical clearance certificate from the academic institution.

If you require any further information, please do not hesitate to contact me at Moti Faji Muleta: [57660999@mylife.unisa.ac.za](mailto:57660999@mylife.unisa.ac.za) or [motimuleta@yahoo.com](mailto:motimuleta@yahoo.com)

Phone number: +251 0912364754

Cellular number: +251 0911373095

Thanking you in advance for your anticipated co-operation.

Yours Sincerely

Moti Muleta

Oromia Shewa zonal office  
Ethiopia  
+251 0112364758

The Health Centre Manager  
Gindabarat district  
Ethiopia

Dear Sir/ Madam

**Re: Request to collect data for a research study on 'The quality of health services delivery in Oromia National Regional state, Ethiopia'**

I hereby request for permission conduct a study and to collect data for a research on The quality of health services delivery in Oromia National Regional state, Ethiopia. The purpose of the study is to assess the quality of health services delivery in the health centres at Oromia National Regional state, Ethiopia; with a view to develop standard protocols for health care delivery within the district.

This research study is an academic requirement for my degree in Doctor of Literature and Philosophy undertaken with the University of South Africa (UNISA).

The data collection period as accepted by the Higher Degrees Committee at the above mentioned University is hereby attached. Ethical consideration will be well adhered to during data collection. The participants above 21 years will voluntarily take part and will sign consent form prior to participation. Respect for privacy and confidentiality will be observed throughout the period to the data.

I hereby attach a copy of the research proposal and the ethical clearance certificate from the academic institution. If you require any further information, please do not hesitate to contact me at Moti Faji Muleta: [57660999@mylife.unisa.ac.za](mailto:57660999@mylife.unisa.ac.za) or [motimuleta@yahoo.com](mailto:motimuleta@yahoo.com)

Phone number: +251 0912364754

Cellular number: +251 0911373095

Thanking you in advance for your anticipated co-operation.

Yours Sincerely

Moti Muleta

## ANNEXURE I

**Table5. 1: Average scores of evaluation on each g**

Strategy	Eval 1	Eval 2	Eval 3	Euidelineval 4	Eval 5	Eval 6	Average score
Guide line 1	1	2	2	2	2	2	2
Guide line 2	2	2	2	2	2	2	2
Guide line 3	2	2	2	2	2	2	2
Guide line 4	2	2	2	2	2	2	2

## **ANNEXURE J**

### **Turn-it-in report**

#### Turnitin Originality Report

- Processed on: 22-Dec-2018 16:52 SAST
- ID: 1060209422
- Word Count: 90425
- Submitted: 1

Quality Health Service Delivery Thesis By Moti Faji Muleta