COLLEGE OF MEDICINE

Effects of working conditions on healthcare providers' provision of quality maternal healthcare services at Kamuzu Central hospital and Bwaila district hospital in Lilongwe district, Malawi.

By

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Declaration

I, the undersigned hereby declare that this is my original work and has not been submitted to any other institution for similar purposes. Where other people's work has been used, acknowledgements have been made.

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March 2020

Dedication

To my heavenly sent parents Mr. and Mrs. P. Tambala, who have treated me as their own, believed in my capabilities, supported me since my childhood until now and furnished me with the best future every child would dream of. I consider myself lucky because God always make a way when you don't see one, I am what I am today because he gave me best family.

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God bless you all.

EXECUTIVE SUMMARY

Background: In developing countries, health workforce is one of the predominant challenges affecting the health care systems' function of providing quality services including maternal care. The challenge relates to how these countries establish conducive working conditions that attract and retain health workers into the health care sector and enable them to perform effectively and efficiently to improve maternal healthcare services in hospitals.

Objective: The research study was assessing the effects of working conditions on healthcare provider's ability to provide quality maternal healthcare services in two major hospitals; Kamuzu Central hospital and Bwaila district hospital of Lilongwe district.

Methods: The research study was a qualitative descriptive approach applying in-depth interviews and focus group discussions using interview and discussion guides respectively. Participants were selected using purposive sampling. Data was digitally collected using audio recorders. The data was manually analyzed using thematic analysis.

Research Findings; The study has reviewed many working conditions that surround health workers at maternity departments of these two major public hospitals in Lilongwe district. The status of these identified working conditions received mixed reactions as majority of study participants expressed them as poor and pathetic, and that hugely affects their ability to provide quality maternal healthcare services. Health system and health managers have major role to play in supporting health workers available on the ground in order to improve maternal healthcare services that have higher potential to reduce maternal mortality rates in this country.

Conclusion; Both health workers and managers explained their perceptions on existing working conditions and how they are related to work motivation and overall performance.

TABLE OF CONTENTS

ACRONYMS AND ABREVIATIONS

AIDS Acquired Immune-Deficiency Syndrome

AMSTL Active Management of Third Stage of Labor

BEmOC Basic Emergency Obstetric Care

EmOC Emergency Obstetric care

EHP Essential Health Package

FANC Focused Antenatal Care

FGD Focused Group Discussion

GDP Gross Domestic Product

HIV Human Immunodeficiency Virus

HWs Health care workers

IDI In-depth Interviews

IRB Institute Review Board

MDG Millennium Development Goals

MDHS Malawi Demographic Health Survey

MNH Maternal and Neonatal health

MoH Ministry of Health

QI Quality Improvement

SDG Sustainable Development Goals

WHO World Health Organization

1. CHAPTER ONE: Introduction

1.1. Background

In developing countries, health workforce is one of the predominant challenges affecting the health care systems' function of providing quality services including maternal health care. The challenge relates to how these countries establish conducive working conditions that attract and retain health workers into the health care sector and enable them to perform effectively and efficiently to improve maternal healthcare services in hospitals (1). Achieving Sustainable Development Goal (SDG) three places high demand on the global health workforce and requires substantive and strategic investments (2). Health workforce stands among the six building blocks responsible for strengthening the health system and has the maximum ability to contribute towards improved quality of healthcare services as they are behind every block to operationalize within the health system context (3). Human Resource Management is geared at motivating staff to provide good quality health care but there are huge challenges in managing and motivating health workers for good performance in low and middle income countries (4). This is not exceptional for Malawi and there are likely to be a number of factors related to these poor working conditions that are limiting the country to achieve the desired maternal and neonatal health care outcomes.

Maternal mortality is a vital indicator with the widest disparity between developing and developed countries (5). In Malawi maternal mortality ratio according to the 2015-16 Malawi Demographic Health Survey (MDHS) was estimated at 439 maternal deaths per 100,000 live births (3). Malawi failed to achieve the set target of 155 deaths per 100,000 livebirths during the implementation of Millennium Development Goal number five (MDGs) which is currently succeeded by Sustainable Development Goals (SDGs). Provision of Emergency Obstetric Care (EMOC) to women and

improvements in social status may contribute significantly towards this goal (5). In order to reach SDG of reducing maternal mortality, women's access to good quality health care is required. This is more likely to be achieved as a result of better working conditions of health workers being met by the health care system. The need for accommodative working conditions for health workers providing maternal health care must be considered since they are very much associated with the performance issues and quality of services. There are three main components of maternal health care services namely: antenatal care, intrapartum (skilled birth attendants) and postnatal care. At each component the provision of quality care is the key which may easily be affected by working conditions of health care providers (6). The majority of all maternal deaths in Malawi occur due to direct and indirect obstetric causes (7). Access to and availability of medical care is both necessary but not sufficient factors to improve the quality of maternal and newborn health. In fact, they do not guarantee improvement of quality of such services that are likely to result in better maternal health outcomes and also increase client satisfaction.

1.2.Health workforce in Malawi

1.2.1. Population rises

A country's population growth rate is the critical variable in health workforce planning that seeks to meet minimum threshold for health worker density (8). There is likely to have huge impact of population growth on countries effort to improve their population's access and skilled health worker. Malawi has estimated population of over 17.5 million people and is experiencing a rapid population growth (9)**.** According to World Health Organization (WHO) recommendations encourage a ratio of 6 doctors and 34 nurses to every 10,000 patients but Malawi has only 0.2 doctors and 3.4 nurses and midwives for every 10,000 people (10). Poor working conditions

particularly in remote areas where primary health care is hugely delivered and serves large population inhibits Malawi's' ability to reach recommended ratios. Malawi is still far from achieving right ratio of health care professionals to patients effectively. Malawi ministry of health described the country's human resources situation "*as near collapse"* as lot of health workers are overwhelmed by the demand for services resulting from population growth (11).

1.2.2. Coverage and distance

The health workers distribution is unequal between urban and rural areas with more and highly qualified serving in urban than in rural or hard to reach areas, despite the fact that primary health facilities serve a large population (1). This is also the similar case with Malawi where health workforce distribution is unequal although over 80% of its total population resides in rural areas, they are understaffed and mostly run by a low cadre of health workforce with minimal skills (12). Alma Ata Declaration (1978) advocates for primary health care which is implemented through essential health package (EHP) in Malawi and it is believed to have improved the accessibility of quality health services to many Malawian citizens since health services are taken close to where the communities are found. However, health workforce trusted with this work are experiencing poor working conditions such as staffing crisis, receiving low pay, frequent stock outs of medical supplies and equipment, dilapidated infrastructures and poor road networking. These working conditions are dependent on specific location where health care provider is coming, could be either urban or rural setting. Malawi health sector is grappling with acute shortage of trained health care professionals in the public sector that could have impact on maternal health care.

1.2.3. Poor investment

Most governments find it hard to finance properly their health systems. Economically, the country's gross domestic product (GDP) experienced a reduction in the growth rate from 9.5% in 2010 to 5.9% in 2015(13). Over a decade government expenditure on health was less than 10% of the total government expenditure (14). This is far below the Abuja targets which committed governments in Africa to allocate at least 15% of their national budget on health (15). The main financing sources have been private sources contributing to 45 % of the total health expenditure, however in later years the major financing sources have been donors (14). The reality in many low and middle income countries have dilapidated public hospitals and clinics, lacking reliable water, sanitation, and electricity which often times may result into poor working conditions for the health workers even when they are highly trained and available (16). Health workers are unable to do their job and provide quality maternal health care services requiring reasonable government's investments. One of the most fascinating and important aspects of China's recent history has been the evolution of its health care system. In current situation China's economy is measured through its outstanding improved healthcare process and outcome indicators (17). Good investment strategies to public health improve coverage, quality and efficiency that may likely lead to better health and economic security for the country.

1.2.4. Retention of existing staff

Health system performance depends on the quality composition, distribution and retention of qualified health workers. Attracting and retaining health care professionals in rural and remote areas is acknowledged problem in many countries (18). While there is a considerable effort from government in increasing production of health workers through doubling the intakes in its training

colleges but deployment has been stagnant since three to four years now and retention of already existing health work force in the public facilities is a challenge. A number of studies on health workers in Sub-Saharan Africa have focused on the numbers available leaving the workforce at a particular point in time. Realizing the fundamental contribution of human resources to public health, the WHO issued policy recommendations for health worker retention. Shortage of health workers prevents good access to health services and is a barrier to universal coverage. When such shortages are accompanied by an unequal distribution of the workers, their impact can be even more dramatic (19). A study conducted in 12 countries in Africa, found that 12 countries as a whole are training sufficient physicians to replace outflows when inflows and outflows are considered together, however this is not the case in at least one of the outflow scenarios for 6 countries including Malawi (20). The situation is even worse for nurses and midwives, and physicians with only 3 countries (Ethiopia, Liberia and Sierra Leone) unequivocally training sufficient workers to replace those leaving the workforce. It was suggested that countries not doing well should have aggressive retention policies, such as improving the remuneration and working conditions of health workers and addressing high unemployment levels (20).

1.3. Research problem statement

Over the last decade low- and middle-income countries have focused on interventions that aim to increase demand for health facility delivery services that are believed to have high impact on maternal and neonatal health. Evidence is emerging that during the same period health sector reforms in most Sub-Saharan countries including Malawi, have stalled and health systems remain weak as characterized by inadequate funding (below Abuja recommended 15% of the national budget), inefficient resource management, and poor policy implementation, health workforce shortage, dilapidated infrastructure and weak information system (21). Many challenges are

coming in due to underfunding of a country's health system determines the position in terms of working conditions that are met by health workers and their influence on the quality of health care services. Government efforts are mostly directed towards the capacity building of health care providers on various methodologies of quality assurance and improvement with the belief that knowledge gained will deal with the direct and indirect causes of high rates of maternal mortality.

Currently in Malawi most health workers in public health facilities are suffering substantial frustration and dissatisfaction with the working conditions because of numerous constraints within the health system (22). It is likely that government through the health sector is unable to identify possible strategies for closing gaps existing within the health workforce crisis which is attributing towards poor working conditions. As such the country is far much away in achieving the desired maternal process and outcome indicators if the focus remains on capacity building of health workers on maternal and neonatal health (MNH) interventions without looking at other factors that will motivate and make them perform well in their work. The question one may want to address is how do working conditions affect the quality of maternal health services? Are these working conditions recognized and properly examined on how they are affecting their output on maternal health care services regardless of the trainings they attained to maximize their technical expertise intended for improvement in management of the leading causes of maternal mortality?

Thorough knowledge of health workers experience on working conditions is needed to understand the actual determinants for good performance which relies on motivation for work and ultimately the quality of maternal health care. This research study aims to assess how health providers' working conditions can actually be recognized and influence the deserved quality of maternal services that have to be provided to yield better outcomes.

1.4. Objectives of the study

1.4.1. Broad Objective

To assess the effects of working conditions on healthcare provider's ability to provide quality maternal healthcare services

1.4.2. Specific objectives

i. To explore working conditions existing on health care providers' affecting the delivery of quality maternal health care services.
ii. To explore the effect of existing working conditions on health care providers' performance and satisfaction.
iii. To explore health provider's perceptions of their working conditions on provision of quality maternal health care services.
iv. To examine the extent to which working conditions affect delivery of quality maternal healthcare services.

2. CHAPTER TWO: Literature Review

2.1. Introduction

This chapter presents a review of relevant literature to the study. It focuses on types of reviews conducted, search engines and search questions that were used and an actual literature review. The researcher used Google Scholar, Hinari, PubMed and Biomed Central (Open Access) with search words. Both published and unpublished studies were reviewed. The commonly searched questions and words used in this literature review were: Health workforce, maternal health care, working conditions, quality improvement in maternal health care and motivation and job satisfaction.

2.2. Maternal Health Care in Malawi

Malawi as a country has a well-established strategy called Health Sector Strategic plan which was revised in 2016 and will run for the next four years. The implementation of this important strategy stipulates interventions that would potentially address many challenges contributing to poor working conditions for health workers (23). In comparison with other countries like Tanzania and Uganda that have moved to decentralisation approach of running their health sector and many other sectors, it is believed that the similar approach that Malawi as a country has currently adopted will be able to understand better on how the health sector can run and improve the retention of health workers and enable them to provide the necessary maternal healthcare services.

The Malawi health sector through various international and local agencies support the government by integrating high-impact, evidence-based practices into activities that address vital Maternal Newborn and Child Health issues in communities and health facilities (24). It is also noted that the health sector is notably and heavily affected sector that experiences inadequate health care personnel, medical resources, equipment and supplies, a situation that aggravates not only

substandard quality of care but also undesirable low health outcomes more especially among the vulnerable women in Malawi compared to their counterparts in the neighboring countries (25). Despite Malawi engages in training skilled health workers in large numbers to meet the shortage of health workforce in the country, the effort has proven to be futile due to the country's economic situation that affects investment in health care services (26).

In many studies, it was clearly said that there is a need to establish a positive working environment, keep communication open, provide opportunities for career advancement and recognize and reward hard-working health workers (1). A study by Blaauw and colleagues dwelled much on job satisfaction being an important determinant of health worker motivation, retention and performance, all of which are critical to improving the functioning of health systems and improving the quality of maternal health care in low and middle income countries (27). They further compared job satisfaction among health workers of different cadres in between three counties; Malawi, Tanzania and South Africa. Findings revealed that variations and differences in job satisfaction were statistically significant in each country, particularly for Malawi which had almost 30% of its respondents as being not satisfied with their job (27). However, the study had inadequate evidence to show the relationship between working conditions and job satisfaction over health worker's performance as far as maternal health care is concerned.

One study conducted in Tanzania highlighted what is perceived as dominant concerns that influence health workers working conditions for provision of quality maternal health care services; uncertain future for their career advancement hence left the feeling of abandonment and lost within unsupportive system which leads to frustrating working environment. The study further analyzed administrative system being irresponsible and bureaucratic (1). The 2006 WHO report emphasizes

having human resource management that motivates, supports and develops health workers to achieve both international and national goals (28).

2.3. Maternal health care and quality improvement

Maternal Mortality Ratio is one of the main important indicators Malawi track on its performance. Globally, 62.0% of maternal deaths occur in postpartum period however in Malawi the evidence shows that the most leading direct cause of deaths is eclampsia and mothers usually are admitted in critical condition (29)(30). According to Malawi confidential inquiry into maternal deaths, analysis of the results on health workers, showed that skills among midwives are inadequate (2.8%) as contributing to maternal deaths. This was captured in cases showing incomplete assessments (38.4%), inadequate resuscitation (32.5%) and wrong diagnosis and no treatment (19.4%). All these culminate to question the quality of care provided in health facilities and quality of training, mentorship and skills development of health workers regarding basic and comprehensive EmOC (29). In A study conducted in Gambia, reviewed maternal deaths from different settings, and they utilized the three-delay model. It was found that delay in receiving adequate and appropriate care once the facility is reached is mainly due to operational difficulties in the health delivery system such as shortage in supplies and equipment, lack of trained personnel, incompetence of the available staff, exhaustion due to long working hours and many others (5). These factors may likely be determinants of health worker's working conditions which may influence substandard services accessed by women in many health facilities (30). There is more evidence on effectiveness of a number of interventions to prevent and manage all major causes of maternal morbidity and mortality including good nutrition, access to contraception, skilled attendance at delivery and emergency obstetric care (31). The implementation of highly evidenced interventions such as Focused Antenatal Care (FANC), Active Management of Third Stage of

Labor (AMSTL), etc. should also give insight of working conditions experienced by health providers providing maternity services of which may stand high possibility of compromising its quality.

There is no consensus of the quality of maternal health, partly due to inherent complexities of measuring the concept. While it is difficult to define the complex and to some extent, specific construct of quality, early attempts to define and measure the quality maternal health framework were developed by Donabedian (1988) (32). And according to Hulton et al define quality specific to this field as "the *degree to which maternal health services for individuals and populations increase the likelihood of timely and appropriate treatment for the purpose of achieving desired outcomes that are both consistent with the current professional knowledge and uphold basic reproductive rights.* According to findings of the systematic reviews which had collection of a number of pieces focusing on identifying the evidence base and information gaps on approaches that enable health providers to adopt and implement patient centred evidence-based interventions highlighted that quality improvement (QI) analysis at facility level, health workforce has full potential to improve a range of perinatal, maternal and labour specific indicators (30). Going further with the review shows that there is a need to maintain performance and motivation among these health providers, stress management trainings which will help to impart knowledge on better stress coping mechanisms, holding multidisciplinary meetings which will give insights on how services are being run and giving feedback sessions in order to isolate individuals strengths and weaknesses (30). However, there are very many limitations shown at that facility level as many of components of leadership, health information system and staffing models are unable to impact fully on MNH care and outcomes. Furthermore, it is not conclusive that health workers' working

conditions related factors are the only ones hindering the delivery of quality maternal health care in order to achieve the set SDG number five.

2.4. Working conditions

The concept of working conditions have been conceptualized differently by different authors; according to WHO (2006) in Songstand defines working conditions as the working environment and existing circumstances affecting labor in the workplace(28). In this case working conditions are defined as the driving forces which are associated with the number of health workforce allocated in maternity departments, skill mix, health team balance, compensations, non-financial incentives and workplace safety. All these driving forces will facilitate job satisfaction of the health provider who will be able to deliver deserved maternal health care to women. Better working conditions are essential for health worker motivation and ultimately for the quality of the health care delivered. In one of the studies which was focusing specifically on nurse working conditions, findings reviewed that there is a strong association between working conditions and outcome measures (33). According to a study which was comparing health provider job satisfaction and intention to leave between the three countries including Malawi, findings showed there were indeed differences as each country showed some variations among health providers' job satisfaction and Malawi alone recorded 26.5% of n=939 among those who took part in the study were seeking for jobs elsewhere (27). What would drive away one from his or her professional could be a number of factors, but in this case, it is clearly shown that health providers were not happy within their current working conditions.

The overall performance of health workforce is measured through better outcomes; maternal mortality happens to be one of them. Often times working conditions under which health

workforce are exposed will determine their output on patient's service delivery. Generally, policy makers are looking for ways to improve health care outcomes but are not concentrating to understand how these working conditions impact patient's quality of care. The European Working Conditions survey of 2005, highlighted that workers at low and middle level are inadequately informed on details in regard to their position, as such it raises concerns that essential information may not be equally distributed across the workforce (34). As in observing Malawi health sector is within this situation where health workers doing the technical work in maternity departments are inadequately shared with information that would have helped them to improve the quality of health services and meet people's needs and their expectations.

2.5. Motivation and job satisfaction

Working conditions surrounding health workers could possibly determine their motivation and satisfaction for work and further influence their performance. Motivation and job satisfaction are critical to improving the functioning of health systems in low and middle income countries (27). In a study conducted by Franco et al, described motivation as a set of psychological transactional processes. Psychological because it gives behavior purpose and direction and transactional because it is a result of individuals and their work environment (35).

It is not only monetary factors that play a role in affecting the health worker's motivation and job satisfaction. However, the usual health worker's strikes that fall in most health systems in African governments are associated with monetary benefits as being a major factor. Other studies of worker motivation in African countries showed that it is also very important to shed more lights on non-monetary factors that may positively motivate health care workers which would include better working conditions such as improved staff welfare, managerial support for career development,

improved quality of supervisions and adequate availability of medical supplies and equipment (36).

According to Herzberg et al, working conditions under which a health care provider find himself or herself are likely to be pull factors (reasons that will make him/her to stay in a job) or push factors (reasons that will make him/her to leave a job). The Herzberg Motivation-Hygiene factors Theory proposes that two sets of independent and distinctive factors exist which serve as satisfiers or dissatisfies to health workers and these could be influenced by intrinsic and extrinsic factors (37**).** These factors may include: status, job security, relationship with subordinates, personal life, salary, and working conditions. All these belong to the higher order motivating factors meaning factors that may likely stimulate health care workers' motivation even in absence of extrinsic rewards(38). Intrinsic job satisfaction primarily impacts on motivation when extrinsic needs such as good working conditions have been met but also when work is rewarding, for instance when it provides high social recognition or recognition of achievement by supervisors or colleagues.

2.6. Conclusion

The purpose of this chapter was to review the literature relating to working conditions that hinders health workers to deliver quality maternal healthcare services. The discussion in this chapter has been presented with major focus on the associated research problem as maternal healthcare in Malawi, maternal healthcare and quality improvement and working conditions. The literature has reviewed the gap in achieving quality of maternal care in this country and what other countries in similar circumstance have done in addressing the problem as far as health workforce working conditions are concerned.

3. CHAPTER THREE: Conceptual Framework

3.1. Introduction

This paper is focusing on health workforce's working conditions and their effects on the quality of maternal health care services. Working conditions are determinants of workforce performance. It is rewarding when a health system provides appropriate working conditions in order to make sure that performance of its health workforce meets the required standards and contribute towards national achievement of major outcome indicators such as maternal mortality and neonatal mortality rates. When health workers are motivated and satisfied, they find themselves within their comfortable zones and deliver what is expected of them. This influences improved adherence of standards which result into improved provision of quality of health care because it builds up competencies, opportunities, and strengthens the relationship of health workers, colleagues and local communities (39).

There are many theories and scientific articles on management of employees and their influences on motivation and job satisfaction which affect the overall performance and productivity. A researcher is concerned much on health workforce as "employees" under health sector, working conditions which are safeguarded by ministry of health for their employees and achievement of the optimal quality of maternal health care services which are measures of performance and productivity. This paper will use evidences that are linked to theories of motivation and job satisfaction that serves as basic aspect for a specific relationship between working conditions, employee satisfaction, performance and productivity. Herzberg's motivation and hygiene Theory, Maslow's Hierarchy of needs theory and Hawthorne theory by Elton Mayo are theories emphasizing on employees' motivation and will help in organizing ideas for this paper.

3.1.1. Frederick Herzberg Motivation-Hygiene theory

In 1959, Frederick Herzberg, a behavioral scientist proposed a two-factor theory or the motivator-hygiene theory. According to Herzberg, there are some job factors that result in satisfaction while there are others prevent dissatisfaction or they do not lead to dissatisfaction but no satisfaction. Hygiene factors are those job factors which are essential for existence of motivation at workplace but do not lead to positive satisfaction for long-term whilst motivation factors are inherent to work, yield positive satisfaction and motivate the employees for a superior performance. However, the theory has one limitation which worked as Herzberg's assumption of correlation between satisfaction and productivity. He distinguished between motivators; (e.g. challenging work, recognition, responsibility which gives positive satisfaction and hygiene factors e.g. status, job security, salary and fringe benefits), that do not motivate if present but if absent result in demoralization (40). Herzberg further described basic states as: High motivation and high hygiene often times result into perfect state of happy and motivated employees whilst if low motivation and low hygiene result into total mess of bored and unhappy employees (37).

The presence of hygiene factors such as salary is also vital however it only prevents dissatisfaction of health workers and has minimal or no effect on performance wise. Poorly managed health system which fails to understand that its health workforce is not motivated by addressing hygiene needs therefore is only truly motivated by enabling them to reach for and satisfy, the factors that Herzberg identified as real motivators such as achievement, advancement and development.

3.1.2. Maslow's Hierarchy of needs theory

Abraham Maslow defined need as *physiological and psychological deficiency that a person feels the compulsion to satisfy*. This need can create tension that can influence a person's work attitudes

and behaviors. This is a theory of needs that stresses out working conditions more than any other theory. Humans are motivated by multiple needs and that these needs exist in hierarchical order divided into five clusters: physiological and safety needs, these two are mainly about working conditions. Physiological needs may include work regime, work hours, work breaks, time to rest and among others. Safety and security need at work mean not only safe workplace that does not endanger a person's life or health but also considers safety of job in a psychological meaning. These could be fear from being dismissed, getting a demotion at work and even mobbing and bossing as such can influence negative impact on person's motivation and performance. The need of belonging to a group, the need of esteem and self-actualization needs are dependent on pleasant working environment and other people around. Safety of work environment also means a good orientation of a worker at the workplace , the knowledge of procedures and norms, predictability of the environment and in particular confidence in oneself (41).

Further Maslow said that people work to survive and live through financial and non-financial compensation, to make new friends, to have job security, for a sense of achievement and to feel important in the society, to have a sense of identity and most especially to have job satisfaction (42). The physiological and psychological needs are very basic determinants of performance and sadly they are also very often overlooked and underestimated by the employer. Health workforces that have job satisfaction are high performers in their respective workplaces (43). Health workforce working conditions must be able to influence achievement of such basic needs.

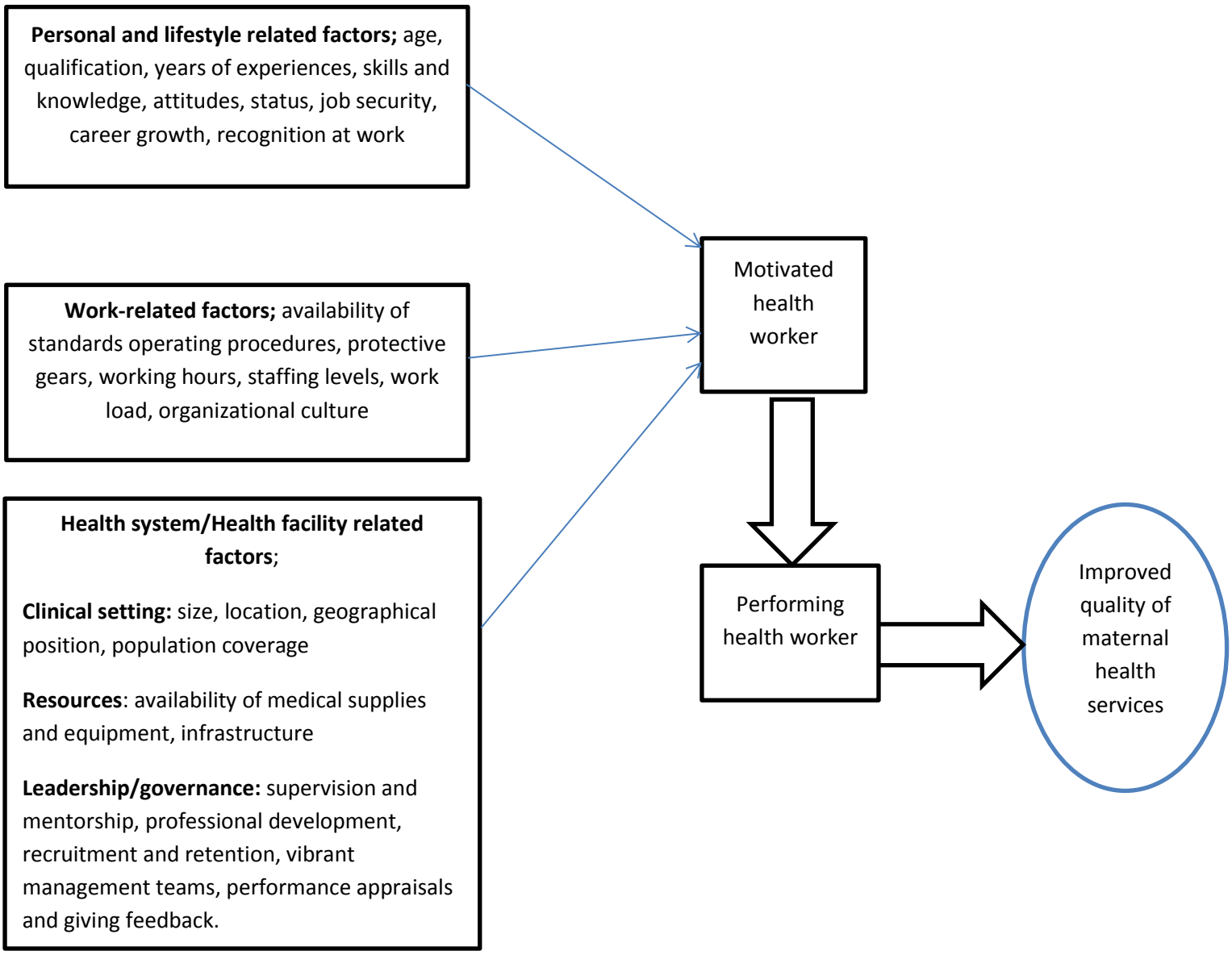
3.1.3. Hawthorne Theory-Elton Mayo

Elton Mayo was one of scientific researchers to investigate the relationship between working conditions and job production. He carried out an experiment in an organization called Hawthorne

in order to demonstrate effects of working conditions and productivity of labor. Every change in working conditions can likely cause an increase or decrease in productivity. Mayo proved that workers protest if their working conditions are poor and also proved their influence on both performance and job satisfaction. He further concluded that job productivity is affected by motivation of a person by his or her job satisfaction (41).

Health workers are people who are professionals in the field of assisting sick people. Since they are also people, they are basically motivated by working conditions which exist within their working zone which result in bringing job satisfaction that possibly attributes to improved service delivery. Better working conditions can also become part of organizational human resource marketing strategy which helps to attract new people and frequently it is the working conditions and not wages itself (41). Better working conditions consequently become a part of an organizational culture which helps to retain skilled workers and improve the quality of health care services. This study adopted the above motivation theories in relation to working conditions and health workforce productivity because it is deemed by the researcher as the most appropriate for the research study to identify and highlight some of the working conditions that affect the provision of quality maternal health care.

Figure one: Conceptual framework organized by researcher



3.2.Application of the theories

This framework was applied to ascertain the effects of working conditions existing in public health facilities on healthcare provider's provision of quality maternal health care services. It is giving major insight to health care managers, health technical group and entire public that availability of

better working conditions to health care workers working in maternity departments of public health facilities has the potential power of motivation and satisfaction. As such these better working conditions may tremendously improve health worker's performance and result in improving the quality maternal health care services. The study has answered specific questions by assessing and exploring in-depth effects of working conditions to the quality of maternal health care services. The interview guides were derived from this conceptual framework considering the factors at personal and lifestyle, work related, health system related health facility.

3.3. Conclusion

This chapter has illustrated the relationship of different theories on motivation and job satisfaction and performance of an employee (health worker) whose major role is centered on a mother and unborn/newborn baby. The conceptual framework has been presented based on available literature. It was determined and directed towards development of the interview guides that were used for data collection. The chapter has been designed to help answering the research question in a logical manner.

4. CHAPTER FOUR: Research Methodology

4.1. Introduction

This chapter describes methodology which was used to gather the data relevant to the study. It contains research design, study setting, identification, selection and recruitment of participants (sample size and sampling technique and sampling procedure) eligibility criteria, and explained methods of data collection, analysis and interpretation.

4.2. Study design

To enable the researcher to achieve the study's aim of assessing the effects of working conditions on healthcare provider's ability to provide quality maternal healthcare services, a descriptive qualitative approach was used employing in-depth interviews (IDIs) and focus group discussions (FDGs). The descriptive design describes phenomena as they exist. It issued to identify and obtain information on the characteristics of a particular problem or issue (44). Descriptive design was used because it has the advantage of producing good amount of responses from a wide range of people. Also, this design provides a meaningful and accurate picture of events and seeks to explain people's perception and behavior on the basis of data collected. Another advantage with this design is that it helps to find views as they are in their natural setting.

4.3. Sample Size

Kothari (2004) defines a sample as a small group of respondents drawn from a population about which a researcher is interested in getting the information so as to arrive at a conclusion. In-depth interviews (IDIs) were carried out to five key informants who comprised of health and non- health related managers from these two health facilities. Three focus group discussions were conducted with a total of 21 participants having adopted the range of 6-10 participants in each group. Two

FGDs were conducted at Kamuzu Central Hospital and one FGD at Bwaila District Hospital. FGDs comprised of nurse midwives, clinical medical officers, anaesthetical medical officers, and medical doctor.

4.4. Sampling Techniques

The study employed purposive sampling technique and a non-probability sampling, which is most effective when one needs to study a certain cultural/social domain with knowledgeable experts within (45) the study context. Purposive sampling is fundamental to the quality of data gathered. Thus, reliability and competence of the informant is ensured (46). This means that it guarantees that the sample chosen is representative of the population and that the sample is selected in an unbiased way (47). Random sampling technique was adopted in getting the respondents to take part in IDIs and FGDs.

4.5. Study setting

The study was conducted in Lilongwe district at Kamuzu Central Hospital and Bwaila District Hospital. These are public health facilities that serve large catchment areas of the district. Kamuzu Central Hospital is a tertiary referral hospital in Lilongwe, Malawi. It is estimated to have 600-1,000 beds, though the true number of patients always exceeds the number of beds. It serves approximately 5 million people. Bwaila District hospital is among the busiest district hospitals in Malawi with admission rate of 300 a day and has 220 bed capacities. It is estimated of conducting 50-85 deliveries during a single day.

Both health facilities have health workforce which is facing major challenges regardless of tirelessly dedicating themselves in helping mothers during the whole period of their pregnancy until the time they deliver their babies.

4.6. Identification, Selection and Recruitment of Participants

Focus Group discussions and in-depth interviews participants were recruited based on pre-set criteria described in the eligibility criteria sections. To ensure that researchers were accommodated within busy schedules of health and non- health manager's physical booking of appointments were done and specified dates and time was given. The researcher observed punctuality in order not to miss the appointments. These interviews were conducted at their offices at health facilities where they were working. As for FGDs participants' first permission was sought from heads of departments then from the maternity ward in-charges/or heads of sections where the approved signed briefing letter with all necessary details about the study was presented. The list of potential participants meeting the pre-set criteria was identified and allowed to excuse them from work on the set day if they happened to be on shift during the scheduled day for FGD and this list was also shared to the researcher. Other participants were contacted through either phone calls or meeting them in personal and date and venue was agreed for FGD. Researcher was reminding all contacted participants a day before the actual set date and time of the FGD. All FGDs were conducted at health facilities where these health workers were working. The researcher sought consent from participants in writing.

4.7.Eligibility criteria

The eligibility criteria of participants were as follows:

4.7.1. In-depth interviews

Inclusion criteria

All key informants were working at the two health facilities as health and non-health managers, such as head of departments, chief nursing officers, district medical officers, human resource manager, and principle administrative officer and have been directly involved with health care workers working at maternity departments for a period of one year and more. Key informants displayed willingness and interested in taking part in the study.

Exclusion Criteria

Health and non-health related managers who were working at two health facilities being there for less than one year and not having direct responsibility over health workforce working at maternity departments. This was also applied to managers who were not willing and interested to take part in the study.

4.7.2. Focus Group Discussions

All participants in FGDs were active health care workers (midwives, physicians, clinicians, and anesthetists) providing maternity services for a period of one year or more at maternity departments of the two health facilities along with the ability and willingness to provide consent.

4.8. Data Collection

Data collection tools

In-depth interviews and focus group discussions were conducted following inclusion criteria of study population. These interviews were conducted in English language. A semi-structured

questionnaire interview guide was used as a tool for consistency of data. The interview included questions on personal and lifestyle, work and health system or health facility related factors. All interviews were recorded with permission using digital audio recorder, which were transcribed verbatim. The transcription served as the data for analysis.

Data collection process

Prior to data collection, authorization was obtained from Kamuzu Central Hospital and Bwaila District Health Office. Informed consents were sought from participants. Data collection tools were developed in English and pretested and finalized for data collection (refer to Appendices II and IV). The conceptual framework informed the data collection tools' development. The guiding questions were formulated in a way to respond to objectives of the study. Data collection methods used was IDIs and FDGs. The researcher went through the data, cleaned it, and validated it.

Individual interviews were conducted to collect data from health and non-health managers. This allowed conversations between the researcher and participants, which is occasionally known as a self-report. The researcher collected data from health and non-health managers and health workers aged between 33 -54 and 26-66 and years respectively over a period of one month. In-depth interviews were conducted at managers designated individual offices at the facility while FGDs were conducted in private and quiet places at the facility in between working hours when taking their lunch break. All interviews were conducted in English language. One research assistant was recruited and trained in ethics to assist with logistics of the study (identification of participants at the hospitals, scheduling time with participants and criteria for participants). He also helped to find venues for the FGDs within the facility and assisted with serving refreshments. The research assistant was a nurse midwife technician working at Lumbadzi health center. All interviews were

audio recorded using audio digital recorder with permission from the participants and data was collected until we reached saturation.

4.9. Academic Rigor

Qualitative data is assessed for its trustworthiness or its true value. To ensure quality of data in this study, the researcher established trustworthiness and true value of data by ensuring the following:

Credibility

Credibility refers to confidence in the truth of data its interpretations (48). In this study, credibility was ensured by prolonged engagement in data collection and interpretation. Sufficient time was dedicated for data collection activities to help participants unfold naturally. The researcher established a good rapport with participants at the beginning of the interview to allow for participants' free expression. Confidentiality was maintained throughout the study and unintended disclosure was avoided.

Dependability

Dependability refers to data stability over a period of time and conditions. It is comparable to "validity" in quantitative studies (49).

This study achieved dependability by keeping detailed records of the research process to enable future researchers to repeat the study in the same context with the same methods and obtain similar results. Scrutiny of data and relevant documents to assess the extent to which proper research have been followed could be performed with an audit enquiry.

Transferability

The potentiality of transferring the findings to other settings is referred to as "transferability" (49). The researcher has produced a detailed description of the methods used in data collection, analysis as well as the study setting to enable another researcher to apply findings to other settings and come up with similar findings.

External Validity

The study results can be generalized and be applicable to other settings with similar characteristics as in this study like HIV prevalence, socioeconomic status, accessibility of health services just to mention but a few.

Conformability

Conformability refers to objectivity and neutrality of data, which has the potential for congruency between two or more independent people about the accuracy of data (49). Conformability was enhanced by bracketing and maintaining a flexible journal of the study. Although complete conformability is not possible, the researcher made sure that her personal values and beliefs did not influence the research findings.

4.10. Pretesting the tools

The researcher pre-tested the study tools for feasibility and validity. One health manager for IDI at Kamuzu Central Hospital and six participants for FDG at Bwaila district hospital were identified for pretesting tools. The participants involved in the pretesting of tool were not included in the real study. This exercise gave the researcher an opportunity to practice interviewing techniques. The data collection tools were not changed after pretesting and were adopted for the real research.

4.11. Data Management

Data safety was observed by keeping hard copies and digital recorders in a lockable cabin as we awaited analysis. Access to data was controlled, so as to prevent a breach of confidentiality and to avoid data losses. Data was rigorously and thoroughly transcribed verbatim into an orthographic transcript before actual analysis (50). Passwords were assigned to the documents to limit unnecessary access to the recordings and documents.

4.12. Data analysis

The collected data was manually analyzed using thematic analysis as suggested by Braun et al (51). Data from IDIs and FGDs was audio recorded then transcribed verbatim in the same language as recorded. This involved presentation of experiences, meanings and realities of respondents existing working conditions and how these affect the delivery of quality of maternal health care services. The steps that were followed included data familiarization through reading and re-reading of the data to achieve immersion. Firstly, notes were taken and ideas marked while reading data and before engaging in data transcription as a formal process of familiarization. Secondly, initial codes were generated where the data sets were extracted from the data corpus by active and careful identification of semantics that produced meaning since the codes did not necessarily reside in the data but were identified in an active manner. Deductive coding was performed based on prioritized concepts laid at first like availability of resources at facility, skills of health staff and inductive coding of themes using participants' own words that involved active searching of repetitive semantics from the participants. The process involved identification of many codes as possible so that any meaningful idea was embedded in the analysis. Thirdly, a process of searching for themes was conducted which involved collating all similar coded data extracts into themes. Visual representations were developed to come up with a thematic map. The overarching themes and sub-

themes were identified. Fourthly, themes were reviewed by refining and collapsing them to ensure that they were correctly represented. The concept of internal homogeneity and external heterogeneity was considered to make sure that the themes were well demarcated from each other. A thematic map was developed, that was a candidate thematic map. Fifthly, themes were defined and named that allowed identification of essence in the themes. The last step was production of the report itself which has presented the findings and discussion involving telling a convincing story of the collected complicated data in a coherent, logical repetitive and interesting manner. The discussion involve interpretation of the themes (52). Saturation of data extracts demonstrated prevalence of the themes.

4.13. Ethical considerations

The research proposal was submitted to the College of Medicine Research Ethical Committee (COMREC) for review and approval which was done (refer to COMREC number [P.12/18/2552]). Permission for data collection was obtained from Kamuzu Central Hospital Directors and Lilongwe District Health Officer of Bwaila District Hospital where the study took place. Study participants willingly provided written consent (see Appendices I, III and IV). To avoid disrupting health services, data was collected in the afternoon when health care workers were less busy than in the morning hours. Interviews were carried out in quiet rooms. Unnecessary disclosure of information was avoided to maintain confidentiality.

4.14. Constraints

The study faced refusal challenge by health workers from one of the targeted health institutions. Reasons behind their refusal were understaffing levels on a shift and others expressed not interested

especially on the side of medical officers. In additional to that, busy schedules of respondents for interviews delayed data collection.

4.15. Conclusion

This chapter has extensively described the methodology that has been undertaken throughout research conduct. The illustration of research method and the sampling technique were used in order to achieve the main objective of the study which aims at assessing the effects of working conditions on healthcare providers' ability to provide quality maternal healthcare services. The chapter has also highlighted ethical considerations that were observed in the data collection processes.

5. CHAPTER FIVE: Results

5.1. Introduction

This section presents the research findings. The research was qualitative in nature with in-depth interviews (IDIs) and focus group discussions (FGDs) guided by semi-structured interview guides. The FGDs were conducted with the aim of engaging health workers in a discussion of issues pertaining to their experience of working conditions. The interview guides were employed with great flexibility to allow for time to be spent on issues emerging during the discussion. The participants were articulate, and the flow of the discussions was smooth.

The study involved five key informant interviews (health and non-health managers) and three FGDs with a membership of 21 participants (health workers). Data was collected for a period of one month from both key informants and FGD participants comprising groups of health workers namely; nurse midwives, anaesthetical clinical, medical clinical officers and doctors at Kamuzu Central hospital (Ethel Muthalika Maternity wing) and Bwaila district hospital (new maternity wing) in Lilongwe district. The focus group discussions lasting 60 to 72 minutes and IDIs lasting 30 to 58 minutes were conducted in these two hospitals.

The findings follow the study objectives and were guided by the conceptual framework organized by the researcher drawing its major concepts from a number of theories on management of employees and their influences on motivation and job satisfaction which affect the overall performance and productivity. The findings are presented in two parts: the first part includes demographic details of the participants referred to as Section A, the second presents qualitative findings of data of which included participants' views, thoughts, feelings and ideas gathered during the interviews.

5.2. SECTION A: Demographic Characteristics of Participants

Demographic Data for Focus Group Discussions

We conducted three FGDs with a total of 21 participants. Participants from FGDs one and three provide care at Kamuzu Central Hospital (Ethel Muthalika maternity wing) and participants from FGD two provide care at Bwaila district hospital maternity wing. The table 1 below summarizes demographic data of FGDs participants.

TABLE 1. Focus group discussion participants' characteristics

Sex	Female	71.4% (n=15)	**Duration of post**	2-7yrs	71.4% (n=15)
	Male	28.6% (n=6)		8+ yrs.	28.6% (n=6)
Age	26-35	66.6% (n=14)	**Professional cadres**	Nurse Midwives	71.4% (n=15)
	36-45	4.8% (n=1)		Clinicians	9.5% (n=2)
	46-55	14.3% (n=3)		Medical doctors	4.8% (n=1)
	56-65+	14.3% (n=3)		Anesthetists	14.3%(n=3)
Location of stay	Institution house	76.2% (n=16)	**Professional qualification**	Bachelor's degree	19% (n=5)
	Elsewhere	14.3% (n=3)		Diploma	57% (n=12)
	Not Indicated	9.5% (n=2)		Certificate	24% (n=4)
Marital Status	Married	76.2% (n=16)			
	Single	9.5% (n=2)			
	Widowed	9.5% (n=2)			
	Not Indicated	4.8% (n=1)			

Demographic Data for Key Informants

We also conducted in-depth interviews with 5 key informants using an interview guide. The table 2 below summarizes demographic characteristics of key informants.

TABLE 2. Key Informants characteristics

Sex	Female	80% (n=4)
	Male	20% (n=1)
Age	31-40	20% (n=1)
	41-50	60% (n=3)
	51-60	20% (n=1)
Professional cadres	Nursing Managers	40% (n=2)
	Human Resource Officer	20% (n=1)
	District Medical Officer	20% (n=1)
	Principle Administration officer	20%(n=1)
Duration of Post	1-10yrs	80% (n=4)
	11-20+ yrs.	20% (n=1)
Marital Status	Married	100% (n=5)
Location of stay	Elsewhere	100% (n=5)
Professional qualification	Master's degree	20% (n=1)
	Bachelor's degree	80% (n=4)

5.3. SECTION B: Qualitative Data

TABLE 3: Identified Themes and Sub-Themes

OBJECTIVE	THEME	SUB-THEME
Existing working conditions affecting delivery of maternal health	Knowledge of working conditions	Health providers' knowledge Managers knowledge
	Making awareness of working conditions to leaders and health system	Approach used by h/providers
	Challenges arise from working conditions	Health provider's response Leadership support
	Health workforce management	Responsibility Bureaucracy Recognition Opportunities
effects of working conditions on health care providers	Performance	Adherence to standards, policies Meeting client's expectations and needs
	Satisfaction	Resource availability Environment Leadership
	Living conditions	Personal needs Family needs Housing
health provider's perceptions working conditions on provision of quality maternal health care services	Motivation/ demotivation	Benefits Work organisation Team working spirit
Impact of working conditions towards maternal healthcare services	Quality maternal healthcare services	Relationship of working conditions and quality maternal health care services
	Maternal indicators	

5.4. Knowledge on existing working conditions

Health workers and their managers were all knowledgeable on status of working conditions that surrounds them and how each of them was affecting their ability to provide quality maternal healthcare services. There were various working conditions that were identified being at the central point of discussions. Many of the FGDs respondents and key informants mentioned the following working conditions: low staffing levels, inadequate medical supplies and equipment, good working relationships among health workers, lack of proper recognition and rewarding systems, modern and spacious infrastructure, inadequate training opportunities, good organization of working system, good environment and many others.

The summarized general status of working conditions received some mixed reactions from both health workers and managers. Some health and non-health managers were able to appreciate the status of working conditions that surrounds them as being good. One key informant said

"I can say their working conditions are good because they normally have shifts, some work during the day and others during the night, I haven't yet received any complaint from them which means everything is good" IDI_002.

In contrast to that, majority of health workers and some health managers described the status working conditions as poor and pathetic.

"I see that status of our working conditions are very poor, too much workload few workers, inadequate resources to support your work, so boring and pathetic. These poor working conditions are crosscutting, are affecting every professional cadre within the health system" IDI_001.

Health workers reported that at times to make these working conditions be known to their leaders they implored some mechanisms.

"to make our leaders know the status of our working conditions we organize ourselves and present the challenges we are facing to them if we don't get feedback we agree to put tools down (strike) that result to the rise of major complications to patients" FGD1_R1, FGD3_R1&R7

5.5. Health Provider Competence (Knowledge and skills)

The quality of maternal healthcare services mainly depends on health providers' that have updated knowledge and technical skills. Majority of respondents that participated in the study haven't had any opportunity for trainings or mentorship sessions for the past two years.

"*…. haven't attended any training in the past 2 years" FGDs 2 and 3 group response*

Healthcare professionals are expected to improve their competencies (i.e. the attitudes, knowledge, and skills) to deliver high-quality maternal services by providing them with these training opportunities of which a good number of them openly said that they are always denied such opportunities by their managers. And they (managers) don't seem to put much effort to look for such opportunities for health workers.

"…. management refuses health workers to attend trainings…." *FDG2_R2 & R4, FGD3_R3,*

"leaders do not put any effort to look for training opportunities that can benefit us, most of health providers at central hospital are able to get such opportunities because of their own effort and are forced to present false information on reason for their absenteeism at work to their managers" FGD1_R1.

Some health workers felt that by being at secondary or tertiary level of health care as the case with central and district hospitals, that alone would have been considered the big opportunity to them of acquiring more advanced knowledge and skills that would have been provided by specialists and consultants at the facility. However, that is not being perceived in that way.

"I am a medical doctor in practice, I am supposed to be working in a full hospital where I would be able to ask my seniors (specialists, consultants) for their second opinion if am not sure, but look, there is only one consultant and often times is not here at this hospital" FD2_R3

5.6. Health Workers' motivation and satisfaction

Health workers' job satisfaction is very important in delivering high-quality maternal healthcare services. Healthcare providers and their managers identified organisational factors they believed influence their motivation and consequently job satisfaction. These were good working relationships among colleagues, organization of work, working environment, receiving timely positive feedback when issues are presented, infrastructure, good patient's outcome, and patient's satisfaction on care given, when maintained on payroll when gone for upgrading of their qualifications.

Health workers mostly expressed their satisfaction with patients' outcome and observed satisfaction among them (patients),

"Seeing women in desperate conditions and then they are provided with care that later brings improvement to their life I feel good and that keeps me going" FGD3_R2

Good working relationship among healthcare professionals and supporting staff helps in building up good team working spirit at the workplace as it was reported that it plays major influence towards their motivation and commitment to the work, they do every day. And thus, boost up their working morale, forgetting all the worries about working conditions surrounding and having the ability to come up with better alternatives within the system and maximizing the few resources available to assist a good number of patients with the sole aim of meeting their expectations and needs.

"…team working spirit keeps me going as I see that everyone is working on achieving better outcomes of patients" FGD3_R5.

Health workers reported that were pleased on how work is organized at maternity departments of these two hospitals. It was said it brings certain motivation to them in a way that patients are hardly missed out and that also helps them making extensive follow-up on them even when internal referral was made for further management.

"patients are put in units (1,2,3) that helps in making follow up and assess progress of their condition because in every unit are assigned clinicians/doctors that you can always call" FGD3_R8

However, majority of respondents were dissatisfied, frustrated and stressed because of a number of working conditions that surrounds them such as, shortage of staff that leads to heavy workload, very little salary, fault finding/blame game, inadequate specialists, lack of proper recognition mechanism that is cross-cutting, no direct benefits, inadequate medical supplies and equipment's, lack of supervision, no supportive environment, inadequate involvement in decision making, delayed promotions.

The ratio between patient/client to midwife/clinician/doctor was not good because there were critical staffing levels that were believed to result in compromising the quality of maternal healthcare services because were always exhausted when coming in and out of long shifts.

"workload is just too much, your always tired, you can't do anything at home, the conserved energy is on patients, if you're a wife you cannot attend to your husband and children because your always tired" FGD2_R4.

Working in an environment which has limited or no resources to support quality delivery of healthcare services brings a lot of dissatisfaction and slumber mood within a health worker.

"I feel demotivated when I fail to assist a woman accordingly with the care she deserves and something goes wrong because of lack of necessary support of resources such as drugs and that feeling inside me of knowing that I would have done something different" FGD1_R2.

Throughout every focus group discussion with healthcare providers and In-depth interviews with their managers, the common reason for their dissatisfaction was insufficient and unfair pay that is failing to meet very expensive living conditions.

"I would say what health workers get is not adequate, salary cannot support them with all their needs because living standards in Lilongwe are very high and costly, there are many costs they have to incur such as transportation, food, housing and many others" IDI_005.

Another health worker reported that

"Salary is not enough, I cannot afford to support myself and my family, it changes my commitment towards work because I have to start thinking of doing business that can supplement my small salary" FGD3_R3

Majority of health workers and their managers were able to describe living conditions as not good because they could hardly meet all necessary expenses with what they earn on monthly basis from their jobs.

"living conditions are not good because levels of government salaries are not enough, just imagining a nurse would be getting MK190000 or less per month and that has to support her to

get a good house and everyday has to move from home to work and back plus lunch, I don't think it is enough, since we are all struggling we just look at it as normal" IDI_002

Health workers were also more concerned with the very small risk allowance they get comparing with their colleagues working at private institutions and they have greater feeling that the work they do is putting them at a very high risk and awkward situation to their lives. One respondent said;

"….. risk allowance we get is MK1500 comparing with private clinics that are getting MK75,000, this is pathetic" FGD1_R3.

It was very important for health workers to see that their contribution towards improvement of women's and new-born lives was recognized and valued by managers, even if only symbolically. Most of health workers reported that did not see it coming from their managers.

"I feel demotivated because when I do something good no one speaks of it but when something goes wrong your always accused, the whole blame is put on you without considering that I was alone on duty and had a lot of patients to take care, given a chance to do something else, I would lightly jump on it" FDG2_R1.

5.7. Feedback on performance

Performance appraisal was perceived as the process that points out strengths and weaknesses of an individual and gives an insight of areas that requires improvement for the betterment of that particular individual and patients. Hospital managers acknowledged of having functional performance appraisal system that enables health workers to be recognized and rewarded through this approach.

"…. best performers are rewarded through the process of performance appraisals…." IDI_004

However, most of health workers reported that had never been appraised on their performance and they were not sure about their performance and that as well hindered them to improve the quality of healthcare services.

"we don't get feedback on most of the things we do, am not even sure if at all my colleagues got appraised on their performance and ever received feedback" FGD3_R8

When asked for an example of the feedback health workers had ever received, many health workers cited occasions of receiving negative feedback that usually provided after committing an error and that was regarded as a blame.

"…there is lack of feedback on most of the things we do, even some will bring projects to this hospital but they do not provide us with any kind of feedback…the only time you get feedback is when you have committed a blunder and is being circulated on social media platforms, thus the only time you see you managers coming to you curious to know what happened, what went wrong and asking you to write an incident report" FGD3_R8.

5.8. Leadership and management

Effective health facility and entire system management were mentioned as an important enabler of quality healthcare services from the perspective of health workers and managers. Many respondents from FGDs were in agreement that their managers are more knowledgeable on unfavorable status of working conditions that surrounds them and expected adequate support from them.

"….. our leaders are much aware that health providers are in trouble, but we are usually asked to calm down and give them a little time to address the presented issues" FGD1_R6

"..... our managers are much aware of the status of our working conditions, they are slow in responding to these problems, they have been there ever since, they only see that staff is there, are working and wards are covered, the rest they don't care at all and years are passing no tangible response especially on the less pay issue" FGD3_R4

Health workers desired to have had supportive leaders that would have triggered a lot of strength and increase their commitment towards work. They expected their leaders to put effort in rescuing them from the current working conditions, addressing the existing challenges they are facing immediately. The majority of health workers perceived it in a different way.

"*our managers delay in responding to challenges that we present to them, sometimes they just advise us to find alternatives of which are not long lasting and sometimes they do not provide us with any feedback at all" FGD3_R4&R8*

Hospital managers' ability to support fully health workers was limited to the fact that country's health system was not also adequately supporting these hospitals to run as expected. Majority of managers pointed out on some influences that are believed to be part and parcel of the current status of working conditions.

".... yes, management here is trying, so is the ministry of health but not enough, our MoH can do better than this because somewhere else are doing better either on salaries or resources why can't they do the same with us, to our health workers so that they must find something that can attract them. The MoH must provide us with adequate resources, improve health budget allocation" IDI_003.

Management went beyond to look on how health workers were able to manage themselves within current working conditions. Managers were aware of major constraints health workers are facing,

they provided support through encouraging them on maximizing the use of minimal resources provided to them and be responsible in everything they do in order to achieve patients' expectations and satisfaction.

"I encourage them (health workers) to make sure few resources that are provided to them should not be mismanaged or abused but should achieve efficiency and effectiveness to meet the needs of the patient." IDI_005

5.9. Effects of working conditions over quality of maternal healthcare services

Health workers reported that were observing many effects of existing working conditions towards the delivery of quality healthcare. For example, in a resource constraint environment was reported that;

"it gives bad image to the public, as the hospital is regarded as a death trap" FDG1_R2

Health workers also reported that they were much concerned with their own physical health as they work in an environment that is not conducive.

"……the more years one stays in health professional the more he/she is at risk of suffering physical problems like spinal cord pains the rest of her/his life" FGD1_R2

With adequate staffing levels at the ward was believed in influencing proper distribution of tasks among health workers and that minimizes the chances of compromising the quality of healthcare being delivered to patients. Under different circumstances where there were experiencing critical shortage of staff in the ward usually would bring out a different story.

"there is no adherence to protocols and standards because you're alone in the ward and have to monitor over 5 pregnant women who are in labor" FDG2_R3

Professionalism and good conduct were reported as an area that was also highly affected with current existing working conditions as issues of favoritism, taking bribes from patients and stealing medical supplies for example drugs happened to be on the rise.

"we are forced to prioritize our relatives to access health care services easily and timely and receiving bribes because resources that are available cannot meet the needs of all patients that comes to this facility" FGD3_R8

5.10. Perceived relationship between working conditions and quality maternal healthcare services

Health managers were in agreement on noticeable relationship between existing working conditions and delivery of quality maternal health services. Health workers' performance was influenced with motivation and adequate support from their managers. As they were working in a conducive environment, the feeling was good and that goodness was transferable to patients, for example with the working environment that was well supported with medical supplies and equipment's and staffing levels were good, patients felt satisfied with the care when they got helped accordingly and complications were reduced and proper healthcare was provided in time.

"I see this relationship as inseparable……. when working conditions are good, they work hard, they work with respect for patients they adhere to standards when providing services……but when working conditions are poor, they can do anything to the patient, the anger they have can hinder them to provide necessary healthcare services" IDI-003&004

It was further reported that good working conditions can help in building good relationship between health worker and patient. The first impression that would be given to patient on the first contact would be able to instill the flexibility of telling it all in regard to the problem that has

prompted the patient to seek medical care. Comprehensive information would be obtained and concluded with right diagnosis for the right treatment.

"*good working conditions would attract health worker to come to work with a happy smiling face, and even the approach to patients would be that smile, when beneficiaries see the smile, they are able to appreciate hospitality given and they are free to express themselves fully with every details of their health problems" IDI_005*

5.11. Perceived impact of working conditions on maternal healthcare outcomes

Majority of health workers developed attitudes towards patients due to unsatisfactory working conditions that often times does not serve to the best interest of the patient, as such there a lot of omission in the health care provided as one way of expressing their frustrations and anger.

"…at times the situation we are in give us bad attitude towards the patients that we are supposed to provide healthcare…we are forced to give care that is far from meeting the expected standards" FGD2_R3, FGD3_R5.

Managers reported that there were able to observe change of performances from health workers whenever they have responded positively to issues which were presented to them. That was usually observed through good performance of the outcome indicators.

"….. improving working conditions is able to show the positive impact towards healthcare service delivery in a way that it is noticeable through indicators we are tracking as they show some reductions in maternal and neonatal mortality rates" IDI_004

5.12. Conclusion

The purpose of this chapter was to highlight the findings that emerged on account of the interviews that were carried out. The findings have clearly given a comprehensive insight on how health

workers and managers are hugely affected by a number of working conditions that surrounds them and how this impact delivery of quality maternal healthcare services. Many respondents described working conditions as bad, pathetic and hard as they continue feel helpless to deliver the best of their knowledge and skills to satisfy the mother with quality maternal healthcare as she deserves.

6. CHAPTER SIX: Discussion

6.1. Introduction

This chapter will discuss study findings based on the study objectives and themes that emerged. These are discussed in more detail below. This study has assessed working conditions that affect health workers to provide the quality maternal healthcare services. Maternal Healthcare service quality depends on personal and lifestyle related factors of the healthcare service provider, work related factors and health system or health facility related factors. Differences in internal and external factors such as availability of resources and collaboration and cooperation among providers affect the quality of health care and patient outcomes.

6.2. Knowledge on existing working conditions affecting the delivery of quality maternal healthcare services

The study revealed that health workers (HWs) are more knowledgeable of working conditions that are surrounding them and how these working conditions affect HWs' role of providing maternal health care services dominated major concern. It was explained that working conditions affect their work performance because health system do not pay attention to them and they remain unchanged for years. This agrees with results from one study conducted by Mkoka et al, which says that HWs feel abandoned and lost within an unsupportive system they serve (1). Healthcare quality can be improved by supportive visionary leadership, proper planning, education and training, availability of resources, effective management of resources, employees and processes, and collaboration and cooperation among providers (53)**.** HWs believe that improved working conditions could help in achieving the sustainable development goal number three that aims at ensuring healthy lives and promote well-being for all at all ages (54).

With decentralization policy that Malawi government has adopted it gives power to managers at grassroots level in this case we referring to public hospital managers, to make strategic decisions (55). However, this study revealed that health and non-health managers seem to be also aware of the compromised working conditions that are affecting HWs to use their technical skills and knowledge to provide quality maternal healthcare services. The study reported that managers in these two public health facilities are limited to support healthcare providers fully because almost all decisions regarding the structures, general goals, policies, and even resource allocation are still made at the central level within the MoH. This is totally in contrast with what a decentralised health system is supposed to manage its health workforce.

6.3.Effect of working conditions on health care providers' performance and satisfaction

Findings of the study revealed that majority of both HWs and managers are not happy with the current working conditions as they are hindering the provision of quality maternal healthcare services. Health workers are compounded by difficult working and living conditions, bureaucratic and irresponsible management, unclear career advancement, lack of on-job trainings, lack of formal mechanism for voicing concerns and lack of feedback on performance. Unconducive working and living conditions reported in this study contributes to low morale and under performance of health workers in providing maternal health care services. Studies done in Tanzania and elsewhere linked difficult working and living condition with HWs' low motivation and poor performance (27,56). The compromised working conditions were reported to have direct effects on provision of quality maternal health care services, and their motivation to work. This is in contrast to a number of literature that considers working conditions as one of rudimental determinants of work performance as it can be clearly seen to influence motivation of employees (1,41,44). The potential relationship between job satisfaction and job performance has been a

subject of intense investigation by industrial psychologists for many decades, but the research remains inconclusive (57). Many theories of motivation are strongly proving the relationship between working conditions and satisfaction and performance of employees (41).

Workload at maternity departments of these health facilities has also been revealed in this study as effects of compromised working conditions that hinders provision of quality maternal healthcare services. HWs have described excessive workload as being caused by critical shortage of staff and other material resources and high demands of maternity services by the communities in the maternity departments that hugely hinders HWs capacity leading to provision of sub-standard maternal healthcare services that leave women unsatisfied with the type of care they receive. Mistrust towards HWs and the health system in general become an outcome, and with continued blames received from the community. Overworked health staff is more likely to provide sub-standard maternal health services. Many studies have found that the more health care workers are overworked; the more they compromise on quality of services they give, and the more they are unlikely to be retained in service (58,59). In this era where quality of health care is being advocated for and is at the heart of the national agenda through implementation of several maternal and neonatal health programmes such as Option B+, help baby's breath (HBB), management of eclampsia and many others, workload in maternity departments has been increased leading to excessive workload on the already strained health staff especially in Malawi. This is another factor that might have brought poor quality of services provided. Many studies in resource limited settings have also found the negative impact too much workload brings on health care workers like; stress, burn out and intention to leave the job (56,58,60,61)**.** Other studies further pointed out that HWs with a higher workload tend to report more health problems as compared to those with

lesser workloads (62,63). This is as a result of their frequent engagement in physically and mentally demanding tasks which involve working odd and long hours shifts and dealing with seriously ill and dying patients. All these have adverse effect on health and wellbeing of HWs (60).

Majority of HWs reports that there is no learning for new skills at the work place, which leads to de-motivation of workforce. HWs are not provided with adequate supportive supervisions, trainings, and mentorship opportunities that are considered to be important to their work. Consistent and quality supportive supervision to health care workers helps in coaching, mentoring and correction of diversions from protocols. Many of the respondents participated in this study reported that supportive supervision is rarely conducted and haven't had opportunities to attend any kind of training in the last two years that can help them to improve the quality of maternal health care services, only few of them had managed to have had such opportunities. These events give an opportunity for the HWs to obtain new knowledge and also present challenges that are faced at facility level. Since the supervisors also give feedback to the health workers, mistakes are corrected instantly/timely and a way forward is mapped with no postponed correction. HWs' morale decreases further with lack of access to updated knowledge and skills that equips them with advance information on provision of maternal healthcare services. The current world is dynamic and there are many emerging complications and diseases that are influenced by various conditions that require fresh minds and knowledge to manage them appropriately (64). According to strategic human resource management literature, organizations which in this case are MoH and health institutions have to ensure that they are incorporating trainings and development strategies for employees within the strategic plans so that the capacity building and continuous skill development are enhanced (65). This also helps that their abilities are not doubted by the beneficiaries of the

services being provided. Training and developing employees will help achieve motivation and highly committed staff as such it stands high chances of reducing frequent turnover of staff, increased productivity, improved corporate financial performance and a greater organizational citizenship and reliable employees that are able to immerse themselves into organizational objectives (12,65).

The study reported that annual conduct of performance appraisal of HWs and providing feedback could bring a certain level of motivation and gives room to work on weaknesses that can be identified in the process. It was revealed in this study that HWs hardly get performance appraisals despite that MoH through its health policy highlights on the importance of performance appraisals (66). This was in contrast with reports obtained from non-health managers (hospital administrator and human resource officer) as the findings revealed that health workers' performance appraisals were routinely conducted and at times attract some rewards that influences competitive advantage among colleagues. Health care workers have described department that deals with management of health workforce as having inactive performance management system which would have been all about year-end performance appraisals restricted to awarding ratings to the individual based on their performance. They (HWs) believed that this kind of system would have created a space where health institution and its employees could produce excellent work and perform to the best of abilities. This is no easy task but requires good strategies that have to be enacted and regulated. Performance management is about leadership, interpersonal relationships, constructive feedback and team work (67). These aspects could be setting expectations and plan ways to meet these expectations, monitoring employee performance with check-ins and meetings, offering rewards for good performance and able to address poor performance and continually develop a capacity

for optimal performance (68). HWs' motivation is of paramount importance especially in the critical area of maternal health care where providers besides being skilled, needed to be willing and committed to provide quality maternal health care (1).

Satisfaction of an employee is strongly influenced by membership in a group but his or her performance is strongly affected by social norms of a group and many others (41). This is in agreeable with findings of this study as health workers reported that they found great motivation through good working relationships among colleagues and also patients' satisfaction and their good health outcomes. The research also dealt with the issue of authority, managerial style and motivation. The performance of employees and satisfaction with required group work depends not only on the degree of integration of the group members and their ability to cooperate, but also on the management and the managerial style of the group manager.

Health system that is not supporting health workers in improving their working conditions bears unfavorable consequences that usually brings out unsatisfactory outcomes from the patients they are supposed to serve. It was learnt from the findings of this study that health workers implore other mechanisms as a way of expressing their anger or frustrations towards their current working conditions especially when their concerns seem not to be heard. These mechanisms could be peaceful presentation of memos that contains their grievances and they are given timeline to respond, failing which it attracts putting down of tools that usually left mothers and babies unattended to. Health professionals take an oath to serve lives of people no matter the situation and now this could raise the question that was already raised and answered in one of the published articles by Prof Mfutso Bengo, et al; is it ethical for HWs to strike? The final remarks that were made from this article was that HWs were being caught between two points, on one hand, they

have considered themselves as ordinary workers with no special privileges but with right to strike. As long as HWs receive no special recognition in as far as their compensation is concerned, there is increasing likelihood that they will behave as 'ordinary workers', having no second thoughts when going on strike (69).

6.4. Health provider's perceptions of working conditions over provision of quality maternal health care services

Currently, Malawi health sector is under severe resource constraints and there is deterioration of the status of working conditions in most of public health facilities. Salaries and other allowances such as risk allowances and overtime allowances are extremely low relative to the cost of living thus provide an important backdrop for the current findings of health workers' perceptions of their working conditions. The health workers interviewed expressed clear expectations towards the government as an employer. The cross-cutting issue was however that the government as employer was experienced as being incapable of fulfilling its responsibilities in caring for the employees. Some of the problems experienced were perceived to be the result of district or hospital-level decisions or central government policies. In relation to remuneration, the health workers interviewed readily acknowledged that the salary scheme is decided centrally and thus above district level and thus placed the blame for the prevailing unfairness at the central government level. HWs perceived unheard at all the time by their employer because they don't see any change in most of issues that are presented to either hospital managers or central government managers. And, usually responses are delayed in years and that has been supported by a large body of literature that perceive it in a similar way that employees perceptions over working conditions that are experiencing at their work places as unfair, injustice and irresponsible (4,36,41).

The perceived lack of essential medical equipment and/or drugs observed by study participants is crucial, because it is an important factor influencing quality of health services observed in several studies in other settings (53,70). Participants highlighted the delay in payments by government and hospital managements to suppliers as a factor contributing to the shortage of medical equipment and essential medicines. Furthermore, respondents cited the cumbersome procedures required to replenish out-of-stock drugs at the health facilities pharmacies. It was raised as a concern that having one supplier of drugs, Central Medical Trust in this country is not working better for proper running of many health facilities. There is nowhere to run to whenever medical supplies are stock out.

Study findings also highlighted that HWs perceived untimely promotions and lack of proper rewarding as key factors to poor intrinsic motivation. Some HWs participated in this study expressed their knowledge gap on what it takes for one to get promotions and rewards. Considering years of serving the public post, majority have been on the same post for years and never being awarded for any good job that they ever achieved in the course of their work. This brings a concern about lack of promotion and rewarding system that lead to delay in increase in salaries and unrecognition status respectively. Dissatisfaction is more among HWs because they do not get any appreciation of their work. According to Herzberg theory "recognition of work" is a very important satisfier and motivator (37). Workers at all levels of organization wish to be recognized for their achievement on the job. It is important for the hospital management to address this issue, in line with the self-determination theory, which emphasizes the importance of making extrinsic rewards such as higher pay and promotion clearly contingent upon effective performance (4,56,71).

6.5. The relationship of Health workers working conditions towards their performance and achievement of maternal health outcomes

HWs reports provide a glimpse of possible impact of the compromised working conditions on quality of maternal healthcare services. The relationship between working conditions and HWs motivation are inseparable, and usually affects the performance of an individual that leads to provision of sub-standard healthcare. This agrees with findings from many studies that were focusing on effects of working conditions on quality of healthcare services highlighted observed direct impact to the performance of an employee but not to the major outcomes such as development of major complications and mortality. The available literature provides low strength or insufficient evidence for possible negative impact on health outcomes of mothers assisted at maternity departments. The relationships between working conditions, provider outcomes, and patient outcomes are complex and dynamic in such a way that not only are the effects felt at many levels (provider, patient, healthcare system), but also they create a cycle of reinforcing behaviors and outcomes (58). There are several potential policy interventions at the various levels that might positively influence provider wellbeing. It is very important to pay more attention on the progress of both process and outcome indicators that measures overall performance of health care services being provided. In so doing possibility of isolating major contributors may be early identified and attract for urgent call.

6.6. Conclusion

This chapter have presented an interpretation of the findings by employing available literature. The selection of study participants from the large population of health sector have provided this

study with possible answers to the research objectives. It is by far chance that the study findings may be generalized as such this may be applied to a specific setting of the health sector.

7. CHAPTER SEVEN: Conclusion and Recommendations

7.1. Conclusion

The aim of the research was to assess health workers' working conditions that affect delivery of quality maternal healthcare services. The study has explored and examined some of health workers existing working conditions and how they affect their ability to provide quality maternal health care services. Both health workers and managers have explained their perceptions on working conditions and how they found them related to work motivation and overall performance. It is in this view that study findings have shown some dissatisfaction, anger and demotivation that are attributed by undesirable working conditions that surround majority of health workers working at maternity departments.

There is high probability of achieving quality maternal health care services through health workforce' that finds job satisfaction and motivation as government; Ministry of Health and other supporting development partners that provide and support them fully. The field of working conditions encompasses a wide range of specific factors, and it is not surprising that the research has tended to explore on certain factors, to the exclusion of others. However, the cumulative evidence demonstrates that good working conditions are important to improvement of quality of health care services and deserve careful attention from health workers' employer.

A happy face is really a good face which can promote the quality of health care provided to all people of the nation.

Strengths and Limitations of the Study

The inclusion of health workers and their managers in qualitative study facilitated a wider understanding of existing working conditions that are surrounding healthcare providers working

at maternity departments and how they are affecting their ability to provide quality of care to women deserving it. However, the study suffered less input from medical doctors and other supporting staff working in peripheral departments such as laboratory and pharmacy of these hospitals.

7.2. Recommendations

In view of the above findings, the following recommendations are put forwards.

Policy makers:

- Malawi government should consider improving the physical working conditions of health care workers through revision of remunerations and other privileges for civil servants more especially to health sector in order for HWs to be able to meet high costs of current living conditions and most importantly to keep them motivated.
- The Ministry of Health should strongly reinforce human resource management strategies such as, routine performance appraisals; supervisions and proper feedback mechanism that would attract introduction of performance based incentives so that it should help in measuring HWs output and give necessary directions that will lead to HWs motivation and improvement in the quality of health care services.
- Reinforcing training policy for all public health institutions through provision of training and development opportunities for health workers to advance with knowledge and skills in order to meet the current fast changing world
- For health facilities to achieve and sustain quality of maternal healthcare services strongly requires government support and involvement and commitment by all stakeholders. The Ministry of Health should institute delivery of maternal health care services using a quality improvement approach through the directorate of Quality Management to ensure quality.

- The Ministry of Health should widen its competitive advantage on responsibility of medical suppliers of drugs and equipment so that alternatives should be timely explored in time of stock-outs of items and cumbersome procedures.
- Government of Malawi should consider introduction of other health financing mechanisms such as national insurance, user fee so that can improve hospital budget allocations.

Hospital managers:

- Decision making procedures at health facility level should be guided through involvement of health care providers' representatives so that actions come out of it should be able to address the priorities among priorities.
- Health managers from these institutions at certain extent should be able to practice open door policy for the sake of their subordinates to allay anxieties that have engulfed most health workers' atmosphere.

Health care workers:

- Ensure strong adherence of standard operating procedures, protocols and health policies that will facilitate the delivery of quality maternal healthcare services.
- Change of attitudes among health care workers towards maternal health care services is also very important.
- Health workers and their managers must support fully the culture of maximizing the use of limited resources available since the country as a whole is facing challenges to mobilise adequate resource resources to meet the needs of all.

Community:

- Population control measures should be strengthened at the community and primary health care levels through community mobilization and sensitization on FP services by working with trained HSAs, CBDAs and other community structures like community health action groups (CHAGs). This will aid in relieving pressure from workload experiences by health care workers at public health facilities.

Researchers:

- Further study can be conducted to evaluate health care workers' working conditions and their impact to maternal and neonatal mortality.

Academicians:

- Health professional education institutions should comprehensively deliver management and quality improvement modules in order for them (health professionals) to utilize the acquired knowledge to the best interest of the people and country they are serving.

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9. APPENDICES

APPENDIX I Informed Consent for Focus Group Discussions
Version 0.2 Dated 09 January 2019

Study Title: Effects of working conditions on healthcare providers' provision of quality maternal healthcare services at Kamuzu Central hospital and Bwaila district hospital in Lilongwe district

Principal Investigator: Jacqueline Zambezi Mawanga; BSc HM, NMT

Preamble

This form lets you know thoroughly about the study which you are requested to take part in. You are therefore requested to read it more carefully for you to understand it and make an informed consent to your participation. Please note that your participation in this study is entirely voluntary and you may decide not to take part or to withdraw from this study at any time. There will be no penalty if you decide to quit the study. This study is being done to assess how health providers' working conditions can actually be recognized and influence the deserved quality of maternal services that have to be provided to yield better maternal outcome. The Principal Investigator of this study is Jacqueline Zambezi Mawanga who is pursuing a master's degree in Public Health at the College of Medicine.

Once you understand this study, and if you agree to take part, you will be asked to sign this consent form or make your mark in front of someone. You will be offered a copy of this form to keep.

Purpose of the Study

The study is being run to investigate effects of health providers working conditions on the quality of maternal health care services in Lilongwe district. This research study aims at assessing the effects of health providers' working conditions can actually be recognized and influence the deserved quality of maternal services that have to be provided to yield better outcomes.

Study Procedures

Approximately 46 health care workers that comprise of midwives, clinicians, physicians and anesthetists working at maternity department will be asked to attend focus group discussions and managers such as ward in-charges head of departments, human resource manager, and hospital administrator will be asked to take part in in-depth interviews that will be done at two health facilities respectively. The discussions will be done once and there will be no follow up discussions. The research staff will facilitate the discussions and will also collect some demographic details on a questionnaire. The group's willful signing in the consent form does not exchange with legal rights of the group.

Risks and or discomforts

We do not anticipate major risks. Some discussions may be sensitive and you are free not to answer. However, we encourage you to answer all questions and efforts which will be made to create conducive environment for the discussions.

Potential Benefits

There may be no direct benefit to you from this study. Information gained from this study may help in understanding the existing health providers working conditions affecting quality of

maternal health care service delivery and may inform health care workers on provision of such services and influence decisions to policy makers in future.

Reasons why you may be withdrawn from the study without your consent

You may be removed from the study without your consent for the following reasons:

- The study is stopped or cancelled by the Malawi Ministry of Health, the Malawi College of Medicine Research Ethics Committee.
- Staying in the study would be harmful to you.

Costs and Compensation

There is no cost associated with this study and you will not receive payment for participation. At the end of the discussion we will reimburse your transport costs.

Confidentiality

The information gathered in the study will be kept confidential to the extent permitted by law. This is not however an absolute assurance in maintaining confidentiality throughout. To achieve maximum confidentiality, only codes will be used in all data documents (e.g. completed questionnaire) and no identifying information (e.g. names, addresses, mobile phone number) will be recorded. The recorded discussions will only be used for research purposes and once those requirements are met, they will be erased. Consent forms and all study documents that link the group's identification information with the study will be locked in a separate location from the study data and access to this location will be restricted only investigators listed in the protocol and relevant regulatory authorities at all times.

Injuries

Injuries are not anticipated in this study, however if by any means you are injured in the course of being in this study, you will be assisted accordingly.

Problems or Questions

For questions about this study or a research-related injury, contact:

- Jacqueline Zambezi Mawanga, Principal Investigator
- Located in Lilongwe, Maikhanda Trust P/Bag B437, Lilongwe 3. Phone 0881 945 003, 0991 928 152.

  OR
- The Chairperson, College of Medicine Research Ethics Committee
- Located at the College of Medicine, Private Bag 360, Chichiri, Blantyre 3.
- COMREC Secretariat Phone number: 01871911

SIGNATURE PAGE:

Version 2.0 dated 9 January, 2019

If you have read the informed consent, or have had it read and explained to you, and understand the information, and you voluntarily agree to join the study, please sign your name or make your mark below.

_____	_____
Participant Name (print)	Participant Signature and Date
_____	_____
Study Staff Conducting Consent Discussion (print)	Study Staff Signature and Date
_____	_____
Witness Name (print) (As appropriate)	Witness Signature and Date

APPENDIX II Topic guide for focus group discussion English version

Part A: Demographic Data for participants

Cadres of Health Care workers: Name of facility: Date:

Respective Departments: Location of Living:

Age: Duration on post:

Part B:

KNOWLEDGE OF WORKING CONDTIONS

1. Describe in details working conditions you know and that you're experiencing at this maternity ward?
2. Do you think your leadership/health system is aware of these working conditions?

   If YES, how do they respond_____?

   If NO what do you do to make them being aware?

   Give exclusive explanations?
3. Explain some of the challenges you're facing that are contributed by working conditions whilst delivering maternity services in this ward?
4. Explain the way leadership of this facility supports you in addressing some of just mentioned challenges coming in due to poor working conditions?
5. Describe Malawi health system versus human resource management?

   Probe on: responsibility

   bureaucracy

   recognition

   opportunities

6. Describe how your surrounding working environment interferes with your work as a nurse, clinician or anesthetist at this maternity ward?
7. Describe your living conditions considering the fact that you're a working person either as a midwife, physician, clinician, and anesthetist?
    - Probe on support to health workers' needs
    - Probe on support to health workers' family needs
    - Probe on support to health workers' housing availability
8. Explain MNH initial/refresher trainings or mentorship sessions you have ever attended in the last two years and how useful have been to your work?
    - Probe on number of trainings attended and what was the trainings all about?
    - Describe if you observed any impact of those trainings on maternity services?

Part C

PERCEPTIONS OVER EXISTING WORKING CONDITIONS AND DELIVERY OF QUALITY OF MATERNAL HEALTH SERVICES

9. Explain in details what you find very motivating or interesting in your work

    Clearly mention and explain exclusively how it motivates/interests you.
10. Explain in details if you find your work demotivating/not interesting?

    Clearly mention what demotivates you and explain how it demotivates you.
11. Describe the benefits you get from your work and how do you get them?
12. Describe the working conditions that enhance major maternal indicators at this facility and national level?
13. Are you satisfied with the way work is organized at this maternity ward?

Part D

IMPROVING QUALITY OF MATERNAL HEALTH SERVICES

14. How can you professionally do to improve the quality of maternal health care services?

15. Explain in details as a health provider what you think can be done at this health facility to improve some of the challenges interfering with the delivery of quality of maternal health services?

16. Explain to me what you think this health facility and health system should do to improve working conditions?

    Explain your answer in relation to an individual, health facility and health system factors.

Part E.

EFFECTS OF WORKING CONDITIONS ON QUALITY OF MATERNAL HEALTH CARE

17. **There are no sources in the current document.**Explain the extent to which working conditions affects the quality of maternal health services. Explain your answer in relation to an individual, health facility and health system factors.

End of Questions

APPENDIX III Informed Consent for key respondent Interviews
Version 2.0 Dated 9th January 2019

Study Title: Effects of working conditions on healthcare providers' provision of quality maternal healthcare services at Kamuzu Central hospital and Bwaila district hospital in Lilongwe district

Principal Investigator: Jacqueline Zambezi Mawanga; BSc HM, NMT

Preamble

This form lets you know thoroughly about the study which you are requested to take part in. You are therefore requested to read it more carefully for you to understand it and make an informed consent to your participation. Please note that your participation in this study is entirely voluntary and you may decide not to take part or to withdraw from this study at any time. There will be no penalty if you decide to quit the study. This study is being done to assess how health providers' working conditions can actually be recognized and influence the deserved quality of maternal services that have to be provided to yield better maternal outcome. The Principal Investigator of this study is Jacqueline Zambezi Mawanga who is pursuing a master's degree in Public Health at the College of Medicine.

Once you understand this study, and if you agree to take part, you will be asked to sign this consent form or make your mark in front of someone. You will be offered a copy of this form to keep.

Purpose of the Study

The study is being run to investigate effects of health providers working conditions on the quality of maternal health care services in Lilongwe district. This research study aims at assessing the effects of health providers' working conditions can actually be recognized and influence the deserved quality of maternal services that have to be provided to yield better outcomes.

Study Procedures

Approximately 46 health care workers that comprise of midwives, clinicians, physicians and anesthetists working at maternity department will be asked to attend focus group discussions and managers such as ward in-charges, head of departments, human resource manager, and hospital administrator will be asked to take part in in-depth interviews that will be done at two health facilities respectively. The discussions will be done once and there will be no follow up discussions. The research staff will facilitate the discussions and will also collect some demographic details on a questionnaire. The group's willful signing in the consent form does not exchange with legal rights of the group.

Risks and or discomforts

We do not anticipate major risks. Some discussions may be sensitive and you are free not to answer. However, we encourage you to answer all questions and efforts will be made to create a conducive environment for the discussions.

Potential Benefits

There may be no direct benefit to you from this study. Information gained from this study may help in understanding the existing health providers working conditions affecting quality of

maternal health care service delivery and may inform health care workers on provision of such services and influence decisions to policy makers in future.

Reasons why you may be withdrawn from the study without your consent

You may be removed from the study without your consent for the following reasons:

- The study is stopped or cancelled by the Malawi Ministry of Health, the Malawi College of Medicine Research Ethics Committee.
- Staying in the study would be harmful to you.

Costs and Compensation

There is no cost associated with this study and you will not receive payment for participation. At the end of the discussion we will reimburse your transport costs.

Confidentiality

The information gathered in the study will be kept confidential to the extent permitted by law. This is not however an absolute assurance in maintaining confidentiality throughout. To achieve maximum confidentiality, only codes will be used in all data documents (e.g. completed questionnaire) and no identifying information (e.g. names, addresses, mobile phone number) will be recorded. The recorded discussions will only be used for research purposes and once those requirements are met, they will be erased. Consent forms and all study documents that link the group's identification information with the study will be locked in a separate location from the study data and access to this location will be restricted only investigators listed in the protocol and relevant regulatory authorities at all times.

Injuries

Injuries are not anticipated in this study, however if by any means you are injured in the course of being in this study, you will be assisted accordingly.

Problems or Questions

For questions about this study or a research-related injury, contact:

- Jacqueline Zambezi Mawanga, Principal Investigator
- Located in Lilongwe, Maikhanda Trust P/Bag B437, Lilongwe 3. Phone 0881 945 003, 0991 928 152.

  OR
- The Chairperson, College of Medicine Research Ethics Committee
- Located at the College of Medicine, Private Bag 360, Chichiri, Blantyre 3.
- COMREC Secretariat Phone number: 01871911

SIGNATURE PAGE:

Version 2.0 dated 9 January, 2019

If you have read the informed consent, or have had it read and explained to you, and understand the information, and you voluntarily agree to join the study, please sign your name or make your mark below.

_____	_____
Participant Name (print)	Participant Signature and Date
_____	_____
Study Staff Conducting Consent Discussion (print)	Study Staff Signature and Date
_____	_____
Witness Name (print) (As appropriate)	Witness Signature and Date

APPENDIX IV Topic guide for In-depth Interviews

Start time: **End Time:**

Participants Code: **Interviewer's name:**

Part A: Demographic Data

Age of participan**t** _____Professional _____

Years of experience at maternity ward _____ Location of Living _____

Level of education_____ Sex _____

Marital status _____Health Facilit**y**_____

Part B

KNOWLEDGE OF WORKING CONDTIONS

18. What do you know about status of working conditions to this maternity ward?

    Explain your answer_____

19. As a health manager are you aware of some existing working conditions that are being faced with health care providers?

    Probe on:

    - Midwives working conditions
    - Physicians and clinicians working conditions
    - Anesthetist working conditions

20. How does leadership of this facility support health providers in addressing some of just mentioned working conditions that affects?

21. How would you describe Malawi health system versus human resource management?

    Explain your answer in-terms of responsibility, bureaucracy, recognition and opportunities.

22. Explain to me if you think health workers are satisfied with their working conditions at this maternity ward?

    If YES explain what do you think satisfies them?

    If NO explain what do you think are the reason

23. How would you describe health workers' living conditions considering the fact that are employed by government either as a midwife, physician, clinician, and anesthetist?

    Explain exclusively if they are supported adequately through their monthly earning, rewarding, education and career development, other opportunities among others.

Part C

IMPROVING QUALITY OF MATERNAL HEALTH SERV

24. As a health manager explains what you think can be done at this health facility to improve some of the challenges interfering with the delivery of quality of maternal health services?
25. What is your role as health Manager in bringing about quality maternal health services?
26. What do you think this health facility and health system should do to improve working conditions?

    Explain your answer in relation to an individual, health facility and health system factors.

Part D

EFFECTS OF WORKING CONDITIONS ON QUALITY OF MATERNAL HEALTH CARE

27. What do you think could be the relationship of existing health providers' working conditions and provision of quality maternal health care services?

    Explain your answer in relation to you as a person and then health provider, health facility and health system.

28. To what extent are working conditions affecting the quality of maternal health services?

    Explain your answer in relation to an individual, health facility and health system factors.

End of Questions

APPENDIX V: Study Gantt chart

ACTIVITY	**6 - Nov 2018**	**1-31 Dec 2018**	**1-31 Jan 2019**	**1-15 18-28 Feb 2019**	**1-30 Mar 2019**	**1-12 15-30 April 2019**	**1-31 May 2019**	**3-30 Jun 2019**	**1-30 Jul 2019**	**1-31 Aug 2019**	**2 & 5 Sept 2019**
Ethical Review											
Training											
Data Collection											
Data Analysis											
Report Writing											
Results Dissemination											

APPENDIX VI: Study budget

Item description	Units	Cost	Frequency	Total
Stationery items	1	50,000	1	50,000
NVIVO Package processing	1	00,000	1	50,000
Refreshments for participants in focus group discussions	1	60,000	1	60,000
Fuel	1	50,000	1	50,000
materials(bags)	2	25000	1	50,000
Transport re-imbursement	20	2000	1	40000
Transcription (just consultation)	1	30,000	1	30,000
Dissertation proof reading	1	30,000	1	30,000
Dissemination of results	2	50,000	1	100,000
Total Budget				460,000
10% COM research Administration fee				46,000
Total Study Budget				**506,800**

APPENDIX VII Approval letter from Bwaila district hospital

Ref. No.:
Telephone No : 265 726 466/464
Telefax No.: 265 727817
Telex No.:
E-Mail. lilongwedho@malawi.

COMMUNICATIONS TO BE ADDRESSED TO:

In reply please quote NO DZH/MALAWI,
Lilongwe District Health Office
P.O. Box 1274
Lilongwe
Malawi

5th November, 2018

College of Medicine Research Ethics Committee
Private Bag 360
Chichiri
Blantyre 3

Dear Sir/Madam

PERMISSION TO CONDUCT RESEARCH STUDY IN LILONGWE DISTRICT

Approval has been granted to the bearer of this letter: Jacqueline Zambezi Mawanga, from College of Medicine to conduct a research study in Lilongwe .

" Assess the effects of working conditions on healthcare provider's ability to provide quality of maternal health care services"

Any assistance rendered would be appreciated.

Dr. P.W. Mumba
For: DISTRICT HEALTH OFFICER - LL

APPENDIX VIII Approval letter from Kamuzu Central Hospital

REF. NO.KCH/RES/0/0/3.48
TELEPHONE NO.: (265) 1 753 555/
TELE FAX NO.: (265) 1 756 360

ADDRESS ALL COMMUNICATIONS TO:
THE HOSPITAL DIRECTOR
E-MAIL:

MINISTRY OF HEALTH
KAMUZU CENTRAL HOSPITAL
P. O. BOX 149
LILONGWE

15TH NOVEMBER, 2018

The Chairman
College of Research Ethics Committee
(COMREC)
P Bag 360
Blantyre 3

Dear Sir,

Letter of support for **Jacqueline Zambezi Mawanga** to conduct a study titled: **'EFFECTS OF WORKING CONDITIONS ON HEALTHCARE PROVIDERS' PROVISION OF QUALITY MATERNAL HEALTHCARE SERVICE AT KAMUZU CENTRAL HOSPITAL AND BWAILA DISTRICT HOSPITAL IN LILONGWE'**

I write to inform you that Kamuzu Central Hospital Research Committee is in full support to have the above named study conducted at the institution.

It is our hope that the findings from this study will help hospital management to understand the determinants for good performance that contributes to quality of maternal health care.

Thank you very much for the support you are going to give to the researcher.

Should you need further information, please contact the Hospital Director or the undersigned.

KAMUZU CENTRAL HOSPITAL
DIRECTOR
15 NOV 2018
P.O BOX 149
LILONGWE

Samuel Nowa
Deputy Research Coordinator
Cell: +265 999 321 350
+265 888 321 241
Emails: samnowa@gmail.com
samuel.nowa@mail.gov.mw
samnowa@ymail.com

APPENDIX IX Certificate of Approval from COMREC

CERTIFICATE OF ETHICS APPROVAL

This is to certify that the College of Medicine Research and Ethics Committee (COMREC) has reviewed and approved a study entitled:

P.12/18/2552 - Effects of working conditions on healthcare providers' provision of quality maternal healthcare services at Kamuzu Central Hospital and Bwaila District Hospital in Lilongwe District, Malawi version 2 dated 11 January 2019 by Mrs J. Zambezi Mawanga

On 28-Jan-19

As you proceed with the implementation of your study, we would like you to adhere to international ethical guidelines, national guidelines and all requirements by COMREC some of which are indicated on the next page for your study

28-Jan-19

Dr. YB. Mlombe - Chairperson (COMREC)

Date