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**Analysis of the effectiveness of Free Maternity Health Policy on utilization
and financing of health facilities in Mombasa County**

KHADIJA SOOD MOHAMED SHIKELY



A Research dissertation submitted to Strathmore Business School as a partial Fulfillment of the
Master's Business Administration Healthcare Management Degree

May, 2016

DECLARATION

I declare that this work has not been previously submitted and approved for the award of a degree by this or any other University. To the best of my knowledge and belief, the project contains no material previously published or written by another person except where due reference is made in the project itself.

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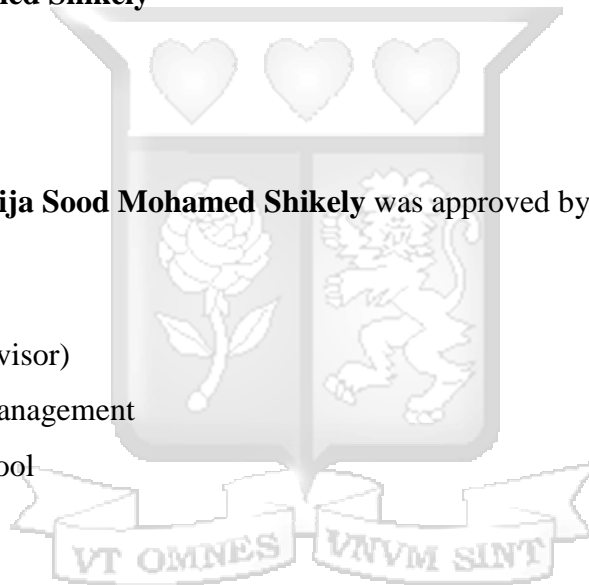
May, 2016

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ABSTRACT

Maternal mortality has been a concern for Kenya for a long time, and one of the reasons for poor uptake of maternal services is the financial barrier. The government was of the view that removing this barrier would dramatically improve uptake.

The Government of Kenya decided to have free maternity health care services in order to reduce maternal deaths and to improve on the quality of delivery among pregnant women. Maternal mortality ratio in Mombasa County is 129 per 100.000 live births.

Free maternity health policy was born on 1st June 2013, H.E Uhuru Kenyatta, President of the Republic of Kenya declared all women to deliver free in all public hospitals.

The main aim of this study was to assess the effectiveness of Free Maternity Health Policy on utilization and financing at health facilities in Mombasa County with the following specific objectives: i) To describe the utilization rate before and after Free Maternity Health Policy. ii) To assess if the Free Maternity Health Policy (financing mechanism) contributed to improved utilization and iii) To assess financial implementation challenges, adequacy of financing the policy and the hospital coping mechanisms.

This study employed a descriptive cross-sectional design where the respondents were asked to complete questionnaires, in depth interviews were carried out and in addition, existing health records of mothers who benefitted from the policy and the existing financial records at the facilities during the period of the study, were reviewed to assess the health care utilization and health care financing and its challenges.

The study was conducted in Mombasa County at purposively selected sites. The target sites was two high volume health facilities, Likoni and Tudor sub county hospitals, both level four hospitals of similar scope of services and in two different sub counties. The target population included health service administrators, clinicians and nurses providing maternity services in their health care facilities.

Data was collected through document reviews, key informant in depth interviews, and extraction from health facilities records. The data collected was coded, quantified and analyzed quantitatively and qualitatively. Quantitative data was analyzed with the use of Statistical Package for Social Sciences (SPSS, version 21.0). The information was displayed by use of bar charts, graphs and pie charts. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through use of SPSS. Thematic

analysis was used to test data that is qualitative nature or aspect of the data collected from the open ended questions. The study also conducted a correlation inferential analysis.

The results of the study on the utilization levels of maternity services before and after FMHP indicated that there was a significant increase (207 deliveries or 95%) in the number of maternity patients in the health care facilities after FMHP. The greatest increase was seen among mothers aged <35 years (201 deliveries or 102%) - the average age of the delivering mothers being 25 years. The study also shows that the common parity for both before and after FMHP is the 2nd parity at 96 mothers and 177 mothers delivering in may 2012 and may 2014 respectively.

The study also found that majority of the patients who delivered at the health facilities had no education and were unemployed. The results also indicates that there was increase in delivery levels by mothers across different levels of education with the highest rate of increase being for mothers with no education at 44 (400%) followed by those with tertiary education at 15 (107%) increase respectively.

It is evident from the results that financing mechanisms after FMHP are much better compared to the one before FMHP. This is supported by a significant increase in the revenue, (through reimbursements from the national government) of the health facilities by Ksh 1,703,320 which is four times more (409%) than the revenue collected before FMHP. This can also be explained by the difference in the average fees per delivery charged before FMHP which was Ksh 2082.64 with what the government reimbursed per delivery after FMHP which was Ksh 5000.

Majority (80%) of the respondents were of the view that FMHP is achieving its stated purpose and that the health workers (93%) are also complying with the the policy guidelines despite the barriers to compliance particularly at an operational level.

Majority of the respondents (87%) affirmed that health workers were not involved in the drafting and implementation of the FMHP. Only 13% of the interviewees were of the view that the health workers were involved. However it is evident that majority (87%) of the respondents believe that the policy has had a greater impact on the quality of health care compared to its impact on financing of maternity health care whereby only 47% of them believed it had a positive impact

DEDICATION

This research dissertation is dedicated to my parents, Late Mr. Sood Mohamed Shikely and Mrs. Layla Khamis Shikely who have raised, educated and cared for me all my life. To my spouse, Mr. Mohamed Mohamed Hatimy and my children Tayba, Mohamed, Halima, Hafswa and Abdulrahman who have always been there for me in trying as well as joyous moments during my study at Strathmore Business School. I could not have come this far without their love and support. May the Almighty Allah bless you all, Ameen.



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I thank the Almighty God for his grace and favour that enabled me to work on this study proposal. I thank Vice Chancellor of Strathmore University Prof John Odhiambo, the Dean of SBS Dr George Njenga for giving me the opportunity to pursue my studies at the Strathmore University. I further take the opportunity to thank the Director, Institute of Health Management Prof Gilbert Kokwaro for allowing a conducive environment during the period of the study. I am grateful to my supervisors Dr. Pratap Kumar for his tireless guidance and support throughout the proposal development.

I thank the management of Mombasa county health management, led by our County Executive for Health Hon. Mohamed Ibrahim Abdi and the managements of Likoni and Tudor Sub county hospitals for giving me an opportunity to further my studies. I also thank my lecturers for research Dr Christopher Ouma and Dr Elizabeth Muthuma and the entire staff particularly Sylvia Anyika who is the Program Associate, Institute of Health Management, Strathmore Business School, and not forgetting my class mates for their critique and inputs of this study proposal towards improvement of the final copy.

I would also like to appreciate my assistants in this research from the County department of health records headed by Sara Kayanda -Head of division of HMIS, M&E and Planning with her team from Likoni and Mvita Sub County and the Likoni and Tudor sub county hospitals. I would most sincerely thank all the staff who volunteered be interviewed by myself in the company of Sara and at Likoni SC Hospital with Sally Muholo and at Tudor SC Hospital with Millicent Omoo. I appreciate their openness and honesty during the interviews.

I am also indebted to HPP and the COP-Mr Stephen Muchiri-who partly sponsored me for this study.

Lastly but not least I would like to thank my secretaries Loise Njau and Rael Tinega for all their support.

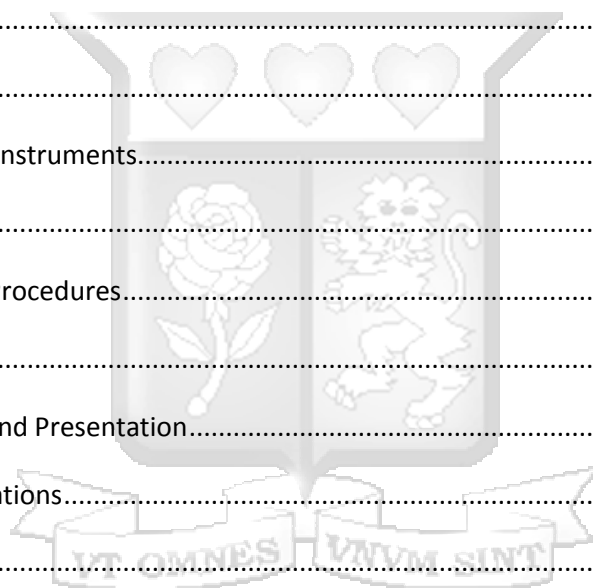
God bless you all.

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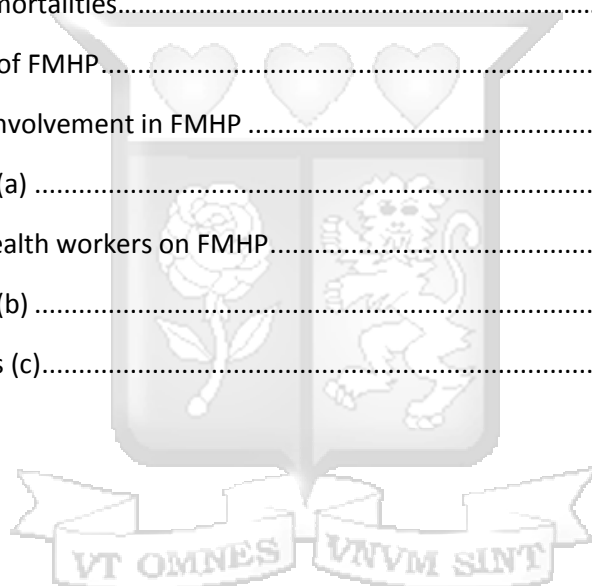
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ACRONYMS AND ABBREVIATION

CEO	-	Chief Executive Officer
DHIS	-	District Health Information System
DMS	-	Director of Medical Services
ERC	-	Ethics Review Committee
FMHP	-	Free Maternity Health Policy
GOK	-	Government of Kenya
H.E.	-	His Excellency
HCM	-	Health Care Management
HIV	-	Human Immunodeficiency Virus
KDHS	-	Kenya Demographic Health Survey
KNBS	-	Kenya National Bureau of Statistics
KNH	-	Kenyatta National Hospital
MDGs	-	Millennium Development Goals
MMR	-	Maternal Mortality Rate
MOH	-	Ministry of Health
MSF	-	Médecins Sans Frontières
OBA	-	Output-Based Approach
PMTCT	-	Prevention of Mother to Child transmission
SPSS	-	Statistical Package for Social Sciences
SVD	-	Spontaneous Vertex Delivery/Normal Delivery
UN	-	United Nations
UNICEF	-	United Nations Children's Education Fund
US	-	United States
WHO	-	World Health Organization

DEFINITION OF TERMS

Academic level-education increases general knowledge and awareness and is believed to influence behavior of a person.

Age-age determines maturity of a person and quite often it is believed to influence decision-making including issues regarding to technology adoption.

Attitude: An acquired tendency to exhibit certain reactions to specific objects based on values, emotions, beliefs and character.

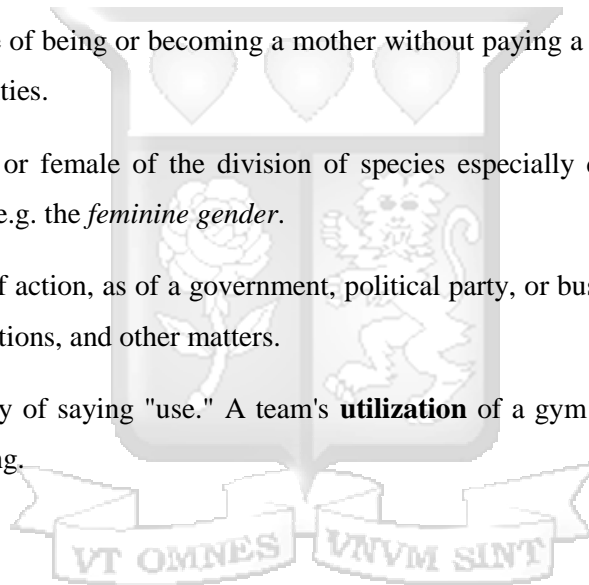
Financing - The act of providing funds for business activities, making purchases or investing.

Free maternity – The state of being or becoming a mother without paying a cent by delivering a baby in authorized health care facilities.

Gender – either the male or female of the division of species especially differentiated by social and cultural roles and behavior e.g. the *feminine gender*.

Policy - A plan or course of action, as of a government, political party, or business, intended to influence and determine decisions, actions, and other matters.

Utilization - is a fancy way of saying "use." A team's **utilization** of a gym for practices might need to continue until it stops raining.



CHAPTER ONE

INTRODUCTION

1.1 Background to the study

Every day, nearly 800 women across the globe die due to complications during pregnancy and childbirth, and 99% of these deaths occur in developing countries. Many low-income countries have high rates of maternal mortality and high fertility. Better women's health is therefore a priority (Bank, 2015). Globally, the maternal mortality ratio declined by 47 per cent over the past two decades, from 400 maternal deaths per 100,000 live births in 1990 to 210/ 100,000 live births in 2010 (Women, 2010).

The maternal mortality ratio in developing countries in 2013 was 230 per 100 000 live births versus 16 per 100 000 live births in developed countries. There are large disparities between countries, with few countries having extremely high maternal mortality ratios around 1000 per 100 000 live births. There are also large disparities within countries, between women with high and low income and between women living in rural and urban areas (WHO, 2014)

Kenya is among the countries with high maternal mortality rates in Africa with an estimated 5,500 maternal deaths per year translating to a high maternal mortality ratio of 488 per 100,000 live births (MOH & NCK, 2012). This is largely because women do not give birth under the care of skilled health providers. Prior to the Free Maternity Health Policy (FMHP), mothers delivered by unskilled attendants due to inability to pay user fees charged, for delivering at the hospital. User fees, introduced in Kenya and many other low-income countries in the late 1980s, have failed to achieve the intended objective of improving access to healthcare (Maina & Karigi, 2015).

The Millennium Development Goals (MDGs) had 8 Goals; and goal 5 was on "Improving Maternal Health" with a target of reducing maternal mortality by 75% between 1990 to 2015. While substantial progress has been achieved in almost all regions, many countries, particularly in sub-Saharan Africa, have failed to reach the Goal 5 target of reducing maternal mortality by 75% between 1990 to 2015. In fact, of all the MDGs, the least progress has been made towards the maternal health goal. Although more than 90

percent of Kenyan women receive antenatal care from a medical professional, fewer than half of all births take place in a health facility, according to the 2008 - 2009 Kenya Demographic Health Survey.

On June 1, 2013, the Kenyan President announced that the government had abolished maternity charges in public health facilities. In keeping with the pre-election pledge, the President said that scrapping of the fees would help all expectant mothers to access maternal care and would also help reduce maternal deaths.

The FMHP was financed by the National government and each delivery whether normal or otherwise would be reimbursed KShs 5,000 if conducted in a hospital of Level 4 and 5 hospitals, and KShs 2,500 if delivery conducted at the level 2 and 3 facilities. With devolution, health service delivery was devolved to the 47 counties with all hospitals except the two referral hospitals (Kenyatta and Moi) and the Spinal and Mental Hospitals, under the county level.

The fertility rate in Kenya is 3.9 with the highest rate is in North Eastern region of 8.1, while the fertility of the Coast region 4.3, while in Mombasa is 3.2 (KDHS, 2014). The maternal mortality in Mombasa is 244 per 100,000 live births (MOH & NCK, 2012). Women of reproductive age represent 24.60% of the population in Mombasa.

1.3 Health Services in Mombasa County

The County Department of Health is charged with delivery of health services in the public sector of Mombasa County. These services are delivered through four hospitals (one level 5, which is a 700-bed County Referral hospital, three level 4 where one is a 170 beds county hospital and two are 11 beds and 20 beds sub county hospitals and 39 rural health facilities which are level 3 and level 2 facilities). All the levels hospitals are responsible for curative, preventive, promotive, palliative, rehabilitative services, and primary health care service to over one million population of the county. The level 5 hospital serves a population of about three million people in the region through its referral services which offer specialized care to the greater coast region and beyond. There are 6 sub counties with 4 Sub county health teams that deliver mainly preventive and promotive health care, mainly primary health care which is well integrated with all the programs and curative care through the level 2 & 3 rural health facilities. All the four hospitals have delivery services, but only two hospitals have theaters and can do caesarian sections when need arises. Out of the 36 public facilities only 13 facilities conduct deliveries in this sector.

1.4 Problem Statement

Despite its commitment to improving maternal health care, Kenya continues to make slow progress. Kenya is among the countries with the highest maternal mortality rates in Africa with an estimated 5,500 maternal deaths per year translating to a high maternal mortality ratio of 488 per 100,000 live births. The country did not achieve the UN Millennium Development Goal 5 by 2015. Kenya had committed to reducing these deaths to 147 per 100,000 live births by 2015, (MoDP, 2013). The reasons given for the continued high mortality rate include financial barriers that prevent poor mothers from accessing maternal health services from skilled birth attendants mainly in modern health facilities. The free maternal health policy was expected to reduce the inequalities in access to maternal health services and therefore lead to increases in skilled deliveries and therefore reducing maternal death. Data from Kenyatta National Hospital has however shown mixed results.

Before free maternity in the period, Jan and May 2013 the number of Ante natal (ANC) attendance were 8381 and deliveries were 4570. After Free Maternity policy, five months after the policy was introduced, ANC attendance were 14165, deliveries were 7489, an increase of 61% for deliveries and 59% ANC attendants. The maternal mortality increase from 47 to 80 i.e. by 59%, due to congestion of free maternity at KNH, the MMR stands at an average of 107 deaths per year (MOH & NCK, 2012)

Several studies have been undertaken in Kenya on the effect of user fees. These studies show that user fees and other forms of out-of-pocket payments have led to reduction in access to health care services in Kenya including maternal health services (Mwabu, 1986; Mbugua, Bloom, & Segall, 1995; MoH, 2004; MoMs & MoPH, 2009). The poor population cannot afford to meet the cost of health care services and in most cases delay seeking care at all or seek care from unskilled health care resulting to increased morbidity and mortality. Wide disparities in utilisation exist between geographical regions and between urban and rural areas (MoH, 2004; MoMS & MoPH, 2009).

The introduction of free maternity is expected to increase the number of mothers attending maternity services in the Public facilities. According to the Coast General Hospital management, free maternity services were expected to increase accessibility to skilled health care before, during and after childbirth. Before the policy, maternity services used to attract some fees. On the financing of free maternity, health facilities were to provide data on services provided for reimbursement by the National government through the County government of maternal health services which includes Ante – natal care, delivery and post – natal care. All public health facilities were to comply.

This research will therefore, attempt to analyze the effectiveness of this Free Maternity Health Policy on the utilization and financing of maternity services at two level 4 health facilities in Mombasa county.

1.5 Justification / rationale for the study

Before the FMHP, mothers delivered with the help of unskilled attendants due to inability to pay user fees (in hospitals) charged amongst other reasons. It was shown in a study conducted in Western Kenya that eighty percent of women delivered outside a health facility; among these, traditional birth attendants assisted 42%, laypersons assisted 36%, while 22% received no assistance, (Van Eijk et al, 2006). Factors significantly associated with giving birth outside a health facility included: age ≥ 30 years, parity ≥ 5 , low Socioeconomic status, < 8 years of education and > 1 hour walking distance from the health facility, (Eijk, 2006). This led to the higher maternal mortalities at 488/100,000 live births in Kenya (KDHS, 2014) against the target of 127/100,000 live births of the MDG 5 to be achieved in 2015. With advent of this Policy the expectation is increase in deliveries by skilled attendants, increase numbers of deliveries in hospitals and reduction of maternal mortalities.

This study was focused on utilization and financing of the Free Maternity Health Policy. Most of the removal of user fee studies only look at a sample of facilities but in this study, the focus is on the only two level four hospitals in Mombasa (with maternity in patient services only). Moreover, studies already done in this are mostly focused on removal of user fees in general and not specifically on removal of user fees on maternal health services. Secondly, the fact that the Mombasa county department of health is looking at improving maternal health services provided by the two hospitals also provides a justification. Thirdly, Mombasa department of health is planning to establish a monitoring & evaluation system to monitor the FMHP and this study will provide the baseline indicators.

1.6 Research Purpose

The aim of this study was to analyze the effectiveness of Free Maternity Health Policy on maternity services in two high volume level 4 hospitals in Mombasa County. The study explored changes in the utilization and financing of maternity services since its implementation, mainly delivery services.

1.7 Research Objective and Questions

1.7.1. Main Objective

To describe the effectiveness of the Free Maternity Health Policy in relation to the utilization and financing of maternity services at two high volume, level four hospitals, Likoni and Tudor subcounty Hospitals in Mombasa County

1.7.2 Specific objectives

1. To describe the utilization levels for maternity services rate before and after Free Maternity Health Policy at Likoni and Tudor subcounty hospitals
2. To assess if the Free Maternity Health Policy (financing mechanisms) contributed to improved utilization in maternity services at the two high volumes level 4 hospitals.
3. To assess the implementation challenges, adequacy of financing and the hospital coping mechanisms of the Free Maternity Health Policy.

1.7.3 Research Questions

What are the utilization rates at Likoni and Tudor sub-county hospitals before and after FMHP?

What are the financial mechanisms contributing to improved utilization if any, before or after FMHP?

What are the challenges of implementing Free Maternity Health Policy at Likoni and Tudor sub-county hospitals Mombasa County?

1.8 Assumption

The researcher assumed that the utilization and financing of free maternity in the health facilities was influenced by the new Free Maternity Health Policy. Another assumption is that the management of health institutions was honest in their response to the questionnaire and was available to complete the questionnaire within the expected time. It was also the assumption of the researcher that the authorities of the hospital granted the required permission to collect data from the various key areas where the services are being offered.

1.9 Significance of the Study

The study will inform the policy on utilization and financing of free maternity services in two high volume level 4 hospitals in Mombasa County. The study highlighted a full description of factors that influence utilization of free maternity services based on existing records and interviews with health care providers and in depth interviews. This made it possible to identify areas that need improvement.

The study is also significant to the following stakeholders:

(a) Clinicians Team

The study is important in creating information on the management of the Free Maternity Health Policy in Mombasa County on the utilization of free maternity services. It is further hoped that health workers in Mombasa County use the findings of this study in their planning purposes.

(b) The Patients

The patients will benefit with more prompt and quality patient care due to improved maternity services.

(c) The General Public

The study is of significance to the general public once disseminated, since it will explain the challenges of free maternity services as provided by the policy. Unnecessary delays affecting the care of maternity services of mothers due for delivery of accessing maternity services were dealt with amicably.

(d) The Researcher

The researcher gained useful skills and experience that aided in carrying out future studies on issues affecting free maternity services and general improvement of the Free Maternity Health Policy.

(e) Scholars and research students

The study is also of great significance to various scholars, researchers and students who might be involved in free maternity service research activities. The report will be made available to the library to be used by those who want to understand how free maternity policy is working. This leads to development of further research activities that will address the factors that were not addressed by this study and hence providing more effective solutions to effectively handle patients health care management challenges.

1.10 Scope of the Study

The study was limited to health care providers at the Mombasa County. The study was carried out at Mombasa County (the second largest city of Kenya), situated at the coast.

1.11 Summary of the Chapter

This chapter has given the background of health in Kenya, and the need to study the effectiveness of FMHP on utilization and financing of health facilities in Mombasa County. The subsequent chapters will give more information on this.



CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

2.1.1 Mombasa and its population

Mombasa County is one of the 6 counties in the coast region. It borders Kilifi to the north, Kwale to the south and Taita Taveta to the west and the Indian Ocean to the east. It has been subdivided into six sub counties namely Mvita, Changamwe, Jomvu, Likoni, Kisauni and Nyali. Table 1.1: shows the current and projected population of Mombasa County to the year 2017. It tabulates the population per age brackets and specific for the study, reproductive age group (15 years to 49 years) at 290,263 or 24.6% of the total population

Table 2.1: Population per age cohorts (source KDHS 2014)

SN	Description	Pop. Estimates	Target population				
			2013	2014	2015	2016	2017
1	Total population		1,093,577	1,135,933	1,179,929	1,225,629	1,273,099
2	Children under 1 year (12 months)	3.10%	33,901	35,214	36,578	37,994	39,466
3	Children under 5 years (60 months)	13.20%	144,352	149,943	155,751	161,783	168,049
4	Under 15 year population	38.50%	421,027	437,334	454,273	471,867	490,143
5	Women of child bearing age (15 – 49)	24.60%	269,020	279,439	290,263	301,505	313,182
6	Estimated Number of Pregnant Women	3.70%	40,462	42,030	43,657	45,348	47,105
7	Estimated Number of Deliveries	3.70%	40,462	42,030	43,657	45,348	47,105
8	Estimated Live Births	3.70%	40,462	42,030	43,657	45,348	47,105
9	Total number of Adolescent (15-24)	24.70%	270,114	280,575	291,442	302,730	314,455
10	Adults (25-59)	32.80%	358,693	372,586	387,017	402,006	417,577
11	Elderly (60+)	4.10%	44,837	46,573	48,377	50,251	52,197

2.2 Financing of health care including maternal care in Kenya.

The three broad functions of health financing are revenue collection, pooling and purchasing (Kutzin , 2001). Revenue collection is the process by which the health system receives contributions from households, enterprises, government and other organizations including donors. Pooling is the accumulation and management of these revenues in order to spread the risk of payment for health care among all members of the pool. Purchasing is the process by which these pooled contributions are used to pay providers to deliver a set of specified or unspecified health interventions, (Kutzin, 2001). Health care can be funded in a number of ways ranging from direct user charges (out of pocket and user fee), payments to indirect methods that pool across time (prepayment) and across different risk and wealth groups (insurance and general taxation). All these methods can be used to finance maternal health services. When assessing the impact of financing mechanisms it is important to be aware of the different ways they effect service delivery patterns and utilization, (Ensor & Ronoh, 2005). Health financing in Kenya is fragmented and there is very limited risk and income cross-subsidization (i.e. from the healthy to the ill and from the wealthy to the poor).The country has made little progress towards achieving international benchmarks including the Abuja target of allocating 15% of government's budget to the health sector, (Chuma & Okungu, 2011).

In 2005, the 58th World Health Assembly called for health systems to move towards universal coverage, where all individuals have access to "key promotive, preventive, curative and rehabilitative health interventions for all at an affordable cost, thereby achieving equity in access". It urged member states to ensure that health financing systems incorporate an element of pre-payment and risk pooling, (WHO, 2005). Responding to the WHO call, the 56th session of the regional committee for health in Africa urged member states to strengthen their national prepaid health financing systems, to develop comprehensive health financing policies and strategic plans and to build capacity for generating, disseminating and using evidence from health financing in decision making. They also called on the World Health Organization (WHO) to provide support to fair and sustainable financing and to identify financing approaches most suitable for the African region (WHO, 2006).

2.2.1 Tax Funds

Since independence in 1963, Kenya has had a predominantly tax-funded health system, but gradually introduced a series of health financing policy changes (Carrin, et al, 2007). Between 1965 and 1989, general taxation used to finance health services in line with the policy of free medical care (Ong'uti, 2012). Government funds are mainly allocated through historical incremental approach. The

sector is largely underfunded and health care contributions are regressive (i.e. the poor contribute a larger proportion of their income to health care than the rich), (Chuma & Okungu, 2011). Like their counterparts the world over, Kenyan politicians have long been more reluctant to tax the rich than the poor. But recently, the country reintroduced capital gains tax (CGT) on companies and individuals, 30 years after abandoning it. The move will broaden the tax base and generate more resources to fund essential services, especially for people living in poverty. If those services – from midwives and ambulances to roads and policing – are to be better funded, then tax is the answer. It is cheaper than government borrowing, and more reliable and less conditional than aid (Bashir, 2015).

2.2.2 National Health Insurance Fund (NHIF)

In 1965, Parliament of Kenya passed the Sessional Paper No.10 on African Socialism and its application in planning, their intention was to provide social welfare service on a large scale through National Provident Fund and National Health Insurance among other mechanisms. During this period the user charges (Kshs. 5) for every hospital visit were abolished. The Kshs 5 poll tax both used to finance the running of dispensaries and health centers was also abolished (Onguti 2012). In 1966 there was establishment of NHIF in line with Sessional Paper No.10 of 1965, to provide a contributory hospital based cover for workers earning over Kshs 1000. In 1972, voluntary membership introduced to bring on board those with monthly earnings below Kshs 1000 and the self - employed, (Ong'uti, 2012). The NHIF collects monthly contributions from all members through payroll deductions for formal employees. However, voluntary members make their personal payments through districts and provincial offices (Chuma & Okungu, 2011). In 1994 the Cabinet approved the Kenya Health Policy Framework. The framework outlined Government health policies and priorities in the next century. The particular financial reforms included restructuring the NHIF to extend and diversify the range of benefits. Overhaul of the Fund management with a view to converting NHIF from a hospital to a health insurance (Onguti, 2012).

The most significant event since 1989 has been the government's interest in social health insurance (SHI). The purpose of the latter is to ensure access to out-patient and in-patient health care for all Kenyans and to significantly reduce the out-of-pocket health care expenditure of households, especially the poorest, (Ngilu, 2004). In 2004, Parliament passed the National Social Health Insurance Bill although it was not assented, (Onguti, 2012). However, important objectives such as access to health care and avoiding impoverishment due to direct health care payments should be recognised from the start so that steady progress towards effective universal coverage can be planned and achieved (Carrin, et al, 2007).

2.2.3 User fees

During the period between 1989 and 1992 budgetary constraints and declining donor support led to the introduction of user fees in public health facilities. User fees meant to supplement the budget in the running and maintenance of health facilities (Onguti, 2012). Thus in 1989, user fees, or ‘cost-sharing’ were introduced, (Dahlgren, 1991). User fees were abolished for outpatient care in 1990, inspired by concerns about social justice, but re-introduced in 1992 because of budgetary constraints. Until recently, these fees have remained, with their impact on access to health care the subject of several empirical studies (Mbugua, Bloom, & Segall, 1995). User fees, introduced in Kenya and many other low-income countries in the late 1980s, have failed to achieve the intended objective of improving access to healthcare (Maina & Karigia, 2015). Instead, user fees have imposed a barrier to accessing health services by the poor and vulnerable and have contributed to inequalities in access to healthcare. In response, many African countries introduced partial or total elimination of user fees in the 2000s (Meessen, Hercot, & Noirhomme, 2011).

Hospitals and facilities have waiver and exemption regulations that do assist a small percentage due to the financial implications. The hospitals need the user fees to procure more supplies otherwise at most times the hospitals remain without the essential commodities and in turn the patients are required to buy all these commodities as gloves, gauze, drugs etc. If user fees and other out-of-pocket costs are to be retained in resource-poor settings, there is a need to demonstrate how they can be successfully and equitably implemented (MOH, 2014).

In a study in Dhaka, Bangladesh, the mean cost for normal delivery was 1275 taka (US\$31.9) and for caesarean section 4703 taka (US\$117.5) (Nahan & Castello, 1998). Until now, Kenyan mothers had to pay anything from 12 dollars in rural clinics to 90 dollars in local hospitals for maternity care. If a woman had a caesarean section, it cost 150 dollars. But these fees were scrapped on June 1 and hospitals, health centers and clinics across this East African nation are offering maternity services free of charge (Gathigah, 2013).

From 1st of June 2013 with the introduction of the FMHP the delivery is free for the mothers and the government reimburses the hospitals as follows: the dispensaries and Health centers get Kshs 2,500 (24 dollars) per delivery, while level 4 & 5 hospitals get Kshs 5,000 (48 dollars) for all SVD & Cesarean section whether simple or complicated, (Maina & Onguti, 2014). ‘Free’ maternity care in Bangladesh involves considerable hidden costs which may be a major contributor to low utilization of maternity

services, especially among low-income groups. To increase utilization of safer motherhood services, policy-makers might consider introducing fixed user charges with clear exemption guidelines, or greater subsidies for existing services, especially caesarean section (Nahan & Castello, 1998).

2.2.4 Output Based Approach (OBA) program

The direct costs of maternal health care are prohibitive to many women in low income countries. Fear of high costs and potential catastrophic expenditure that push a household further into poverty causes many women and their families to risk giving birth at home or delay seeking care (WHO, 2010). Innovative approaches have been implemented to reduce the financial barriers to maternal health services in low income countries (Richard et al, 2010). These approaches include demand-side consumer-led initiatives like cash transfers and tax rebates as well as supply-side provider-led initiatives like referral vouchers and strategies that integrate supply and demand elements like the output-based approach (OBA) (Indrani, William, & Shalini, 2010)

Innovative financing strategies such as those that integrate supply and demand elements like the output based approach (OBA) have been implemented to reduce financial barriers to maternal health service (Abuya et al, 2012). In 2005, the Governments of Kenya and Germany in cooperation with KfW Banking Group made funds available for the Reproductive Health OBA Voucher Program offering vouchers for Safe Motherhood, Family Planning and Gender Violence Recovery Services (Griffith, Potts, & Hachaney, 2004). This program, herein referred to as Vouchers for Health, was launched in June 2006 in five Kenyan districts with the aim of providing health services for safe deliveries, long-term family planning methods and victims of gender violence (Bellows, Matthew, & Francis, 2009). The way that the program is being implemented in Kenya demonstrates that the voucher based approach comprises a variety of key structural elements of a national health insurance scheme (Janisch et al, 2010).

The OBA implementation process was designed in phases providing an opportunity for learning and adapting the lessons to local settings. The design consisted of five components: a defined benefit package, contracting and quality assurance; marketing and distribution of vouchers and claims processing and reimbursement. Claims processing and reimbursement was sophisticated but required adherence to time consuming procedures and in some cases private providers complained of low reimbursement rates for services provided (Abuya et al, 2012). In principle, OBA improves efficiency in service delivery through competition, targets essential health services to specific population groups such as low income populations, pregnant women, children or the elderly, and acts as a means to change behavior (Ensor,

2004; Ahmed & Khan, 2011) . OBA aims to cushion households from the catastrophic household expenditure associated with relatively high-cost interventions such as emergency obstetric care. The key elements include redeemable vouchers, health funds or insurance schemes that are intended to subsidize the target health services so that the out-of-pocket cost of medical care at the point of delivery becomes lower than the market price (Ahmed & Khan, 2011).

2.2.5 Out of Pocket

The Kenyan health sector relies heavily on out-of-pocket payments (Chuma & Okungu, 2011). In a population-based survey, women who had given birth in the previous 24 months were interviewed about the costs incurred during childbirth in 2003, and three years later, in 2006, additional women with recent deliveries were interviewed in the same districts to explore their maternity care-seeking experiences and associated cost (Perkins et al., 2009). The findings showed majority of women interviewed reported paying out-of-pocket costs for facility-based deliveries. Out-of-pocket costs were highest in Kenya (a mean of US\$18.4 for normal and complicated deliveries), where 98% of women who delivered in a health facility had to pay some fees. Women in the poorest wealth quintile did not pay significantly less for maternity costs than the wealthiest women. Costs represented 35% of mean monthly household income in Kenya (Perkins et al., 2009).

Health care financing strategies that place considerable emphasis on out-of-pocket payments can impoverish households. There is growing evidence of households being pushed into poverty or forced into deeper poverty when faced with substantial medical expenses, particularly when combined with a loss of household income due to ill-health, (McIntyre et al, 2006). However, among women delivering in government health facilities in Kenya, reported out-of-pocket costs were significantly lower in 2006 than in 2003, indicating that a 2004 national policy eliminating user fees at mid- and lower-level government health facilities was having some impact (Perkins et al., 2009).

2.2.6 Reimbursements for Free Maternity Health Policy

On June 1, 2013, the Government of Kenya initiated a policy of free maternity services in all public facilities, effective immediately. In July 2013, the government committed Sh3.8 billion to fund the free maternal health care program, with an additional Sh3.1 billion for recruitment of 30 community nurses per constituency, Sh522 million for recruitment of 10 community health workers per constituency, within its overall allotment of Sh10.6 billion for health care in the 2013/14 national budget,(N. Bourbonnais,2013). The FMHP was financed by the National government and each delivery whether

normal or otherwise would be reimbursed KShs 5,000 if conducted in a hospital of Level 4 and 5 hospitals, and KShs 2,500 if delivery conducted at the level 2 and 3 facilities. With devolution, health service delivery was devolved to the 47 counties with all hospitals except the two referral hospitals (Kenyatta and Moi) and the Spinal and Mental Hospitals, under the county level. Most of the health services were devolved to the counties, (COK, 2010).

2.3 Utilization of maternal health services and Demographic Variables

Data from surveys carried out on choice of place of delivery among expectant mothers in Teso district, Kenya in 2000 and 2002 indicate that seventy-six percent of 1170 women in the reproductive age who gave birth during the five years preceding the study delivered their babies at home. Traditional birth attendants (TBA) and midwives were the main providers of delivery care. TBAs were regarded as affordable, readily available and respectful to expectant mothers. The constraints to the utilization of institutionalized delivery care proved to be many fold. The major obstacles included the unavailability or inaccessibility of health facilities, competing priorities of mothers in a male-dominated society, poverty, high user charges and associated costs, aggravated by lack of water and food supplies in most health facilities and relatively low quality of services offered. Reducing or removing these constraints would result in increased utilization of institutionalized delivery care (Ikamari, 2007).

2.3.1 Past

A community-based survey in rural western Kenya, conducted among a representative sample of women who had recently delivered, to identify the locations where they had sought care during their pregnancy and delivery. Eighty percent of women delivered outside a health facility; among these, traditional birth attendants assisted 42%, laypersons assisted 36%, while 22% received no assistance. Factors significantly associated with giving birth outside a health facility included: age ≥ 30 years, parity ≥ 5 , low SES, < 8 years of education, and > 1 hour walking distance from the health facility. Women who delivered unassisted were more likely to be of parity ≥ 5 , (van Eijk et al, 2006)

A review of the literature suggests that in developing countries, the use of modern health care such as maternal health services can be influenced by the sociodemographic characteristics of women, the cultural context, and the accessibility of these services (Mekonnen & Mekonnen, 2002). A number of sociodemographic characteristics of the individual affect the underlying tendency to seek care (Addai, 2000). In this regard, good examples are maternal age and parity, which have been examined as determinants of health care use repeatedly (Celik & Hotchkiss, 2000). Maternal education has also been shown repeatedly to be positively associated with the utilization of maternity care services (Addai, 2000;

Celik & Hotchkiss 2000). Although, in general, women in higher socioeconomic groups tend to exhibit patterns of more frequent use of maternal health services than women in the lower socioeconomic groups, factors such as education appear to be important mediators (Addai, 2000). Accessibility of health services has been shown to be an important determinant of utilization of health services in developing countries.

2.3.2 Present

Abolition of user fees in primary healthcare facilities is now widely considered by developing countries as one of the key policy options to address access to healthcare services by the poor and vulnerable (Meessen et al, 2011). Previous experiences with removal of user fees in Kenya and elsewhere indicate limited impact in terms of the utilization of health services (Schneider & Gilson, 1999: Wilkinson, Gouws, Sach, & Karim, 2001). Evaluations have also shown that the removal of user fees is only effective in the first year of implementation and that the majority of facilities reintroduce fees later for various reasons, including lack of supplies and medicines, delays in fund reimbursement, and the need to hire additional support staff whose salaries are not covered in the normal allocations (Chuma, Musimbi, Okungu, Goodman, & Molyneux, 2009).

The 2010 Constitution of Kenya assigned all health service delivery functions to county governments, except for national referral services. This means that counties are responsible for planning, financing, coordinating and monitoring the delivery of health services to fulfill the citizens' right to "the highest attainable standard of health," as prescribed by the Constitution. Counties are expected to implement all national initiatives aimed at increasing access to high-quality care, including abolishing user fees and providing free maternal healthcare (Maina & Onguti, 2014). It is anticipated that the abolition of user fees at primary-level facilities and the provision of free maternal healthcare services in all public health facilities will lead to improved access to health services, especially for the poor and vulnerable.

2.4. Policies and programs to improve financing and utilization of maternal health services in Kenya

User fees, introduced in Kenya and many other low-income countries in the late 1980s, have failed to achieve the intended objective of improving access to healthcare. Instead, user fees have imposed a barrier to accessing health services by the poor and vulnerable and have contributed to inequalities in access to healthcare. In response, many African countries introduced partial or total elimination of user fees in the 2000s (Meessen et al., 2011).

In 2004, Kenya followed suit, through the national policy eliminating user fees at mid- and lower-level government health facilities, except for a minimum registration fee of 10 or 20 Kenya shillings, commonly referred to as the 10/20 policy. Children under age five and clients with specific health conditions, including malaria and tuberculosis, were also exempted from registration fees. Still, there was low adherence to the policy and facilities continued to charge higher fees to clients seeking care (Chuma et al., 2009; Onsomu, et al., 2014)

In response, the government abolished all user fees in public dispensaries and health centers in 2013 and allocated KShs 700 million for compensation to lower-level facilities for providing free services (Maina & Kiragu, 2015). On June 1, 2013, the Kenyan President announced that the government had abolished maternity charges in public health facilities. In addition the FMHP introduced in June 2013 also abolished user fees for all maternity services in the government health facilities in the country at all levels of care, at high, – mid, – and lower level government health facilities (Maina & Onguti, 2014). The purpose of the free maternal services is to remove financial barriers to using maternity services, with the goals of reducing maternal and neonatal mortality rates, contributing to poverty reduction, and therefore moving toward realization of Millennium Development Goal 5 (MOH Circular, 2013).

The government's commitment to provide free maternal health services is expected to encourage more women to deliver at health facilities and to result in fewer maternal deaths. With the new policy, health facilities will be reimbursed by the government for every delivery that they handle, at the rate of Sh.2,500 per birth at health centers and dispensaries, and Sh.5000 for every birth at public hospitals. This covers both normal deliveries, deliveries through caesarean and complicated deliveries (Maina & Onguti, 2014). Providing free maternity services in Kenya's public health facilities is enabling more women to deliver with the care of trained health workers. However, for this presidential directive to save more lives of Kenyan women, the government must ensure timely reimbursements to health facilities, adequately equip health facilities, and increase the numbers of health workers. These were among the key recommendations made by experts on maternal health who met in a breakfast meeting at Silver Springs Hotel in Nairobi, organized by the Ministry of Health and the African Institute for Development Policy (AFIDEP),(Toili,2015).

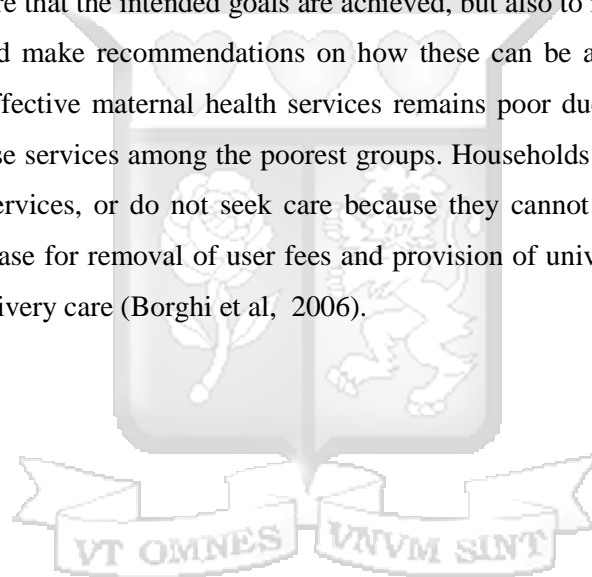
2.4.1 The policy implementation process

In a study by Maina and Kiriga (2015) it was discovered that there are a number of important shortcomings in the policy implementation process. These included limited consultation with stakeholders during the policy design, planning, and implementation process, and the use of a circular by the Ministry

of Health to communicate the policy to county health management teams and health workers. The circular did not clarify the population categories that could access free care or whether health centers/dispensaries under other government departments (e.g., prisons and city and municipal councils) were covered by the policy).

2.4.2 Flow of abolition of user fees funds and reimbursement mechanisms

The findings of the study showed that abolition of user fees faces a challenge of frequent delays in the disbursement of funds attributed to liquidity-related problems at the national level. Devolution further complicated the NSSF's model of disbursing funds, with county governments insisting that reimbursements be made to county revenue accounts instead of being paid directly to health facilities, (Maina & Kiriga, 2015). Continuous monitoring and evaluation of the new policy in Kenya is therefore important, not only to ensure that the intended goals are achieved, but also to identify potential challenges in the process early on and make recommendations on how these can be addressed (Maina & Kiriga, 2015). Coverage of cost-effective maternal health services remains poor due to insufficient supply and inadequate demand for these services among the poorest groups. Households pay too great a share of the costs of maternal health services, or do not seek care because they cannot afford the costs. Available evidence creates a strong case for removal of user fees and provision of universal coverage for pregnant women, particularly for delivery care (Borghi et al, 2006).



2.5 Analytical Framework

Table 2.2 Analytical framework on utilization and financing of FMHP

	Maternal age	Maternal parity	Years of education	Socio-economic status	Accessibility distance to health facility	Organization commitment	Sensitization on policy	Funding	Staff support
UTILIZATION									
	Older women deliver at home	Parity above 5 delivers alone.	Above 8 years of education deliver in health facility	Higher SES deliver at facility, lower SES at home		Long distance reduces facility delivery			
FINANCING									
	Most women all ages deliver at home if poor and user fee unaffordable	Most women all parities deliver at home if poor and user fee unaffordable	If educated and fair income may deliver at facility, can afford user fee.	Lower SES delivers at home due to user fees.		Transport costs and type of transport affect delivery at facility			



UNDERLYING ASSUMPTIONS

POLICY FRAMEWORK

LEGISLATION

SUPPLY OF RUNNING COSTS, COMMODITIES, EQUIPMENTS.

MONITORING AND SUPERVISION.

2.6 Conceptual Framework

The conceptual framework is a scheme of concept (variables) which the researcher operationalizes in order to achieve the set objectives (Mugenda & Mugenda, 2003). A variable is a measure characteristic that assumes different values among subject (Mugenda & Mugenda, 2003). Independent variables are variables that a researcher manipulates in order to determine its effect of influence on another variable, Kombo & Tromp, (2006) states that independent variables also called explanatory variables is the presumed change in the cause of changes in the dependent variable; the dependent variable attempts to indicate the total influence arising from the influence of the independent variable (Mugenda & Mugenda, 2008)

CONCEPTUAL FRAMEWORK

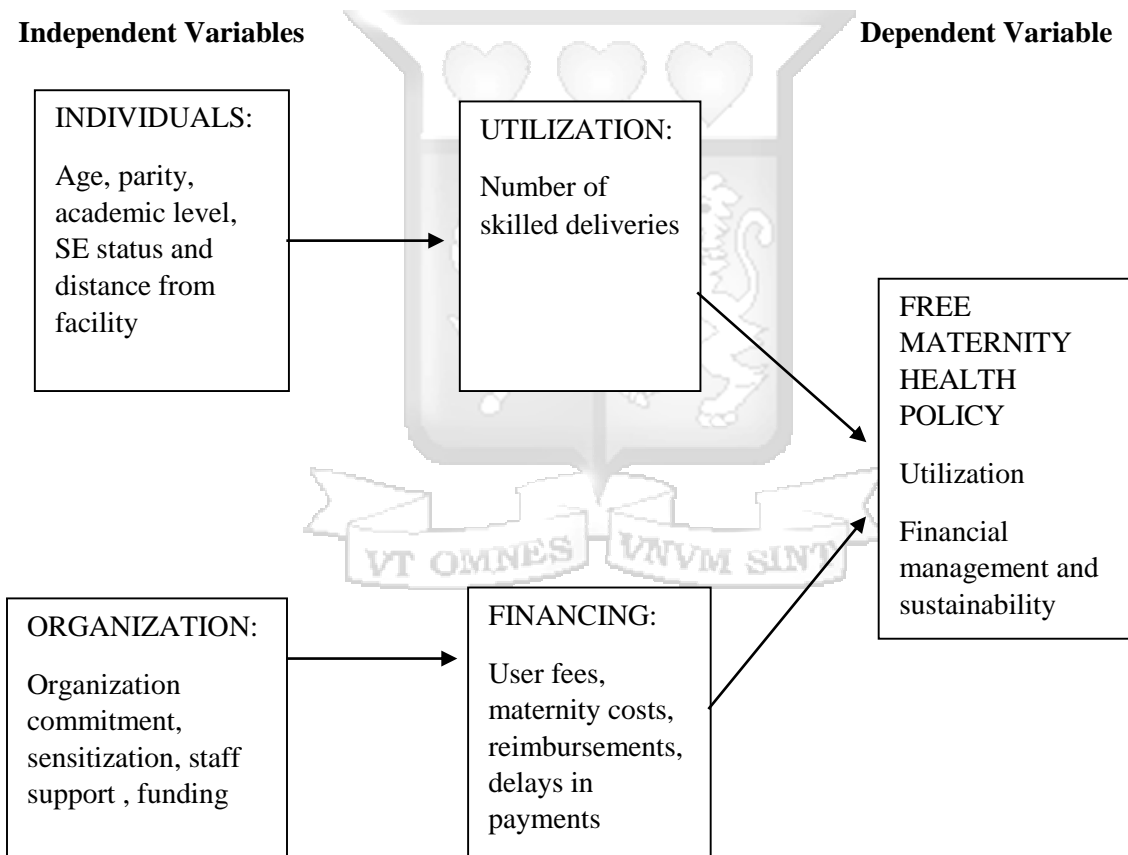


Figure 2.1 Conceptual framework

2.7 Variables

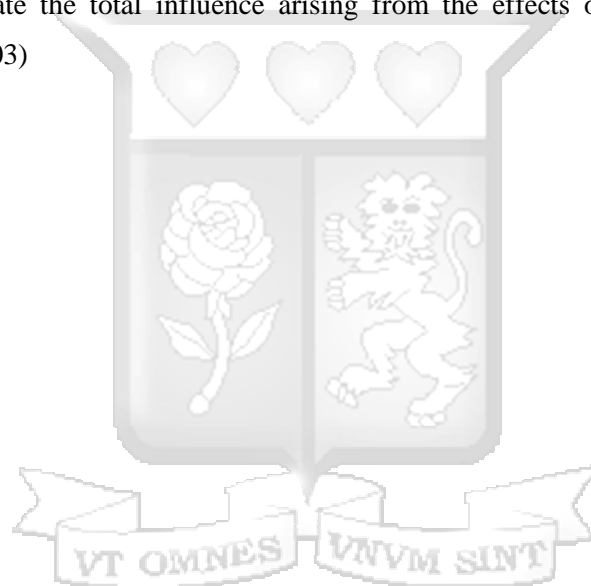
2.7.1 Independent Variables

Independent variables included in this study were individual characteristics such as maternal age at birth, parity, educational status of women, marital status, work status, religion and residence

Organizational culture variables included organizational commitment, sensitization, staff support and funding. According to Mugenda and Mugenda (2003), an independent variable is one that a researcher manipulates in order to determine its effect on another variable.

2.7.2 Dependent Variable

The dependent variable in this study were free maternity (new maternity health policy). A dependent variable attempts to indicate the total influence arising from the effects of the independent variable (Mugenda & Mugenda, 2003)



CHAPTER THREE

RESEARCH DESIGN AND METHODOLOGY

3.1 Introduction

This section describes the procedure that was used to carry out the study. The research design assisted the study to organize data collection and also to set the number of respondents who participated in the study. The concepts covered in this section includes research design, study, conceptual framework, variables, target population, sampling technique and sample size, data collection, data collection instruments, data collection procedures, reliability and validity, ethical considerations, data analysis and presentation and dissemination of findings.

3.2 Case Study research design

This study design adopted a descriptive cross – sectional research design where the respondents were asked to complete already prepared questionnaires as well as review of health records and focus group discussions. Kothari (2006) asserts that descriptive research includes survey and fact finding enquiries of different kinds.

This study used a mixed research approach as it contained both the qualitative and quantitative techniques. Kombo and Tromp (2006) affirmed that research can be regarded as an arrangement of conditions aiming to combine the relevance with research purpose. Consequently, qualitative approach was used to gather information that could not be quantified numerically but only those connected to the theme. Mugenda and Mugenda (2003) suggested that unlike the quantitative approach, the qualitative approach recognizes methods through which the disadvantaged groups can disclose information that are capable of authorizing knowledge in the given field of study. The quantitative techniques will also be most important in use because the expected information from the field will involve factual elements that would be presented using descriptive statistics.

This research design was considered appropriate because variables involved do not involve any manipulation but to establish the current status of the phenomena (Borg & Gall, 1983). The design enabled the researcher to determine the utilization of free maternity services in Mombasa County.

3.3 Location of the study

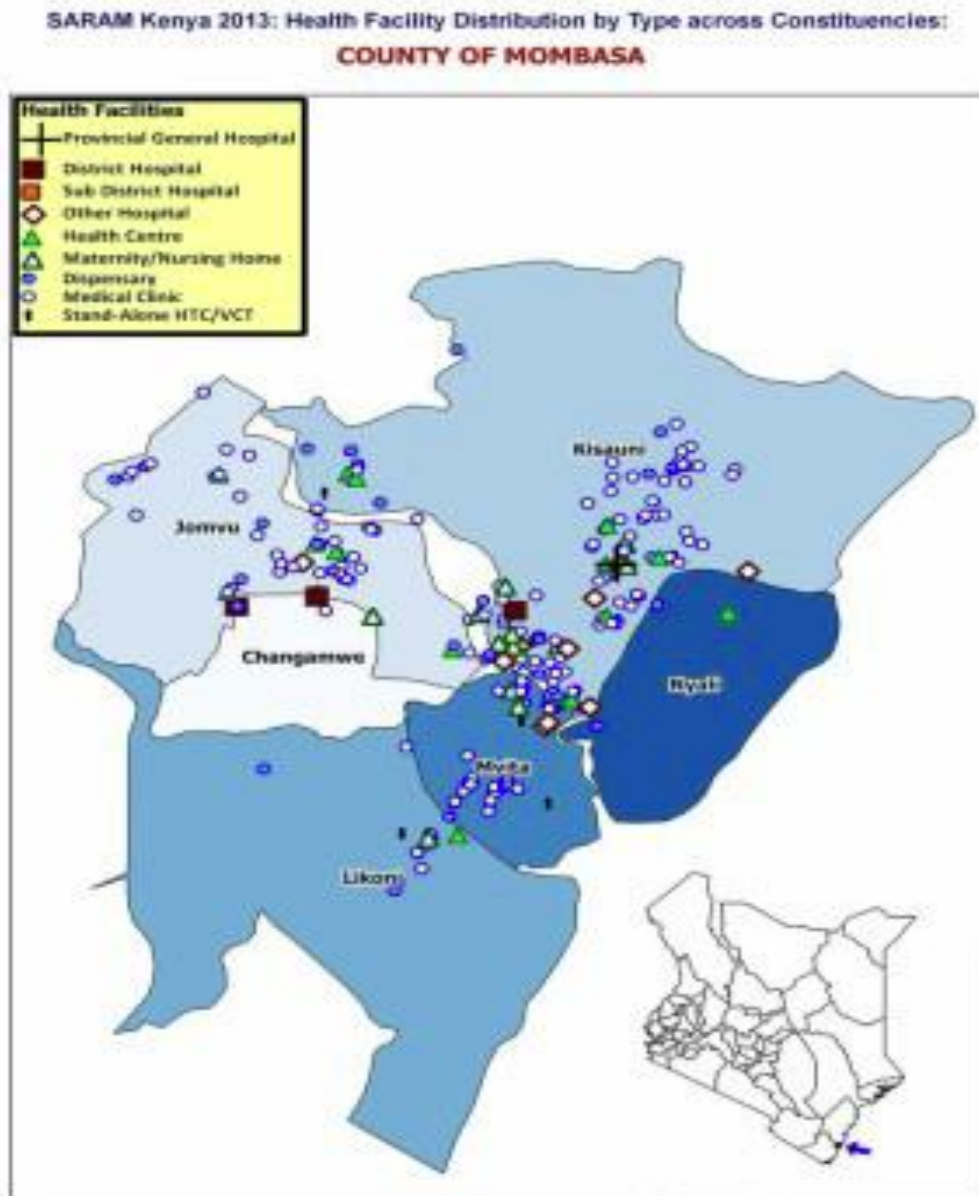


Figure 3.1: SARAM Kenya–health facility distribution, county of Mombasa

3.4 Demographics

The study was conducted in Mombasa six sub counties, which are located within Mombasa County along the Indian Ocean on the coast region of Kenya. Mombasa has a population of over one million (1,135,932), of these 279,439 are women in the reproductive age, residing within an area of 14.1 Km² from 33,160 households (KNBS, 2009). The geographical coordinates of the district are 403's 39 40c. The city of Mombasa is located in this county. It seeks to determine the level of utilization of free maternity services at the Mombasa County in relation to the free maternity policy mostly into consideration of health care financing.

3.5 Target Population

The target sites was two level 4 high volume hospitals, with similar scope of services in two sub counties in Mombasa County. The target population includes medical doctors, clinical officers, nurses and head of institutions / administrators in the hospital. A sample of respondents was picked from the two health facilities in Mombasa County. Mugenda and Mugenda (2003) defined target population as a complete set of individuals, case or objects with the same common observable Quantitative data on 'patient charts were reviewed to collect data on utilization and costs of care'.

3.5 .1 Inclusion Criteria

The study included selected health professionals working in the hospital since 2011 and dealing with maternity services. Data collected for May 2012 and May 2014 (a year before and a year after Free Maternity Policy) .The month of May was picked as this was the busiest month in both the years for the study . Other inclusion criteria were inpatients only, all maternity-related admissions including normal delivery.

3.5 .2 Exclusion Criteria

The study excluded all other employees employed after 2011, and who do not deal with maternal health. It also excluded all other months and years outside the inclusion criteria.

3.6 Sampling Technique

Purposive selection of two high volume health facilities maternity wards was done and simple random sampling was used to select study participants.

3.7 Sample size

Facility record reviews: health facilities records were reviewed to extract data on utilization patterns. All the delivery records in the month of May 2012 and May 2014 in each hospital were reviewed and demographic and financial data extracted.

On FGDs: Out of the list of health workers a sample of 5 workers were drawn/selected to form the FGDs. During the selection of health workers to participate during the FGD, the selection process will ensure Nurses, clinical officers and doctors are included. The health workers selected for key informant interviews will not be selected for the FGDs. An FGD guide was developed and implemented.

In-depth interviews were conducted among 16 health workers to document their experiences with policy implementation, perceptions on the impacts of FMHP on the ability of facilities to operate, whether or not facilities received revenue compensation in a timely manner and what, if any, coping strategies have been adopted to allow the facilities to offer services effectively. The respondents were drawn from 2 health facilities i.e. Likoni Sub-County Hospital and Tudor Sub-County Hospital. All health workers - nurses, clinical officers and doctors working in the maternity department - were listed and a sample 16 (three senior staff from administration, two doctors, three nurses and one clinical officers from each facility) was drawn from the list. The distribution of the respondents is shown in the diagram below.

Table 3.2: Sample size per hospital

Health Facility	Health Professionals	Sample size
	Doctors	2
	Nurses	3
	Administrators	2
	Clinical officers	1
Grand Total		8

3.8 Data Collection

Data (qualitative and quantitative) on the free maternity services, utilization and financing was collected by research assistants. Qualitative data assisted the study establish patterns, trends and relationships from the information gathered while Quantitative data helped the study to meaningfully describe the distribution of scores. The research assistants were trained by the researcher how to administer the

questionnaire, how to establish rapport with respondents, how to identify errors and omissions and how to handle completed questionnaires to avoid loss or misplacement.

3.8.1 Data Collection Instruments

The study used a structured questionnaire, in - depth interviews, review of health records and financial records. According to Kombo and Tromp (2006), questionnaire is a research instrument that gathers data over a large sample and the various advantages along includes, information collected from a large sample, confidentiality is upheld, saves time and since they are presented in paper format, there is no opportunity for interview bias. Structured questionnaires with closed - ended questions were used. Closed ended questions were used since they were more convenient in relation to the study. They were also economical to use in terms of time and money. Open-ended questions were also be adopted for more in – depth interviews given the following advantages outlined by Mugenda and Mugenda (2003) as, they permit a greater depth of response, they are simpler to formulate, and the respondents' response may always give insights into the feelings, background, hidden motivation, interests and decisions. The study questionnaire was designed to suit study requirements and for easier data analysis.

3.9 Pilot Survey

Pilot survey was done at Coast General Hospital to test the clarity of the questionnaire and the ease of using it. The Hospital was chosen because it has a large number of maternal cases thus will take care of all the characteristics. The pilot survey was done with a representative sample purposively designed and selected. 10 questionnaires and review of 10 health records were administered. The procedures used in pre-testing the questionnaires will be identical to those that were used during the actual study. The pilot survey revealed that the anticipated analytical techniques were appropriate.

3.10 Data Collection Procedures

The researchers sought for consent from the subjects before administering the questionnaire and assure them the purpose of the study and confidentiality of information given. The questionnaires were administered to the selected health professionals. The subjects were given two days to fill the questionnaires before they were picked by the research assistants for analysis and reporting. The researcher also gathered information from key informants and focused group discussions and in depth interviews held to gather more information.

3.11 Quality Control

Reliability is concerned with the question of whether or not a result is stable (Bryman & Bell, 2007). The method employed was carefully explained throughout the study. The respondents were free to answer the questions without undue stress which may have negative effects upon the reliability of this study. This study was able to reproduce with consistent results.

The pilot test ensured that the questionnaires obtained the intended information and reduced the risk of taking a faulty instrument to the field. This included the training of the data collection assistants.

3.12 Data analysis and Presentation

The data collected was coded, quantified and analyzed quantitatively and qualitatively. Quantitative data was analyzed with the use of statistical package for social sciences (SPSS version 21.0) where descriptive and inferential statistics were computed in order to understand the patterns and nature of relationships. Quantitative data collected was analyzed by the use of descriptive statistics using SPSS and presented through percentages, means, standard deviations and frequencies. The information was displayed by use of bar charts, graphs and pie charts and in prose-form. This was done by tallying up responses, computing percentages of variations in response as well as describing and interpreting the data in line with the study objectives and assumptions through use of SPSS. The study conducted a correlation inferential analysis. It's a measure of the degree of association between two or more variables that have been obtained from the same group of subjects. Oso (2009) has suggested that correlation inferential analysis is used when a researcher wants to predict and describe the association between two or more variables in terms of magnitude and direction.

3.13 Ethical Considerations

The study took into consideration all the logistical and ethical issues that pertain to research. Mugenda and Mugenda (2003) affirmed that these are the issues that the researcher must be aware of and consequently be prepared to save the study a great deal of resources and will also ensure high quality research.

Informed signed consent was obtained from the participants; no names were used so that confidentiality could be guaranteed, (Appendix E). Clearance was obtained from the Strathmore University Ethical Committee,(Appendix 1). To enhance response rate, the respondents were encouraged to fill the questionnaire voluntarily and were explained that the information they gave was used for academic purposes. The study carried an introduction letter from the university to ensure this.

3.14 Limitations of the study

- Age limits of 15 years to 45 years, a few maternity cases were below age of 15 years and a few above 45 years.
- Analyzed only the delivery part of maternity services and left out the antenatal part of FMHP.
- Analyzed only the normal deliveries in both the hospitals.



CHAPTER FOUR

PRESENTATION OF FINDINGS

4.1 Demographics

In order to answer the research question on the utilization levels for maternity services, a review of health facilities records was undertaken to extract data on utilization patterns. A total of 641 patient records of deliveries were analyzed from the two high volume level 4 hospitals: Tudor Sub County and Likoni Sub county hospitals in the months of May 2012 and May 2014 as shown in the table 4.1 below.

Table 4.1 Utilization before and after FMHP

Health Facility/ Delivery Period	Likoni Sub-County Hospital	Tudor Sub-County Hospital	Total
May 2012	151	66	217
May 2014	253	171	424
Total	404	237	641

In-depth interviews were conducted among 15 health workers to document their experiences with policy implementation, perceptions on the impacts of FMHP on the ability of facilities to operate, whether or not facilities received revenue compensation in a timely manner and what, if any, coping strategies have been adopted to allow the facilities to offer services effectively. The interviews had a response rate of 93.8% as 15 out of the 16 respondents sampled participated in the study. A summary of the distribution of the respondents is as shown in the table 4.2.

Table 4.2 Distribution of respondents

Health Facility	Frequency	Percent
Likoni Sub-County Hospital	8	53.3
Tudor Sub-County Hospital	7	46.7
Total	15	100.0

4.2 Utilization Levels of Maternity Services before and after FMHP

The first objective of this study was to describe the utilization levels for maternity services rate before and after Free Maternity Health Policy at two high volumes level 4 hospitals. To achieve this objective, a

questionnaire on the health and financial records of the two level 4 high volume hospitals was filled. In addition health records from personal files of the maternity patients were reviewed to extract data on utilization patterns of free maternity services. Data on deliveries for two periods, May 2012 and May 2014, i.e. before and after the introduction of FMHP, were analyzed to bring out the patterns.

Table 4.3a: Summarized health records results

Health Records	Likoni Sub-County Hospital		Tudor Sub-County Hospital		Combined	
	May 2012	May 2014	May 2012	May 2014	May 2012	May 2014
No. of Beds Available	11	11	20	20	31	31
Admission Rate	90%	95%	43%	81%	67%	88%
Average Length of Stay	1	1	1	1	2	2
No. of Deliveries	151	253	66	171	227	447
No. of Emergencies Referred to CS	3	4	3	3	6	7
No. of Complications	5	4	2	3	7	8
Maternal Mortality	1	0	2	0	3	0

Table 4.3 b shows financial records of the two high volume level 4 hospital, Likoni and Tudor sub county hospitals charges, revenue collections, and complications prior to FMHP. The reimbursements of the FMHP, whether timely or sufficient and the policy coverage. All these were correlated with the data collected during the in depth interviews conducted. It summarizes the financial records from the facility questionnaire.

Table 4.3b: Summarized finance results

Finance Records	LSCH	TSCH
Charges of delivery before the free maternity policy for normal delivery (SVD)	1000	3800
Charges for the referred cesarean section before free maternity policy	500	N/A
Revenue collected before free maternity policy	151000	250800
Are there any reimbursements paid to health facilities by the GOK after free maternity policy for all deliveries?	YES	YES
If reimbursement is done, is it timely?	NO	NO
When was the last reimbursement sent?	Dec-15	Feb-16
Is the reimbursement sufficient to finance your maternity services?	NO	NO
If not sufficient, why not?	Consumption more than	Not given all
Does the free maternity policy cover all pregnancy related complications?	YES	No
Does the free maternity cater for Anti Natal care?	NO	YES
Does the free maternity cater for Post Natal care?	YES	YES

4.3 Maternal age

A total of 641 deliveries were analyzed from the two high volume level 4 hospitals, Tudor Sub county and Likoni Sub county hospital in the months of May 2012 and May 2014. Figure 4.1 shows the distribution of the mothers ages before and after FMHP, of the 641 mothers 46% were aged 15 -24 years and 48% of the mothers were aged 25 -34 years and only 6% were aged 35 -44 years.

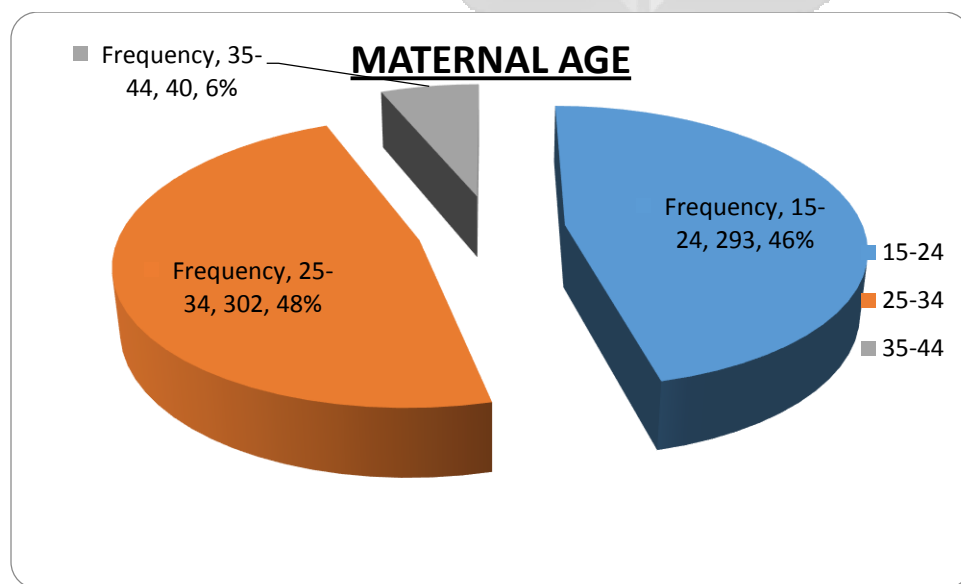


Figure 4.1: Distribution of Maternal ages

Further Analysis indicated that the mean age of the maternity patients before and after FMHP was almost equal despite a slight drop in May 2014. This is exhibited by a mean age of 25.916 for May 2012 and 25.4595 for May 2014. To ascertain the equality of the two means further analysis was undertaken to establish whether the difference seen was significant or not.

A t-test to test the null hypothesis that the means of the two populations were equal ($H_0: \mu_1 - \mu_2 = 0$; $H_1: \mu_1 - \mu_2 \neq 0$). The researcher performed a t-test two-sample assuming equal variances and obtained a t value of -1.090467658. This value was within the range of the t critical two-tail values (i.e. $-1.963718664 < -1.090467658 < 1.963718664$) indicating that the observed difference between the sample means (25.916 for May 2012 and 25.4595 for May 2014) was not convincing enough to say that the average age of the maternity patients between the two periods differed significantly. Therefore, the null hypothesis that the means of the two populations were equal ($H_0: \mu_1 - \mu_2 = 0$; $H_1: \mu_1 - \mu_2 \neq 0$) was accepted.

4.4 Utilization of services (number of deliveries before and after FMHP)

On the utilization of the services before and after FMHP table 4.2 shows Tudor SCH had 66 deliveries in May 2012 and this increased to 151 deliveries in May 2014, while that of Likoni SCH were increased from 151 deliveries in May 2012 and increased to 253 deliveries in May 2014. This clearly shows increase of 159% or 105 deliveries and an increase of 68% or 102 deliveries in Tudor SCH and Likoni SCH respectively after the introduction of FMHP.

A further analysis using Chi-square test was undertaken in order to test the null hypothesis that there was no significant statistical difference between the number of maternity patients who delivered in the two health care facilities before FMHP and after FMHP. The results of the analysis showed $\chi^2 (1, n=641) = 6.056$, $p < 0.05$ which led the researcher to reject the null hypothesis and confirm that there was a statistically significant difference between the number of maternity patients who delivered in the two health care facilities before FMHP and those who delivered after FMHP. This was therefore, concluded that there was a significant increase in the number of maternity patients in the health care facilities after FMHP.

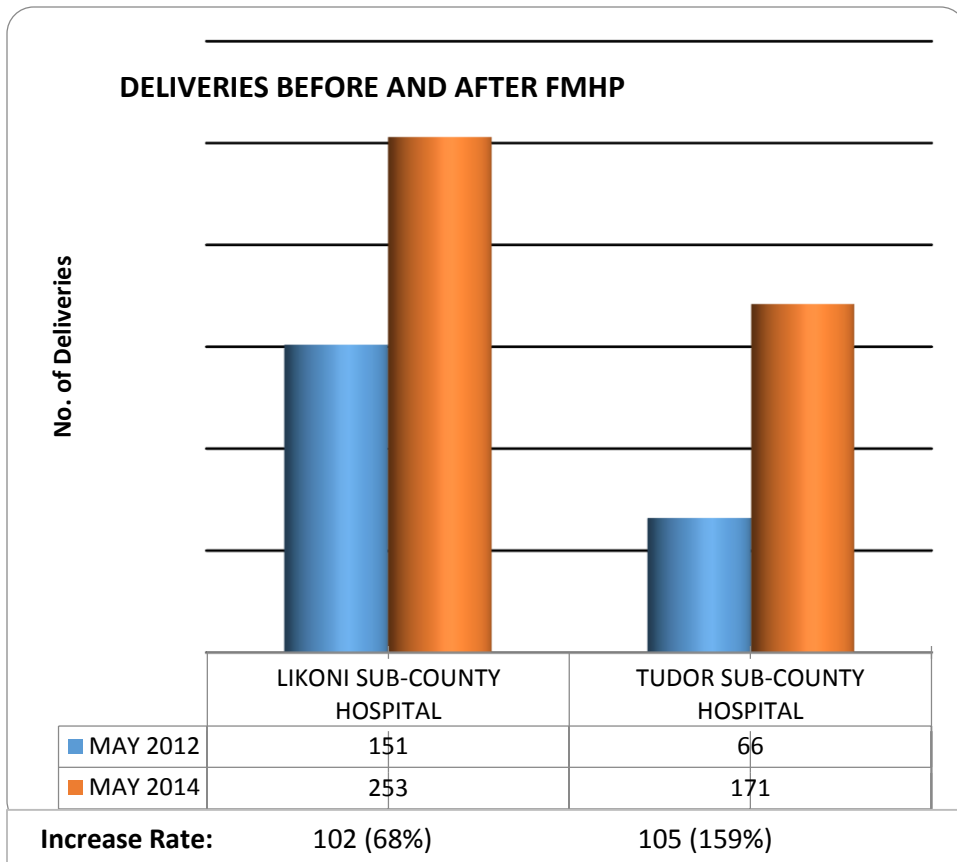


Figure 4.2: Deliveries before and after FMHP in Likoni and Tudor SCH

4.5 Utilization by age groups

Figure 4.3 shows deliveries by age groups in the two hospitals before and after FMHP, it clearly shows that the highest deliveries before FMHP were the 25-34 yrs age bracket at 105 deliveries, while the 15-25 yrs bracket constituted 201 deliveries after FMHP implementation. The table also clearly shows that there was increase in delivery levels across all age groups after the introduction of FMHP. Deliveries by mothers between 15 and 24 years showed great increment of a 118% and that of between 25-34 years was 88% while those above 34 years showed minimal increment of only 22%.

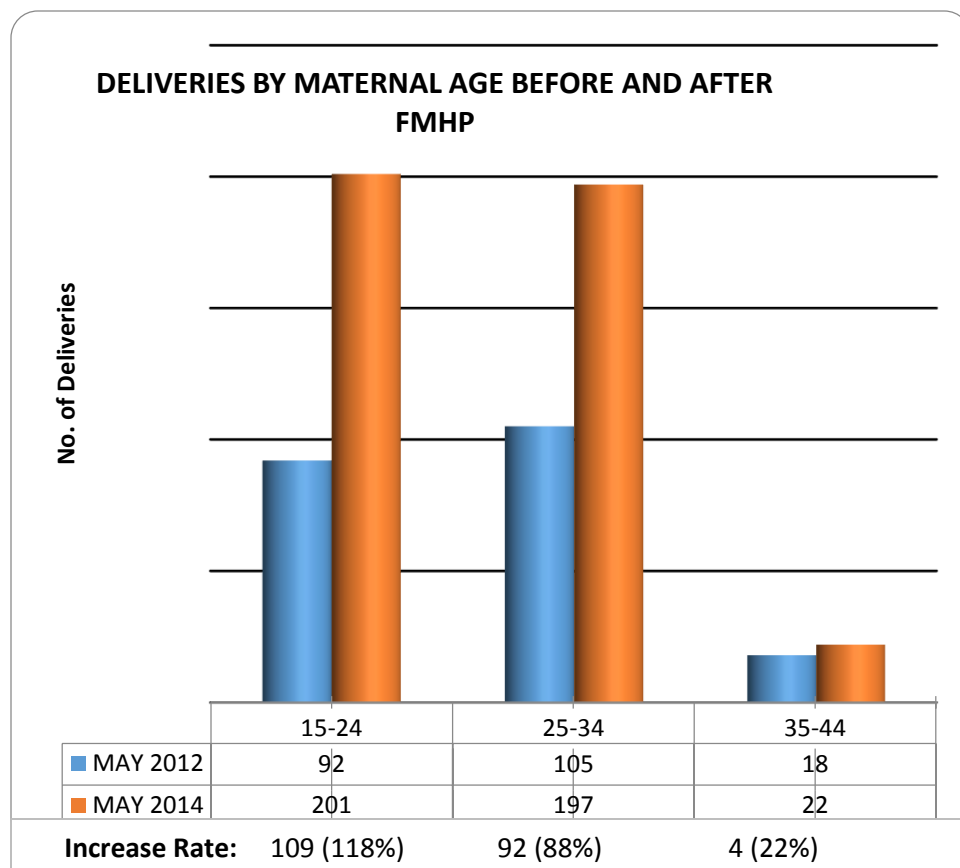


Figure 4.3: Deliveries by age before and after FMHP

On further analysis using Chi-square test in order to test the null hypothesis that there was no significant statistical difference between the number of maternity patients in the different age groups before and after FMHP. The results of the analysis showed $\chi^2 (2, n=635) = 3.120, p > 0.05$ which confirmed that there was no significant difference between the number of maternity patients in the different age groups before and after FMHP. It was therefore, concluded that there was no significant increase in the number maternity patients in all the age groups after FMHP.

4.6 Deliveries by maternal parity

Figure 4.4 below shows the delivery levels by maternal parity. It shows that the commonest parity for both before and after FMHP is the 2nd parity at 96 mothers and 177 mothers delivering in May 2012 and May 2014 respectively. The study also shows two outliers of the eighth and ninth parity coming for delivery in May 2014 that is after FMHP.

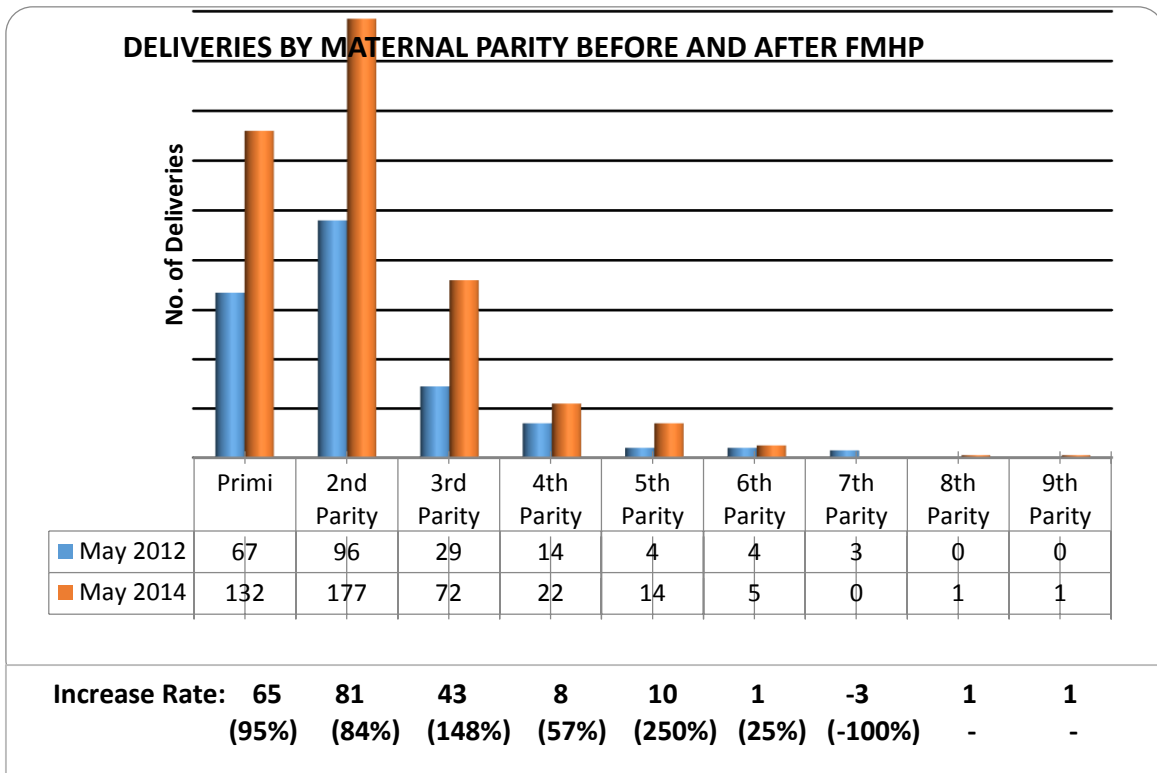


Figure 4.4: Deliveries by maternal parity

Further analysis using Chi-square test in order to test the null hypothesis that there was no significant statistical difference between the number of deliveries by maternal parity before and after FMHP. The results of the analysis showed $\chi^2 (2, n=641) = 10.236, p > 0.05$ which confirmed that there was no significant difference between the number of deliveries by maternal parity before and after FMHP. It was concluded that, based on maternal parity, the number of deliveries after FMHP did not differ significantly with the number of deliveries before FMHP.

4.7 Deliveries by Education levels

The figure 4.5 below shows that majority of the mothers who delivered at the two facilities had basic level of education i.e. primary and secondary education. The results also indicates that there was increase in delivery levels by mothers across different levels of education with the highest rate of increase being for mothers with no education at 44 (400%) followed by those with tertiary education at 15 (107%) while

those with primary education and secondary education also exhibiting high rates of 91 (78%) and 57 (75%) increase respectively with large numbers of deliveries.

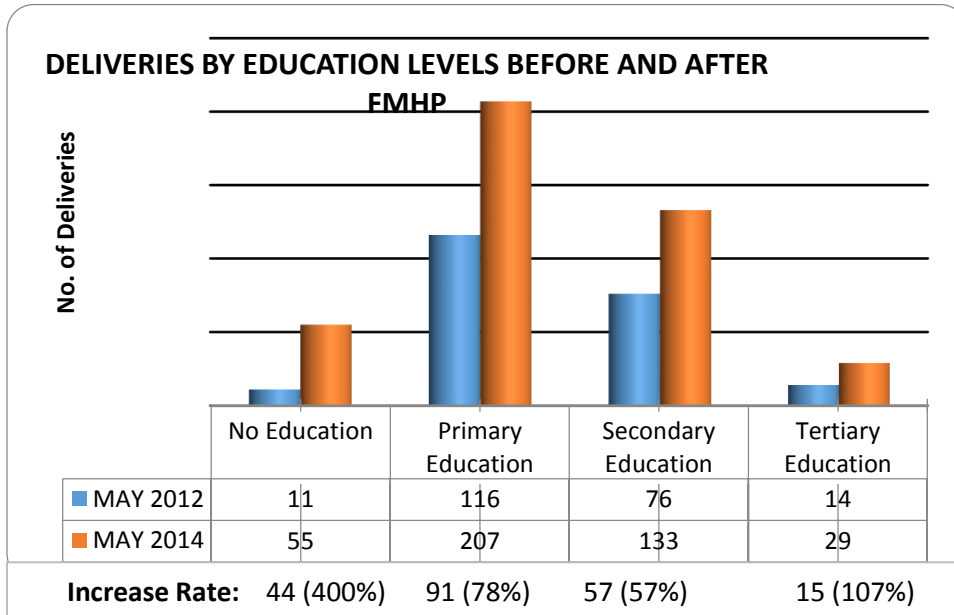


Figure 4.5: Deliveries by education levels

Further analysis using Chi-square test in order to test the null hypothesis that there was no significant statistical difference between the number of maternity patients with different levels of education before and after FMHP. The results of the analysis showed $\chi^2 (3, n=641) = 9.938, p < 0.05$ which led the researcher to reject the null hypothesis and confirm that there was a statistically significant difference between the number of maternity patients with different levels of education before and after FMHP. It was therefore, concluded that there was a significant increase in the number maternity patients with different education levels after FMHP, with the highest difference in the mothers with no education increasing four fold (400%) after FMHP.

4.8 Delivery by Employment status

Figure 4.6 indicates that majority of the respondents who delivered at the facilities were unemployed. The number of unemployed mothers who delivered at the facilities increased drastically by 107% compared to that of the employed mothers which increased by 73% as shown by the Table below

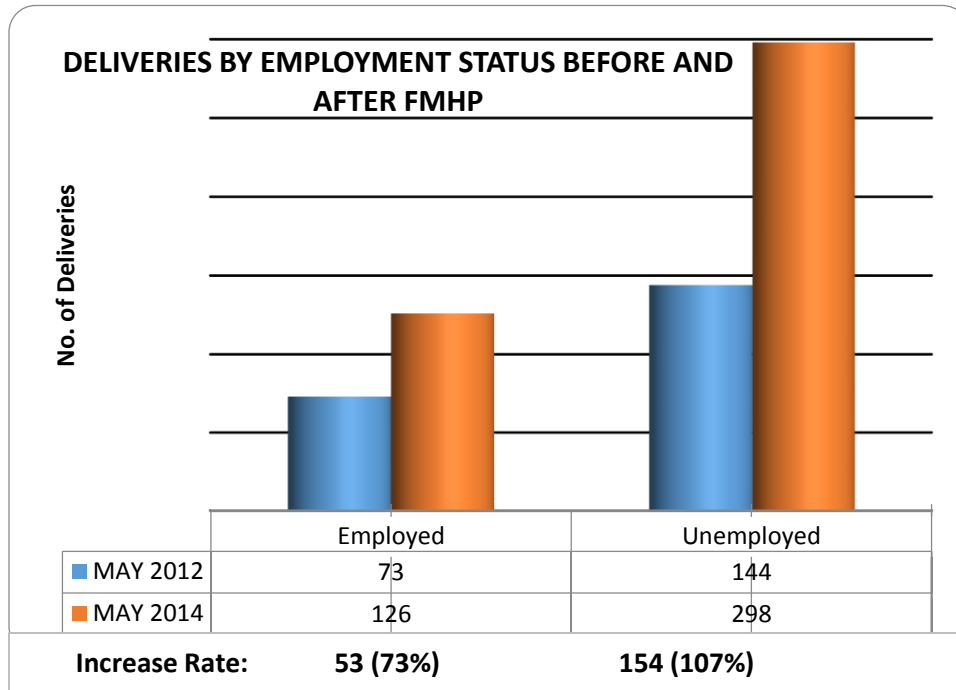


Figure 4.6: Delivery by employment status

Further analysis using Chi-square test in order to test the null hypothesis that there was no significant statistical difference between the number of maternity patients with different socio-economic status before and after FMHP. The results of the analysis showed $\chi^2 (1, n=641) = 1.032, p > 0.05$ which confirmed that there was no significant difference between the number of maternity patients with the different socio-economic status before and after FMHP. It was therefore, concluded that there was no significant increase in the number maternity patients with the different socio-economic status after FMHP.

4.9 Delivery levels by Place of residence

Figure 4.7 indicates that majority of the maternity patients are from, and deliver within the same sub-county of residence, a total number of 197 deliveries and 396 deliveries in may 2012 and may 2014 respectively . Only a few patients come from other sub-counties, a total number of 20 deliveries and 28 deliveries in may 2012 and may 2014 respectively. The results indicate that there was an increase of 199 deliveries (101%) by patients from within the same sub-county and 8 deliveries (40%) by patients from the other sub-counties after FMHP. The results also indicated that before FMHP, mothers from rural areas

did not deliver at the health facilities. However, this changed after the introduction of the policy which led to an increase in not only the mothers from the urban areas but also mothers from rural areas.

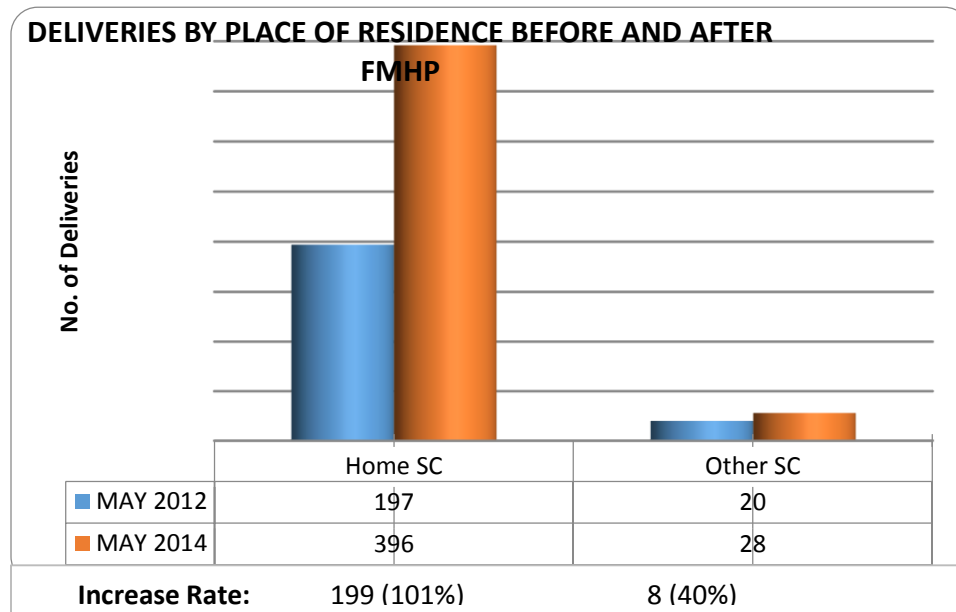


Figure 4.7: Delivery levels by place of residence

Further analysis using Chi-square test in order to test the null hypothesis that there was no significant statistical difference between the number of maternity patients from the different residential areas before and after FMHP. The results of the analysis showed $\chi^2 (2, n=641) = 1.415, p > 0.05$ which confirmed that there was no significant difference between the number of maternity patients from the different residential areas before and after FMHP. It was therefore, concluded that there was no significant increase in the number maternity patients in all the residential areas after FMHP.

4.10 Duration of Stay in the Maternity Facility before and after FMHP

Figure 4.8 indicates that majority of the respondents spent only one day in the delivery facilities. This is evidenced by means of 1.2 and 1 for May 2012 and May 2014 respectively. However, further analysis by the researcher revealed that the observed difference between the sample

means (1.2073733 for May 2012 and 1.0023585 for May 2014) was convincing enough to say that the average length of stay of the maternity patients between the two periods differed significantly.

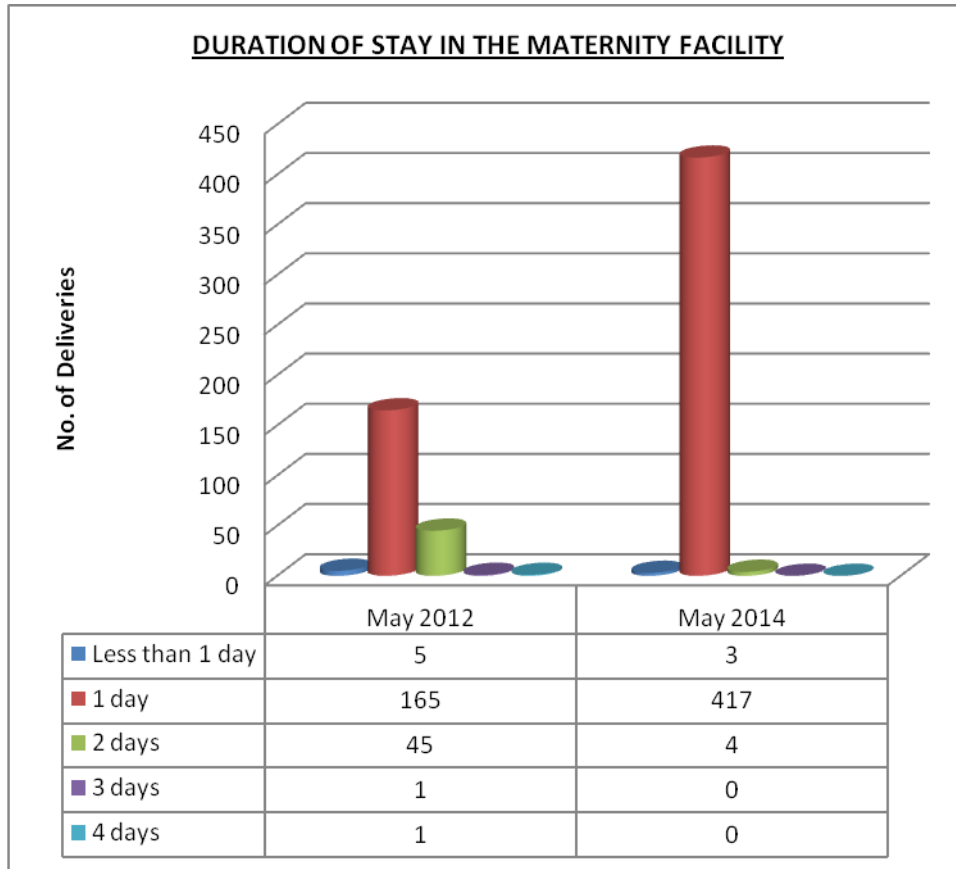


Figure 4.8: Deliveries by duration of stay

This was supported by a t-test analysis which gave a t statistic value of 5.958092921. This Value was greater than the upper limit of the t critical two-tail value (i.e. $5.958092921 > 1.970286607$). Therefore, rejected the null hypothesis that the means of the two populations were equal ($H_0: \mu_1 - \mu_2 = 0$) and accepted the alternative hypothesis that the two means are indeed unequal ($H_1: \mu_1 - \mu_2 \neq 0$). The researcher then concluded that the decrease in the duration of stay by maternity patients after the introduction of FMHP was significant. This indicates that FMHP improved service delivery to maternity patients. This assertion is further supported by a

maximum response of 2 in May 2014 indicating than no patient stayed for more than 2 days in the facilities.

4.11a Deliveries with complications before and after FMHP

Table 4.4a indicates that there was a reduction of deliveries with complications with the introduction of FMHP. This is evidenced by the ratio between deliveries with complications and those without complications. The results indicate that in May 2012, there were 6 deliveries with complications for every 100 deliveries that took place in the facilities while in May 2014 for every 100 deliveries there were only 3 deliveries with complications.

Table 4.4a Deliveries with complications

	With Complications		Without Complications		Total Frequency
	Frequency	Percent	Frequency	Percent	
May 2012	13	6%	204	94%	217
May 2014	14	3%	424	97%	438

Further analysis using Chi-square test in order to test the null hypothesis that there was no significant statistical difference between number of deliveries with complications before and after FMHP. The results of the analysis showed $\chi^2 (1, n=641) = 2.572, p > 0.05$, which confirmed that there was no significant difference between the number of of deliveries with complications before and after FMHP. It was therefore, concluded that there was no significant decrease in the number of deliveries with complications after FMHP.

4.11b Deliveries with Mortality before and after FMHP

Table 4.4b indicates that there was a reduction of deliveries with mortalities with the introduction of FMHP. This is evidenced by the ratio between deliveries with mortalities and those without mortalities. The results indicate that in May 2012, there were 3 deliveries with mortalities that took place in the facilities while in May 2014 there were zero deliveries with mortalities.

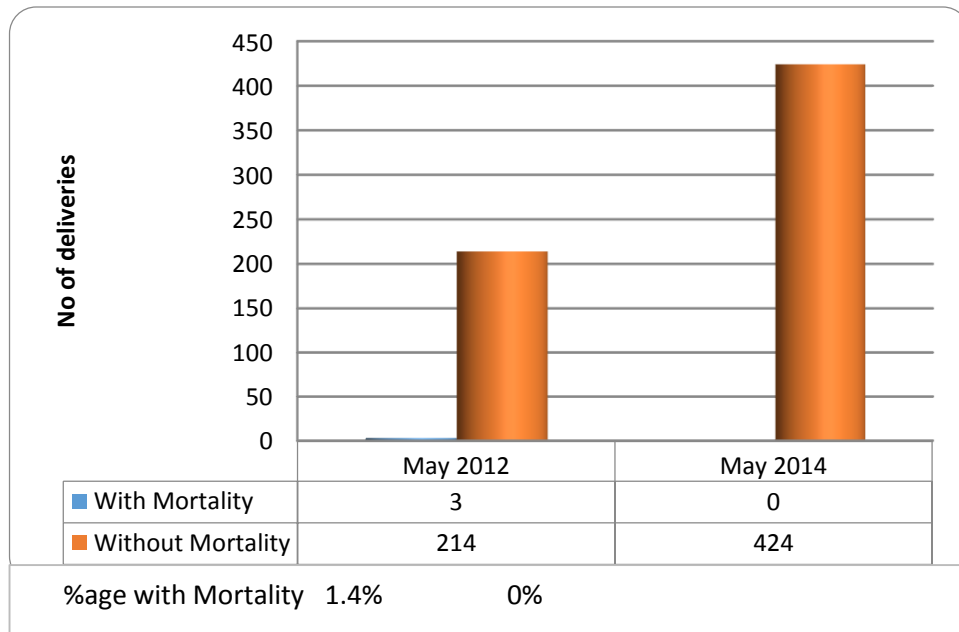


Figure 4.9: Deliveries with mortalities

The researcher performed further analysis using Chi-square test in order to test the null hypothesis that there was no significant statistical difference between number of deliveries with mortality before FMHP and after FMHP. The results of the analysis showed $\chi^2 (1, n=641) = 5.889, p < 0.05$ which confirmed that there was a significant difference between the number of of deliveries with complications before FMHP and after FMHP. The researcher, therefore, concluded that there was a significant decrease in the number of deliveries with mortality after FMHP

Table 4.4b Deliveries with mortalities

	With Mortality		Without Mortality		Total Frequency
	Frequency	Percent	Frequency	Percent	
May 2012	3	1.4 %	214	98.6%	217
May 2014	0	0%	424	100%	424

4.12 In depth interviews

4.12.1 Implementation of the FMHP

This section sought to establish the implementation status of the new FMHP in the two health facilities. From the data collected, it is evident that the two facilities were fully implementing the new policy. Majority (80%) of the respondents were of the view that FMHP is achieving its stated purpose and that the health workers (93%) are also complying with the the policy guidelines despite the barriers to compliance particularly at an operational level. On the issue of consistency, the respondents affirmed that the policy is indeed consistent with not only Hospital rules, policies, guidelines, strategic plans, budget allocations etc, but also with external codes of practice and best practice guidelines. The respondents also affirmed that there have been no great impact on the policy due to restructures and legal changes that have taken place.

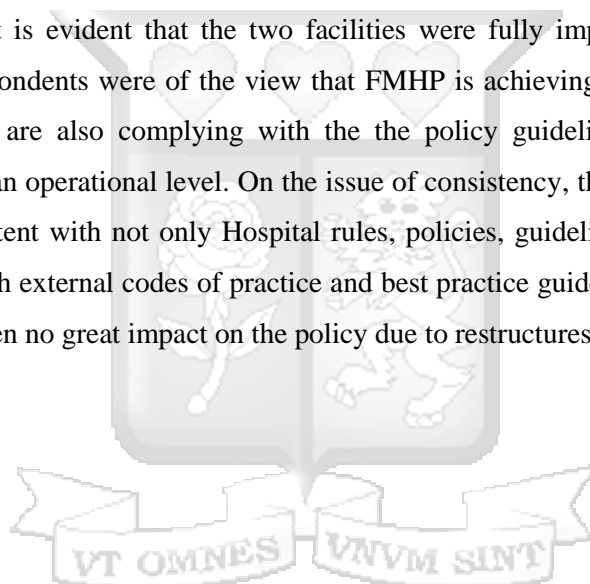


Table 4.5: Implementation of FMHP

Health Workers Awareness of the New Maternity Policy	Yes	No	Not Aware
The institution practice maternity policy	100.0%	0.0%	0.0%
The new maternity policy achieve its stated purpose	80.0%	20.0%	0.0%
The outcomes and/or principles and objectives expressed in the policy still consistent with the facility's guiding principles, strategic plans, delegations and budget allocation	60.0%	33.3%	6.7%
The policy is consistent with external codes of practice and best practice guidelines	80.0%	20.0%	0.0%
There have been any restructures that impact on the policy	40.0%	46.7%	13.3%
There are legal changes that impact on the policy	26.7%	73.3%	0.0%
The is policy being complied with	93.3%	6.7%	0.0%
Health worker are clear about their roles and responsibilities in the implementation of the new policy	73.3%	26.7%	0.0%
There are barriers to compliance, particularly at an operational level	60.0%	40.0%	0.0%
The supporting procedures/guidelines are consistent with the policy and effective in	53.3%	46.7%	0.0%
The policy is consistent with other relevant Hospital rules, policies, directives, guidelines	80.0%	20.0%	0.0%

For effective implementation of the policy, majority (80%) of the respondents confirmed that there are coordination bodies in their facilities. This is shown in figure 4.9.

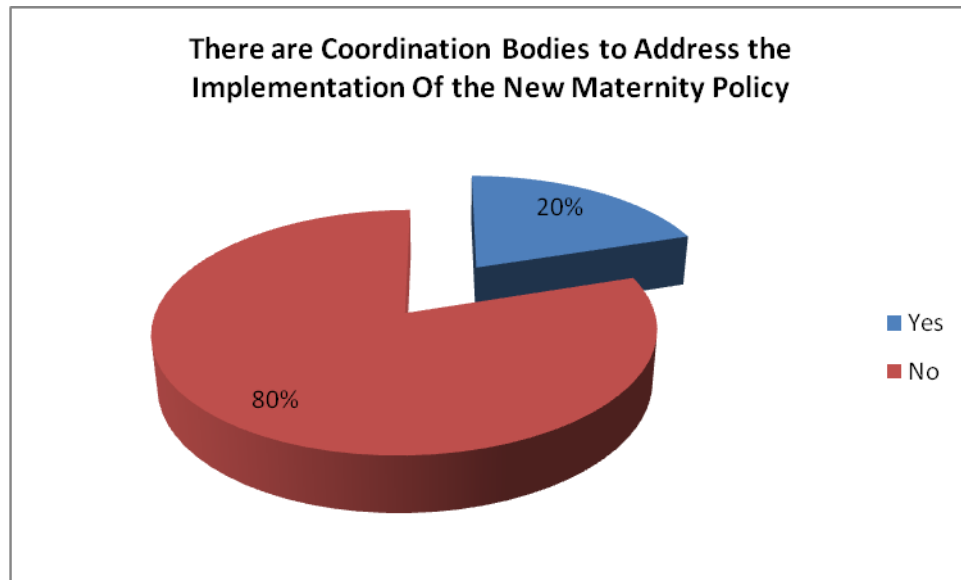


Figure 4.10: Effective implementation of FMHP

4.12.2 Involvement of Health workers

This section focused on rating the degree of involvement of the health workers in the drafting and implementation of FMHP. This was rated using various statements that were measured using a 5-point Likert scale whereby the respondents either 1= Strongly Disagreed, 2= Somewhat Disagreed, 3= Neutral, 4= Somewhat Agreed or 5= Strongly Agreed.

Summary statistics of the ratings by the respondents are provided to create a clear picture on the perceptions of the respondents. In this case, ratings with a mean and a median of between 1 and 2 showed disagreement with the statements while ratings with a mean and median of between 4 and 5 showed agreements with the statements. Ratings with a mean and median of 3 showed neutral perceptions.

Majority of the respondents (87%) affirmed that health workers were not involved in the drafting and implementation of the FMHP. Only 13% of the interviewees were of the view that the health workers were involved.

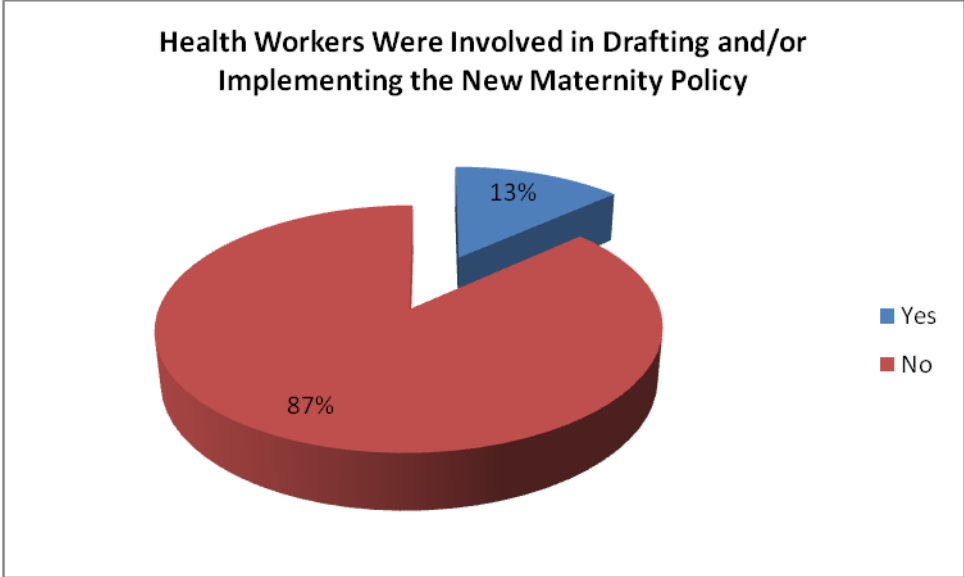


Figure 4.11: Health workers involvement in FMHP

The results above are further supported by the responses to the statements in the figure below. According to figure 4.10, majority of the respondents strongly disagreed with the statements that they and the hospital team were either consulted or sensitized as stakeholders on the FMHP.

This is further evidenced with the mean of 2.357 and a median of 2 for the statement on consultation and a mean of 2.214 and median of 2 for the statement on Sensitization. This lack of involvement either through consultation or sensitization is seen to have an impact on the level of awareness of FMHP among the health workers. This is evidenced by figure 4.2 which indicates that majority of the respondents were neutral on their awareness of how the new FMHP works. This is supported by a mean of 3.143 and a median of 3 as indicated in table 4.6.

Table 4.6: Health workers involvement in FMHP

	Valid Responses	Mean	Standard Error	Median	<i>Variance</i>	Standard Deviation
I / hospital team was consulted as a stakeholder in the new policy formulation	15	2.357	0.387	2	2.093	1.447
I / hospital team was taken through sensitization of the new maternity policy	15	2.214	0.3	2	1.258	1.122
I am fully aware of the new maternity policy work.	15	3.143	0.361	3	1.824	1.351

Further analysis by use of ANOVA single factor revealed that the means of the responses to the various statements were equal (i.e. $(H_0: \mu_1 = \mu_2 = \mu_3)$). This is supported by an F value of 2.028662 which is less than the F critical value. (i.e. $2.028662 < 3.238096$). Despite the differences in variances to the responses, it was concluded that the differences were not significant. This conclusion is evidenced by P-value $> \alpha$ Value (i.e. $0.145159 > 0.05$). The results of the ANOVA analysis are shown in the table below.

Table 4.7: ANOVA Analysis (a)

Source of Variation	SS	df	MS	F	P-value	F critical
Between Groups	7	2	3.5	2.028662	0.145159	3.238096
Within Groups	67.28571	39	1.725275			
Total	74.28571	41				

4.12.3 Satisfaction and Sensitization of Health Workers with the Free Maternity Policy

This section focused on rating the degree of satisfaction and sensitization with the new FMHP among the health workers using various statements that were measured using a 5-point Likert scale whereby the respondents either 1= Strongly Disagreed, 2= Somewhat Disagreed, 3= Neutral, 4= Somewhat Agreed or 5= Strongly Agreed. Summary statistics of the ratings by the respondents are provided. In this case, ratings with a mean and a median of between 1 and 2 showed disagreement with the statements while ratings with a mean and median of between 4 and 5 showed agreements with the statements. Ratings with a mean and median of 3 showed neutral perceptions.

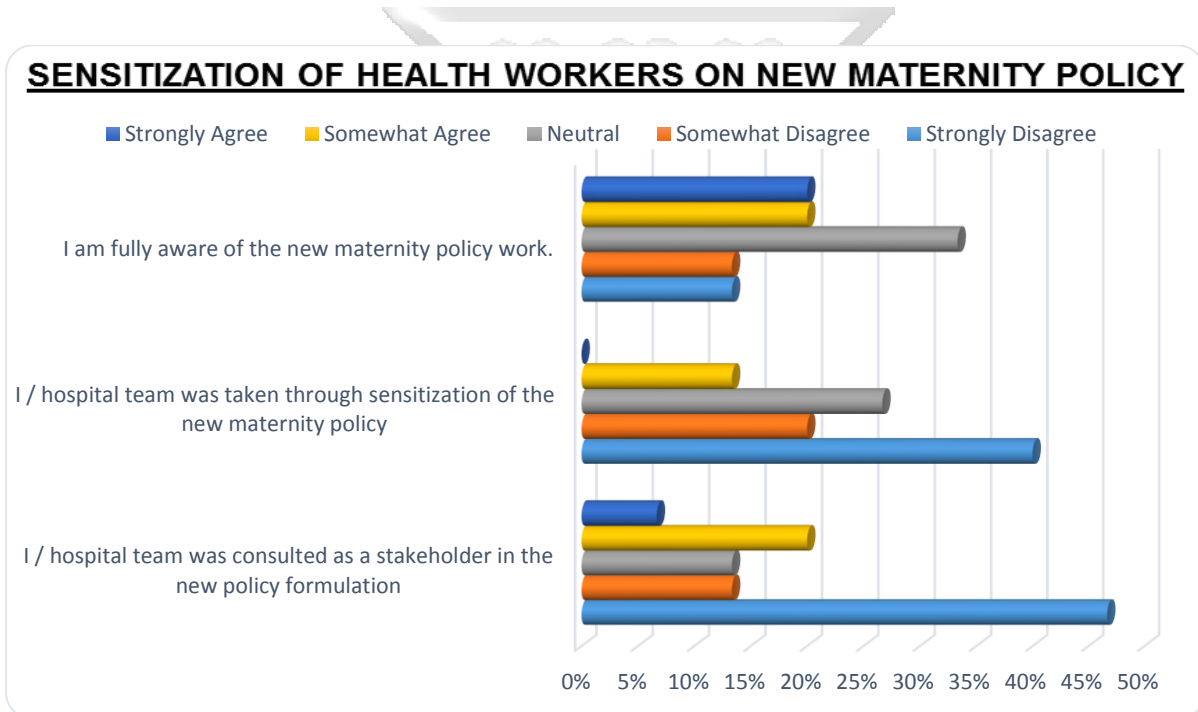


Figure 4.12: Sensitization of health workers on FMHP

From table 4.7 it is evident that majority of the health workers interviewed were optimistic with the new FMHP. From figure 4.11 majority of the respondents were of the view that the policy has been of benefit to the delivering mothers and that the policy has given people more freedom of utilization of health care services. The ratings further indicate that majority of them agree that

the number of patients has increased since the introduction of FMHP and that the policy has been beneficial to the people who have benefited from improved health care services. This is evidenced by a mean of between 3.5 and 4.5 and a median of between 4 and 5.

On the benefits of the policy to the health workers, the respondents were not so optimistic. This is evidenced by the respondent's neutral responses (mean of 2.929 and a median of 3) on their perception of control over their work performance with the introduction of the policy. The respondents also posted near neutral responses (mean of 3.429 and median of 3.5) on the perception whether the maternity policy make health care workers more efficient in their work output.

These statements' summary statistics are shown in the Table 4.8

Table 4.8: Satisfaction of health workers on FMHP

Statements	Valid Responses	Mean	Standard Error	Median	Variance	Standard Deviation
New maternity policy gives staff more control over their daily work performance.	15	2.929	0.245	3	0.840659	0.917
Patients using the new maternity policy benefit a lot from health care services.	15	3.857	0.345	4	1.67033	1.292
New maternity policy make health care workers more efficient in his/her work output	15	3.429	0.272	3.5	1.032967	1.016
New maternity policy gives people more freedom of utilization of health care services	15	4.286	0.286	4.5	1.142857	1.069
New maternity policy makes it easy for governments to deal with maternity issues.	15	3.571	0.416	4	2.417582	1.555
The health facility is getting more patients than before the new maternity policy was introduced.	15	4.500	0.310	5	1.346154	1.160
The health care services are much better after the introduction of new maternity policy.	15	3.857	0.254	4	0.901099	0.949

On further analysis of the responses by aid of ANOVA single factor, it was observed that the differences observed in the means of the ratings to the various statements was significant (i.e. $F \text{ value} > F \text{ critical value}$; $2.930474 > 2.199905$) and that the variations could not be ignored. This is evidenced by $P \text{ value} < \alpha \text{ value}$ (i.e. $0.011664 < 0.05$). It was concluded that the respondents had varied perceptions on the level of satisfaction derived with the introduction of FMHP. This analysis is summarized in the table 4.9.

Table 4.9: ANOVA Analysis (b)

Source of Variation	SS	Df	MS	F	P-value	F crit
Between Groups	23.4898	6	3.914966	2.930474	0.011664	2.199905
Within Groups	121.5714	91	1.33595			
Total	145.0612	97				

HEALTH WORKERS SATISFACTION WITH NEW MATERNITY POLICY

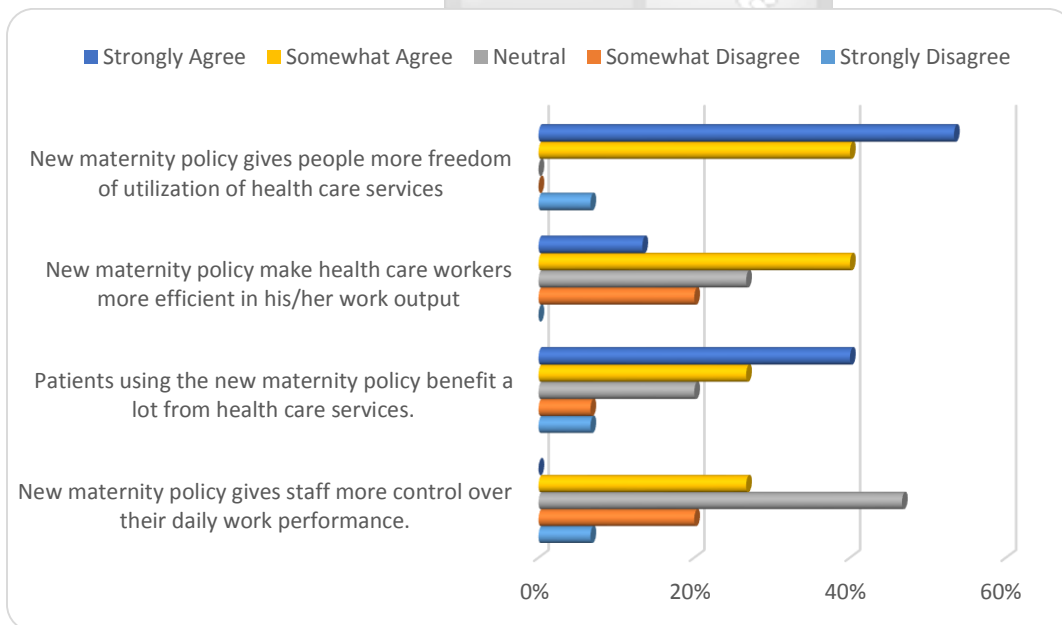


Figure 4.12: Health workers satisfaction with FMHP

The respondents were further asked to respond to a set of statements to show their discomfort with FMHP. From their responses, it is evident that despite their approval rating on their satisfaction with FMHP, they are not comfortable with certain aspects of the policy. The respondents are embarrassed when they don't see the government responding to address challenges (mean = 3.6). They are also somewhat neutral with the assertion that the new policy was not designed for ordinary people (mean = 2.8).

Further Analysis indicated that the observed differences in average ratings of the two statements was not. This was ascertained by performing a t-test to test the null hypothesis that the means of the two statements were equal ($H_0: \mu_1 - \mu_2 = 0$; $H_1: \mu_1 - \mu_2 \neq 0$). The researcher performed a t-test two-sample assuming equal variances and obtained a t value of 1.449138. This Value was within the range of the t critical two-tail values (i.e. $-2.048407 < -1.449138 < 2.048407$) indicating that the observed difference between the sample means (3.6 and 2.8) was not convincing enough to say that the average ratings for the two statements differed significantly. Therefore, the researcher concluded that indeed there were areas of discomfort with the FMHP. This analysis is summarised in the Table 4.10.

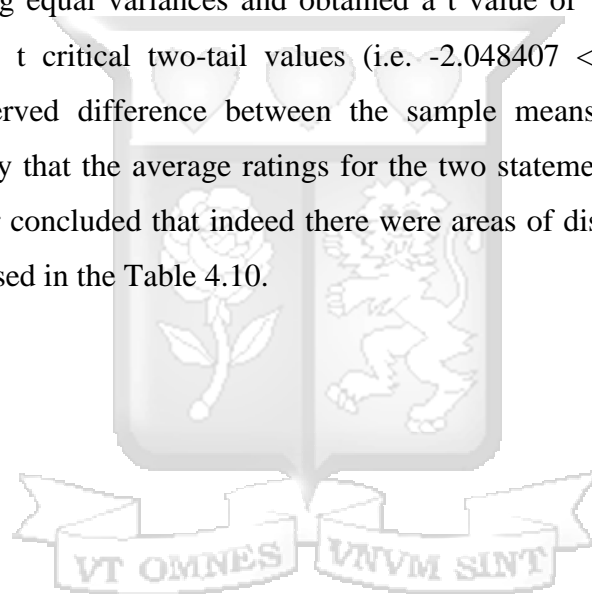
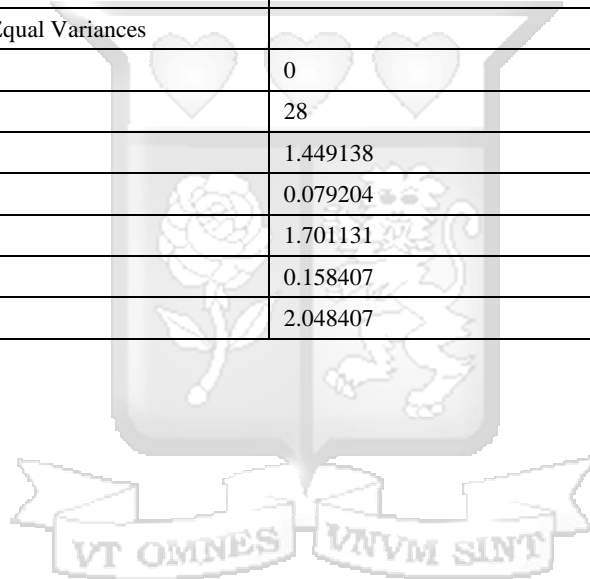


Table 4.10: ANOVA Analysis (c)

Descriptive Statistics	It is embarrassing when I have trouble with new maternity policy while the Government is watching.	Sometimes, I think that new maternity policy is not designed for use by ordinary people.
Mean	3.6	2.8
Variance	2.4	2.171429
Observations	15	15
Pooled Variance	2.285714	
F-Test Two-Sample for Variances		
Df	14	14
F	1.105263	
P(F<=f) one-tail	0.42705	
F Critical one-tail	2.483726	
t-Test: Two-Sample Assuming Equal Variances		
Hypothesized Mean Difference	0	
Df	28	
t Stat	1.449138	
P(T<=t) one-tail	0.079204	
t Critical one-tail	1.701131	
P(T<=t) two-tail	0.158407	
t Critical two-tail	2.048407	



HEALTH WORKERS DISCOMFORT WITH NEW MATERNITY POLICY

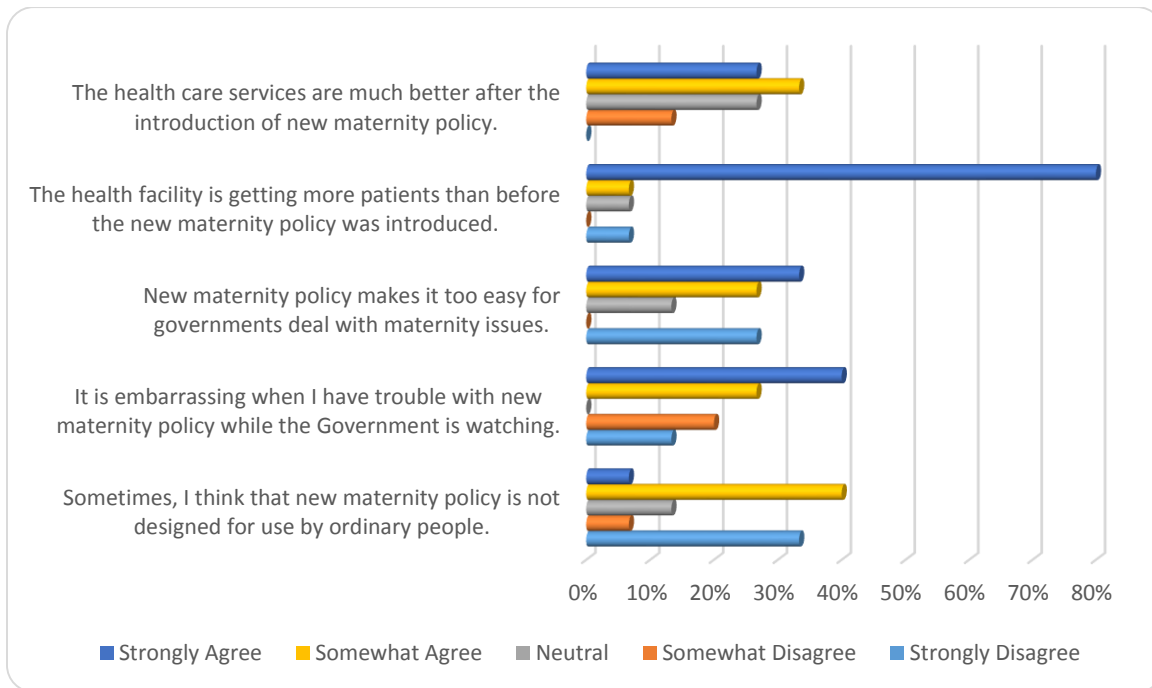


Figure 4.13: Health workers discomfort with the FMHP

4.12.4 Quality and Financial Implication of the FMHP

Figure 4.14 show that the FMHP has had an impact on quality and financial performance of the health facilities. However it is evident that Majority (87%) of the respondents believe that the policy has had a greater impact on the quality of health care compared to its impact on financing of maternity health care whereby only 47% of them believed it had a positive impact.

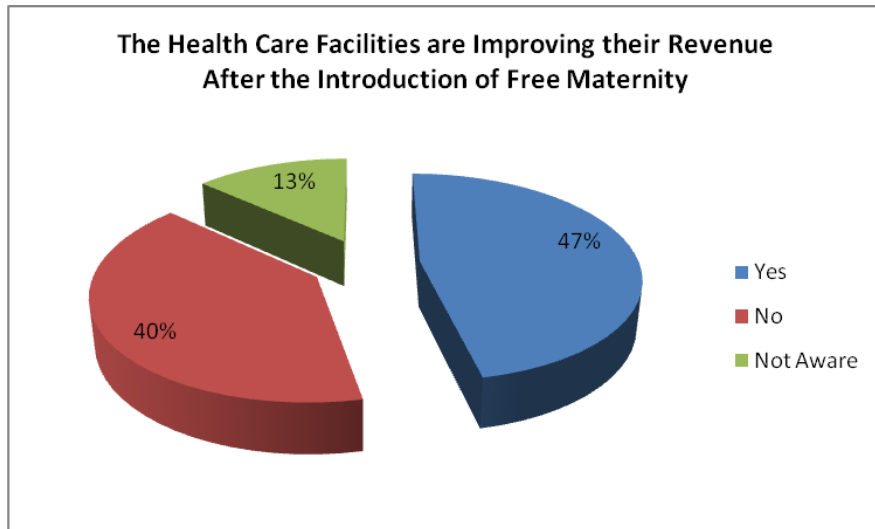


Figure 4.14: Financial Impact

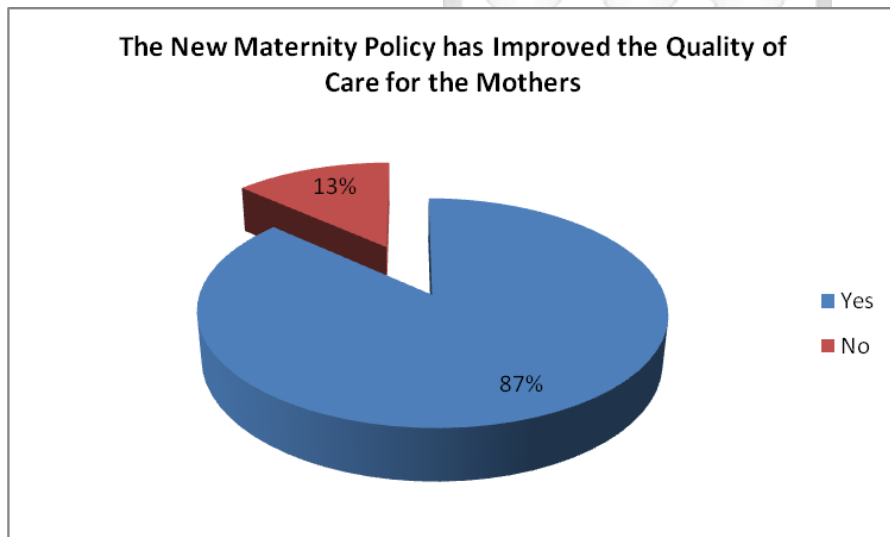


Figure 4.15: Quality Impact

4.12.5 Financing of Delivery Services

On financing of delivery services before and after FMHP figure 4.16 shows that Tudor SCH received a total of Ksh 855,000 in May 2014 up from Ksh 215,090 collected in May 2012 , while Likoni SCH received Ksh 1,265,000 in May 2014 up from Ksh 201,590 collected in May 2012. The results further indicate that there was an increased collection of Ksh 639,910 (298%) in Tudor SCH and Ksh 1,063,410 in Likoni SCH after FMHP.

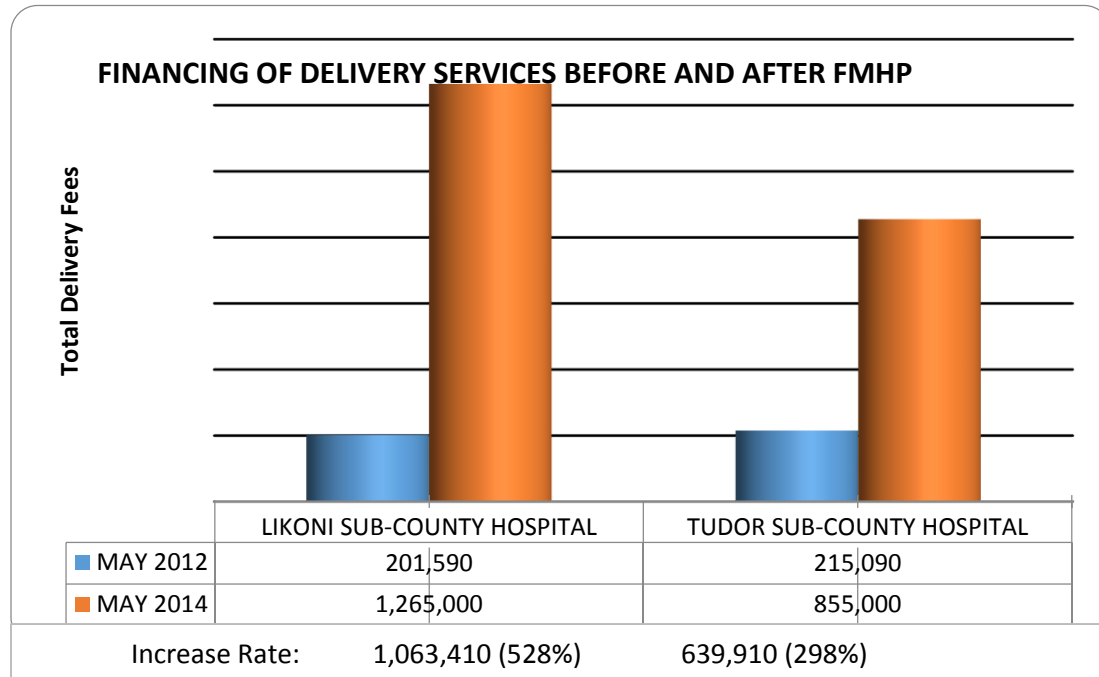


Figure 4.16: Financing of delivery services before and after FMHP

Further Analysis indicated that the average delivery fees for maternity services between the two periods varied. The average delivery fees in May 2014 was Ksh 5000 which was an increase from an average of Ksh 2082.64 in May 2012. To ascertain the equality of the two means the researcher sought to establish whether the difference seen was significant or not.

A t-test to test the null hypothesis that the average delivery fees for the two periods were equal ($H_0: \mu_1 - \mu_2 = 0$; $H_1: \mu_1 - \mu_2 \neq 0$). The researcher performed a t-test two-sample assuming equal variances and obtained a t statistic of 65.3805. This Value was greater than the upper limit of the t critical two-tail value (i.e. $65.3805 > 1.964$). Therefore, the researcher rejected the null hypothesis that the average delivery fees for the two periods were equal ($H_0: \mu_1 - \mu_2 = 0$) and accepted the alternative hypothesis that the average delivery fees for the two periods are indeed unequal ($H_1: \mu_1 - \mu_2 \neq 0$). It was then concluded that the increase in the average delivery fees after the introduction of FMHP was significant. This indicates that there was a significant improvement in the financing of delivery services after FMHP hence leading to improved utilization of maternity services.

CHAPTER FIVE

DISCUSSION OF FINDINGS

5.1 Introduction

In this chapter, the findings are discussed, conclusions drawn based on the findings and recommendations for the various stakeholders and further research suggested in the gaps identified by the study.

5.2 Discussion of Findings

5.2.1 Utilization Levels for Maternity Services before and After FMHP

The first objective of this study sought to describe the utilization levels for maternity services before and after Free Maternity Health Policy at two high volumes level 4 hospitals. To achieve this objective, a questionnaire on the health and financial records of the two level 4 high volume hospitals was filled. In addition health records from personal files of the maternity patients were reviewed to extract data on utilization patterns of free maternity services. Data on deliveries for two periods, May 2012 and May 2014, i.e. before and after the introduction of FMHP, were analyzed to bring out the patterns.

The results of the study indicated that there was a significant increase (207 deliveries or 95%) in the number of maternity patients in the health care facilities after FMHP. The increase in mothers delivering in health facilities is unlikely due to the increase in the population. The greatest increase was seen among mothers aged <35 years (201 deliveries or 102%) - the average age of the delivering mothers being 25 years. The study also shows that the commonest parity for both before and after FMHP is the 2nd parity at 96 mothers and 177 mothers delivering in may 2012 and may 2014 respectively. These findings are in line with several previous studies (Mekonnen& Mekonnen, 2002: Addai, 2000: Celik & Hotchkiss, 2000) that the researcher has reviewed. According to these researchers, maternal age and parity are key determinants for health care use in developing countries. In particular, van Eijk et al. (2006) found that majority of mothers who delivered at health facilities were <30 years and <5th parity. However, the current study also shows two outliers of the eighth and ninth parity coming for delivery in may 2014 that is after FMHP.

The study also found that majority of the patients who delivered at the health facilities have primary level of education and are unemployed. These findings are different compared to the previous studies reviewed

by the researcher. The studies by Eijk et al. (2006); Mekonnen and Mekonnen (2002); Addai, (2000); Celik and Hotchkiss (2000) indicate that mothers with higher socioeconomic and education status sought health care services more than those with lower socioeconomic and education status. This divergence with the previous studies is due to the fact that maternity is free.

Further, the results indicate that majority of the maternity patients deliver within the same sub-county of residence with only a few patients coming from other sub-counties. The results also indicated that before FMHP mothers from rural areas did not deliver at the health facilities. However, this changed after the introduction of the policy which led to an increase in not only the mothers from the urban areas but also mothers from rural areas.

The results also indicated that the average length of stay of the maternity patients in the health facilities reduced significantly after FMHP. This assertion was supported by a maximum response of 2 in May 2014 indicating that no patient stayed for more than 2 days in the facilities. There was also a major progress in reduction of deliveries with complications with the introduction of FMHP. The results indicate that in May 2012, there were 6 deliveries with complications for every 100 deliveries that took place in the facilities while in May 2014 for every 100 deliveries there were only 3 deliveries with complications. Despite the difference being insignificant it indicates that FMHP improved service delivery to maternity patients. The results also indicated that the maternal mortalities significantly reduced after introduction of FMHP from 1.4% in May 2012 to 0% in May 2014. Further analysis using Chi square showed statistical significance.

The purpose of the free maternal services is to remove financial barriers to using maternity services, with the goals of reducing maternal and neonatal mortality rates, contributing to poverty reduction, and therefore moving toward realization of Millennium Development Goal 5 (MOH Circular, 2013). In addition, the government's commitment to provide free maternal health services is expected to encourage more women to deliver at health facilities and to result in fewer maternal deaths. This is in line with the study which showed a 1.8% maternal mortality in May 2012, before FMHP and a reduction to 0% maternal mortality in May 2014, after FMHP.

5.2.2 Effect of Financing Mechanisms on Utilization Levels Before and After FMHP

The second objective of the study sought to assess if the financing mechanisms contributed to improved utilization in maternity services before and after Free Maternity Health Policy at the two high volumes

level 4 hospitals. In this regard the researcher compared the revenue collections from maternity charges by the health facilities before FMHP and the reimbursements that the facilities received from the government after FMHP. It is indeed evident from the results that financing mechanisms after FMHP are much better compared to the one before FMHP. This is supported by a significant increase in the revenue of the health facilities by Ksh 1,703,320 which is four times more (409%) than the revenue collected before FMHP. This can also be explained by the difference in the average fees per delivery charged before FMHP which was Ksh 2082.64 with what the government reimbursed per delivery after FMHP which was Ksh 5000. This clearly shows that the level of financing after FMHP is higher than before.

This new financing mechanism (reimbursements) can be said to contribute to the significant increase (207 deliveries or 95%) in the number of maternity patients in the health care facilities after FMHP. Health experts believe that user fees, introduced in Kenya and many other low-income countries in the late 1980s, failed to achieve the intended objective of improving access to healthcare (Maina & Kiriga, 2015). Instead, user fees imposed a barrier to accessing health services by the poor and vulnerable and have contributed to inequalities in access to healthcare (Meessen et al, 2011). Indeed user fee was an impediment thus these previous studies concurs positively with the FMHP. This study indeed confirms the findings by previous researchers (Meessen et al, 2011; Maina & Onguti, 2014; Toili, 2015) that the new financing mechanism is enabling more mothers to access the services of qualified health care workers. Thus, the improved financing is also believed to translate to improved quality health care. Majority (87%) of the respondents believe that the policy has had a greater impact on the quality of health care for the mothers.

However, long term impact of the new financing mechanism is subject to further investigation. This is necessitated by the findings from previous studies which established that removal of user fees in Kenya and elsewhere indicated limited impact in terms of the utilization of health services (Schneider & Gilson, 1999; Wilkinson et al., 2001). According to Chuma et al. (2009), evaluations have also shown that the removal of user fees is only effective in the first year of implementation and that the majority of facilities reintroduce fees later for various reasons, including lack of supplies and medicines, delays in fund reimbursement, and the need to hire additional support staff whose salaries are not covered in the normal allocations. This study has shown the great benefits of the FMHP, thus the Government needs to enforce this Policy.

On the benefits of the policy to the health workers, the respondents were not so optimistic. This is evidenced by the respondent's neutral responses (mean of 2.929 and a median of 3) on their perception of control over their work performance with the introduction of the policy. The respondents also posted near neutral responses (mean of 3.429 and median of 3.5) on the perception whether the maternity policy make health care workers more efficient in their work output. This could be attributed to the several challenges that have been experienced in the implementation process of the policy including lack of involvement.

5.2.3 Challenges in the Implementation of FMHP

The third objective of the study was to assess the implementation challenges, adequacy of financing and the hospital coping mechanisms of the Free Maternity Health Policy. From the data collected, it is evident that the two facilities were fully implementing the new policy. Majority (80%) of the respondents were of the view that FMHP is achieving its stated purpose and that the health workers (93%) are also complying with the the policy guidelines despite the barriers to compliance particularly at an operational level. On the issue of consistency the respondents affirmed that the policy is indeed consistent with not only Hospital rules, policies, guidelines, strategic plans, budget allocations etc, but also with external codes of practice and best practice guidelines. The respondents also affirmed that there have been no great impact on the policy due to restructures and legal changes that have taken place.

The implementation of the new policy has however encountered several shortcomings. In line with the previous studies (Maina & Kiriga, 2015) this study established the shortcomings in the policy implementation process to include inadequate consultation with and sensitization of stakeholders during the policy design, planning, and implementation process. Also, insufficient and frequent delays in the disbursement of funds attributed to liquidity-related problems at the national level, complications in the disbursement mechanism with county governments insisting that reimbursements be made to county revenue accounts instead of being paid directly to health facilities, over straining of health workers and facilities due to increased number of maternity patients, among others.

As a measure of addressing these challenges and promote effective implementation of the policy, majority (80%) of the respondents confirmed that there are coordination bodies in their facilities

that are charged with coordinating FMHP activities. However, majority of the respondents believe that more still need to be done to improve the implementation of the policy to enhance its impact.



CHAPTER SIX

CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

According to a community-based survey in rural western Kenya, conducted among a representative sample of women who had recently delivered, to identify the locations where they had sought care during their pregnancy and delivery, eighty percent (80%) of the women delivered outside a health facility. Factors significantly associated with giving birth outside a health facility included the unavailability or inaccessibility of health facilities, competing priorities of mothers in a male-dominated society, poverty, high user charges and associated costs, aggravated by lack of water and food supplies in most health facilities and relatively low quality of services offered. Reducing or removing these constraints would result in increased utilization of institutionalized delivery care (Ikamari, 2007).

The Free Maternity Health Policy (FMHP) introduced in June 2013 abolished user fees for all maternity services in the government health facilities in the country at all levels of care, at high, – mid, – and lower level government health facilities (Maina & Onguti, 2014). The purpose of the free maternal services is to remove financial barriers to using maternity services, with the goals of reducing maternal and neonatal mortality rates, contributing to poverty reduction, and therefore moving toward realization of Millennium Development Goal 5 (MOH Circular, 2013). In addition, the government's commitment to provide free maternal health services is expected to encourage more women to deliver at health facilities and to result in fewer maternal deaths.

In light of the foregoing, this study sought to establish the effectiveness and challenges of implementing the Free Maternity Health Policy in relation to the utilization and financing of maternity services at two level 4 high volume hospitals in Mombasa County. According to the results of the study, it is evident that providing free maternity services in Kenya's public health facilities is enabling more women to deliver with the care of trained health workers. It is also evident that the financing of delivery services by the government and other stakeholders after FMHP has significantly increased. This is critical in the provision of quality health care and the subsequent reduction in maternal deaths. Despite these achievements, the implementation of the new policy has encountered several shortcomings. The important shortcomings in the policy implementation process included inadequate consultation with and sensitization of stakeholders during the policy design, planning, and implementation process, a challenge of insufficient and frequent delays in the disbursement of funds attributed to liquidity-related problems at

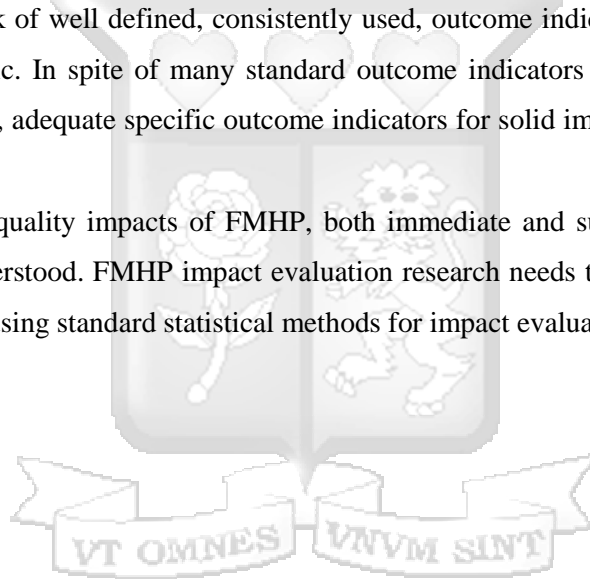
the national level, complications in the disbursement mechanism with county governments insisting that reimbursements be made to county revenue accounts instead of being paid directly to health facilities, over straining of health workers and facilities due to increased number of maternity patients, among others. It is, therefore, imperative for the government and all the stakeholders to relook into the policy in order to strengthen the key pillars to ensure effective implementation and achievement of the overall goal of the policy.

6.2 Recommendations

To continue improving the effectiveness of FMHP implementation, the researcher suggests the following recommendations:

1. The National Government urgently needs to involve the health care practitioners, providers and other stakeholders both through consultation and sensitization on FMHP design, planning and implementation. It is important for them to relook at the policy in order to strengthen the key pillars. This will promote a sense of inclusion and ownership among the health care practitioners and providers as key stakeholders in the implementation of the policy and thus enhance its effective implementation and achievement of the overall goal.
2. The FMHP has been shown to increase utilization and improve financing in the facilities but insufficient and frequent delays in disbursements are a challenge to be addressed. Thus a robust system of finance for disbursement should be established to ensure for efficient and timely use of the funds.
3. Continuous monitoring and evaluation of the new policy is important, not only to ensure that the intended goals are achieved, but also to identify potential challenges in the process early on and make recommendations on how these can be addressed. The monitoring and evaluation tool needs to be shared and agreed upon by the health care providers and other stakeholders.
4. Maternal health care providers need to document better the baseline characteristics and indicators of the delivering population in their health facilities. Follow up on the delivery complications, maternal mortality, reimbursements and other quality and financial indicators is recommended. This information remains necessary for understanding the financial and quality impact prior to and after FMHP.

5. As part of regular policy implementation activities, mechanisms should be put in place to report regularly on policy implementation status and services provided to maternal patients. This study shows that the only service that is free is delivery services. Pregnant women pay for their antenatal services at the facilities which are against the FMHP. Thus building basic information systems into the policy provides the foundation for efficient analysis related to the status of policy implementation.
6. With increased utilization of maternity services it is recommended that the human resources or health care workers in the maternity services units are increased, especially the midwives, so as to match the increased workload. They also need to be taken for training and mentorship courses on quality care, thus leading to improved quality care of maternity services.
7. Impact evaluation research of FMHP requires at least a core set of well-defined outcome indicators. The lack of well defined, consistently used, outcome indicators for FMHP evaluation remains problematic. In spite of many standard outcome indicators already existing for certain core program areas, adequate specific outcome indicators for solid impact evaluation research for FMHP are needed.
8. The financial and quality impacts of FMHP, both immediate and sustained impacts over time, remain poorly understood. FMHP impact evaluation research needs to expand the evidence base on policy impacts using standard statistical methods for impact evaluation.



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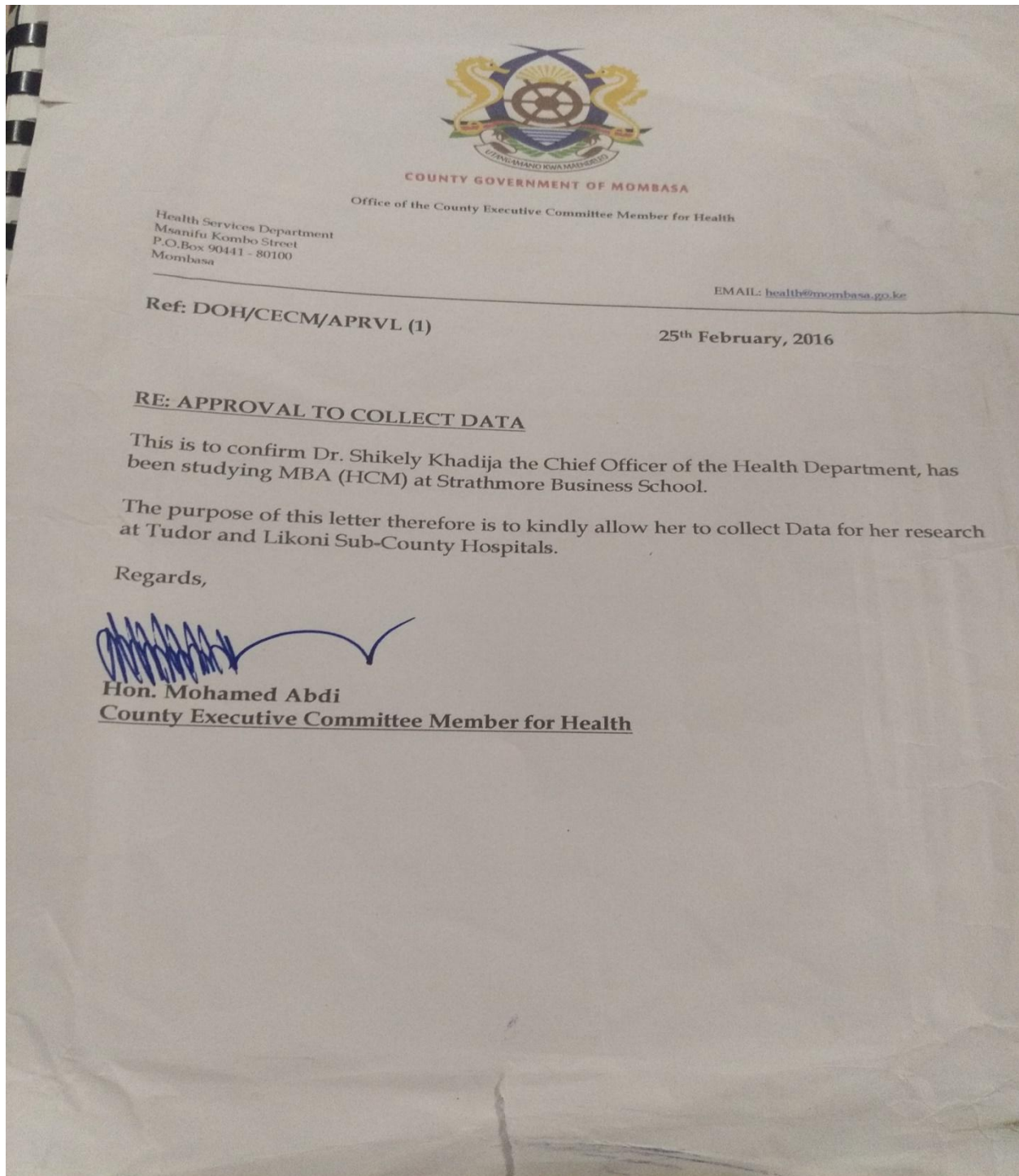


APPENDICES

Appendix A: IRB Ethics Clearance from Strathmore University



Appendix B: Approval from Mombasa County



APPENDIX C: QUESTIONNAIRE – FOR IN DEPTH INTERVIEW

The researcher is a student at Strathmore University carrying out a study the impact of Free Maternity Health Policy on utilization and financing at hospitals and health facilities in Mombasa County. The purpose of this study is to collect data that will assist in improvement of the quality of maternal health, financing and policy implementation. The information provided will be confidential and used for the purpose of the study only.

Thank you

Dr. Khadija Sood Mohamed Shikely

Questionnaire for the staff at facilities for In depth interview

Part 1: Demographic Data/Personal Characteristics.

- 1) Name of facility.....
- 2) What is your designation and position in the maternity department
.....
- 3) Does your institution practice maternity policy? Yes No
- 4) Does the new maternity policy achieve its stated purpose? Yes No
- 5) Are the outcomes and/or principles and objectives expressed in the policy still consistent with the facility's guiding principles, strategic plans, delegations and budget allocation?
Yes No
Explain further
- 6) Is the policy consistent with external codes of practice and best practice guidelines?
Yes No
- 7) Have there been any restructures that impact on the policy? Yes No
- 8) Are there any legal changes that impact on the policy? Yes No
- 9) Is the policy being complied with? Yes No
If not, what evidence is available to substantiate this?
- 10) Are Health worker clear about their roles and responsibilities in the implementation of the Policy? Yes No
- 11) Are there any barriers to compliance, particularly at an operational level? Yes No
- 12) Are the supporting procedures/guidelines consistent with the policy and effective in ensuring compliance? Yes No
If not, what evidence is available to substantiate this?
- 13) Is the policy consistent with other relevant Hospital rules, policies, directives, guidelines and procedures? Yes No

explain further.....

PART 2: SATISFACTION AND SENSITIZATION WITH NEW MATERNITY POLICY

Rate your degree of your overall satisfaction with new maternity policy by ticking in the box provided as shown in the 5- point scale. Use a scale of 1-5 where 1= Strongly Disagree, 2= Somewhat Disagree, 3= Neutral, 4= Somewhat Agree and 5= Strongly Agree

	Optimism	1 Strongly disagree	2 Somewhat disagree	3 Neutral	4 Somewhat agree	5 Strongly agree
14	New maternity policy gives staff more control over their daily work performance.					
15	Patients using the new maternity policy benefit a lot from health care services.					
16	New maternity policy make health care workers more efficient in his/her work output					
17	New maternity policy gives people more freedom of utilization of health care services					
	Sensitization					
18	I / hospital team was consulted as a stakeholder in the new policy formulation					
19	I / hospital team was taken through sensitization of the new maternity policy					
20	I am fully aware of the new maternity policy work.					
	Items on Discomfort					
21	Sometimes, I think that new maternity policy is not designed for use by ordinary people.					
22	It is embarrassing when I have trouble with new maternity policy while the Government is watching.					
23	New maternity policy makes it too easy for governments deal with maternity issues.					
24	The health facility is getting more patients than before the new maternity					

	policy was introduced.					
25	The health care services are much better after the introduction of new maternity policy.					

Part 3 Utilization and financial implication

26. Do you think that the health care facilities are improving their revenue after the introduction of free maternity? Yes No

If No above, please explain.....

27. Do you think the new maternity policy has improved the quality of care for the mothers?

Yes No

If no above, please explain.....

Part 4 Health workers involvement

28. Were health workers involved in ii) drafting and/or ii) implementing the New maternity policy? Yes No

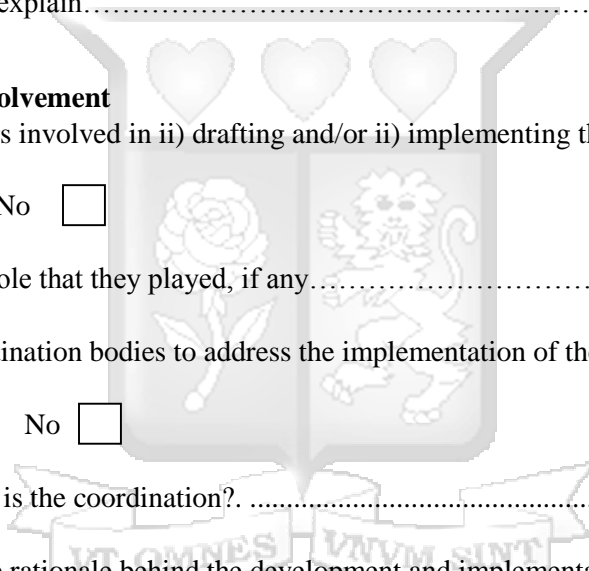
Please explain the role that they played, if any.....

29. Are there any coordination bodies to address the implementation of the New Maternity

Policy? Yes No

If any, how effective is the coordination?

30. Can you explain the rationale behind the development and implementation of the New maternity policy?.....



APPENDIX D: MOTHERS' DATA CHECKLIST FROM HEALTH RECORDS

Demographics:

1) Name of your health facility

.....

2) Maternal Age: 15-25yrs, 26- 35yrs, 36 – 45yrs

3) Maternal Parity: PRIMI, 2nd GESTATION 3rd Gestation. >4th Gestation

4) Education status (Years of education): no education, primary education,
 Secondary, Tertiary education.

5) Socio Economic Status (Occupation of the mother): Unemployed/ housewife, Employed

6) Residence : Urban, Rural,
 Own SC, Other SC, Other County

7) Accessibility (Distance from facility): less than 5 kms, more than 5 kms.

8) Delivery fees

- I. Bed charges
- II. Laboratory charges
- III. Drugs charges
- IV. Consumables charges
- V. Nursing Care charges
- TOTALS

9) Hospital stay (Length of stay)

10) Complications YES
NO

11) If yes from what

APPENDIX E: FACILITY QUESTIONNAIRE

ID	1.0 Health Records	Before	After
1.1	What are the numbers of beds available before and after free maternity?		
1.2	What was the admission rate before and after free maternity policy?		
1.3	What was the average length of stay before and after free maternity policy?		
1.4	What was the number of deliveries before and after free maternity (SVD)?		
1.5	What was the number of emergencies referred for cesarean sections before and after free maternity?		
1.6	What was the number of complications before and after free maternity e.g. PPH?		
1.7	What was the number of maternal mortality before and after free maternity?		

ID	2.0 Finance Records	Provide Answer
2.1	What were the charges of delivery before the free maternity policy for normal delivery (SVD)?	
2.2	What was the charge for the referred cesarean section before free maternity policy?	
2.3	What was the revenue collected before free maternity policy?	
2.4	Are there any reimbursements paid to health facilities by the GOK after free maternity policy for all deliveries?	
2.5	If reimbursement is done, is it timely?	
2.6	When was the last reimbursement sent?	
2.7	Is the reimbursement sufficient to finance your maternity services?	
2.8	If not sufficient, why not?	
2.9	Does the free maternity policy cover all pregnancy related complications?	
3.0	Does the free maternity cater for Anti Natal care?	
3.1	Does the free maternity cater for Post Natal care?	

APPENDIX F: FOCUS GROUP DISCUSSIONS GUIDE

An analysis of the effectiveness of the free maternity health policy on utilization and financing in hospitals in Mombasa county.

Tool: FDGs Guide

Health workers: Out of the list of health workers a sample of 5 workers will be drawn / selected to form the FDGs. During the selection of health workers to participate during the FGD, the selection process will ensure Nurses, clinical officers and doctors are included. The health workers selected to answer the questionnaires will not be selected for the FDGs.

Purpose: The data collected from these FDGs will support to describe the effectiveness of FMHP and its effects on utilization and financing in level four hospitals. In addition, the information gathered will be used to provide inputs for the improvement of free maternal services and also provide recommendations for a monitoring and evaluation system of free maternity services in Mombasa county..

Data Source: FDGs with health workers and hospital heads at sites that work in areas related to maternity services will be asked on FMHP.

Frequency: The data collector should interview two groups, each consisting of five members, per hospital.

Directions to the Data Collector

Before Beginning – Provide an introduction to a possible participant (see “Introduction”). Next, verify that the participant is a health worker in the Maternity or MCH or in administration and who works in the facility. Then, read the “Informed Consent” section. Obtain informed consent (verbally) before you begin the interview. If verbal consent is received, move to an uncrowded and relatively quiet location to begin the discussions.

During the FDGs –Use the digital recorder to record the conversation, once you have obtained consent. Also write key notes in your notebook.

Estimated Time: 1 hour

Introductions

Introductions

- I am here today with my colleagues to undertake a research that will be analyzing the effects of the Free Maternity Health Policy.
- We are collecting information to learn on utilization and financing of this policy at two high volume level 4 hospitals.
- We are interested in hearing from those who are directly involved with this Free Maternity Health policy

Meeting Selection Criteria

Are you working in the maternity unit, MCH or administration of this health facility?

Yes - Proceed

No - Please ask if he/she can direct you to the appropriate individual.

Are you one of the staff who received and handed back a completed questionnaire on this same study?

No – proceed

Yes – please ask if she / he can direct you to the appropriate person

Informed Consent:

Are you willing to participate in the FGDs with me, in which we will discuss Free Maternity Health Policy implementation, its effects on utilization and mode of financing, its challenges and possible solutions for improvement and best way to monitor and evaluate this policy for better outcomes? The questions asked will be about your thoughts and opinions on these issues. There are no right or wrong answers. Your responses will remain anonymous.

Your participation is completely voluntary. You may choose to stop answering at any point. Your participation, and the answers you provide, will not impact your job in any way.

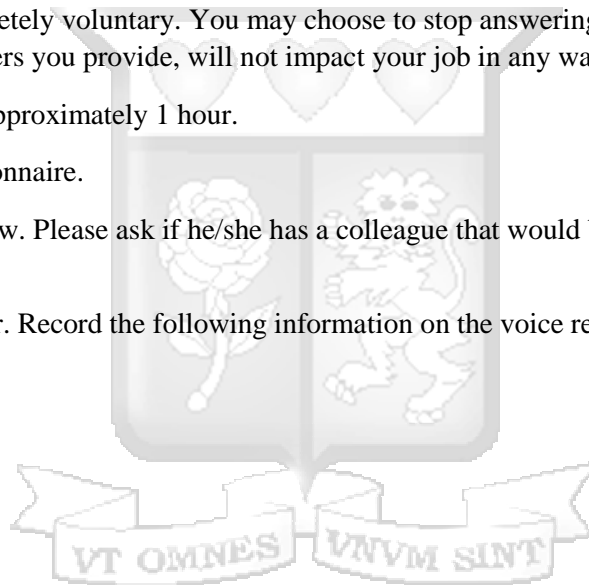
The interview should last approximately 1 hour.

Yes Proceed with questionnaire.

No Do not begin interview. Please ask if he/she has a colleague that would be able to discuss these issues.

Turn on the Voice Recorder. Record the following information on the voice recorder, and in your notebook:

- Interview number
- Name of Sub-County
- Name of Health Facility



Questions to the Focused Group

1. When did you start implementing the Free Maternity Health Policy (FMHP) in your hospital?
2. What services are covered under the FMHP?
3. Describe what has changed after the introduction of the FMHP.
4. How adequately are maternal services funded in the facility?
 - Before FMHP - explain .
 - After FMHP – explain.

5. What maternal services changes have you observed in the facility? Explain further in each case.

	Before FMHP	After FMHP
Number of deliveries/ utilization of services		
Staffing; adequacy of numbers and appropriate cadre and skills,		
Essential maternal supplies/commodities.		
Laboratory services, availability of reagents.		
Infrastructure – space and equipment.		
Emergencies Referral		

6. What are the outcomes, in particular maternal mortality?

Before FMHP

After FMHP

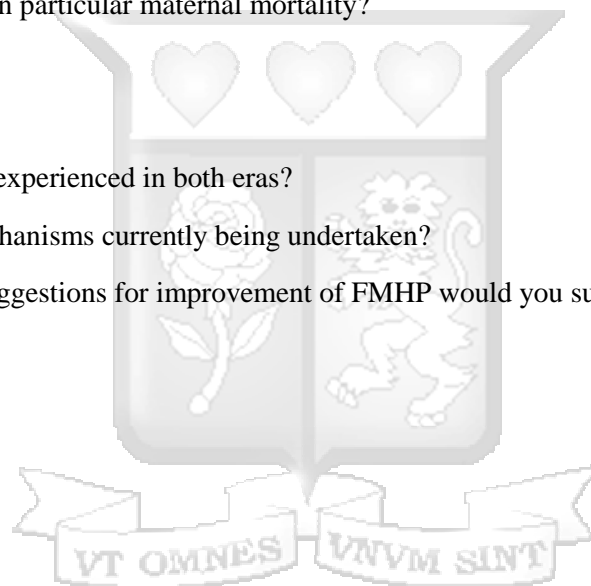
7. What are the challenges experienced in both eras?

8. What are the coping mechanisms currently being undertaken?

9. What opportunities or suggestions for improvement of FMHP would you suggest?

10. Any other suggestion?

Thank you all.



APPENDIX G: CONSENT TO PARTICIPATE IN A RESEARCH STUDY

Title of Research study

Analysis of the effectiveness of Free Maternity Health Policy on utilization and financing at hospitals in Mombasa County.

Investigator

DR. KHADIJA SOOD MOHAMED SHIKELY

Introductions

- I am here today with my colleagues to undertake a research that will be analyzing the effects of the Free Maternity Health Policy.
- We are collecting information to learn on utilization and financing of this policy at two high volume level three hospitals.
- We are interested in hearing from those who are directly involved with this Free Maternity Health policy

Study purpose

The purpose of the study is to ascertain the impact of Free Maternity Health Policy on utilization and financing at hospitals and health facilities in Mombasa County.

Procedure to be undertaken

If you agree to participate in the study:

- 1). You will be selected at random to participate at your convenient time.
- 2). You will be required to sign consent.
- 3). You will be given a questionnaire to fill or you will be interviewed in case you need assistance in answering questions.
- 4) The questionnaire will take 30-45 minutes to complete.
- 5). You are not required to indicate your name in the questionnaire.

Benefits

I understand that there are no direct benefits for me. However it will help in understanding of the impact of Free Maternity Health Policy on utilization and financing at hospitals in Mombasa County.

Risk

I understand there are no potential risks foreseen to be involved as I will only be required to fill in a questionnaire.

Confidentiality

The results of this study will be discussed with me. All other information except for this disclosure will be considered confidential and used only for research purpose. My identity will be kept confidential in as far as the law requires.

Questions

The research assistant or principal investigator will answer my questions.

Right to refuse or withdraw

I understand my participation is entirely voluntary but essential to the success of this study.

I am free to refuse to take part or withdraw at any given time without affecting my future relationship with the Strathmore University, School of Business, Nairobi.

In case you would want to know the results of this study or you have any complaints or if you have a question about your rights as a research subject you should contact :

- 1. **DR. Khadija Sood Shikely** on cell phone number 0722410121/ 0772410121
- 2. Chairman Strathmore University-ERC, Box Nairobi. Tel,
Extension

Consent

I have been clearly explained and fully understand the nature and purpose of this study and freely consent to participate.

Respondent’s signature Date

I the undersigned have fully explained the relevant details of this study to the person whose signature has been appended above.

Investigator’s/Research assistant’s signature ...

