

# **Factors influencing access to and utilization of Free Maternity Services in Kenya**

Margaret meme

Kenya

52<sup>nd</sup> Master of Public Health/ International Course in Health  
Development (MPH/ ICHD)

September 21, 2015 – September 9, 2016

KIT (Royal Tropical institute)

Vrije University Amsterdam

Amsterdam, The Netherlands

## **Factors influencing access to and utilization of Free Maternity Services in Kenya**

A Thesis submitted in partial Fulfillment of the requirement  
For the degree of Master of Public Health

By

Margaret Meme

Kenya

### **Declaration:**

Where other peoples work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with the requirements of the department. The thesis 'Factors influencing access and utilization of Free Maternity Services in Kenya' is my own work.

Signature:-----

52<sup>nd</sup> Master of Public Health/International Course in Health Development  
(MPH/ICHHD)  
September 21, 2015 –September 9, 2016  
KIT (Royal Tropical Institute)/Vrije University Amsterdam  
September 2016

Organized by  
KIT (Royal Tropical Institute) Health Unit  
Amsterdam, The Netherlands

In cooperation with:  
Vrije University Amsterdam (VU)  
Amsterdam, The Netherlands

## Table of Contents

List of tables.....	iv
Lists of Figures .....	iv
Acknowledgements.....	v
Lists of abbreviation.....	vi
Sustainable Development Goals .....	vi
Abstract.....	vii
Introduction and organization of Thesis.....	viii
Chapter 1: Background information .....	1
1.1 Geography and Demography .....	1
1.2 Socio-cultural setting .....	2
1.3 Economy.....	2
1.4 Agriculture.....	4
1.5 Education .....	4
1.6 Gender and women empowerment.....	5
1.7 Political and Governance system.....	5
1.8 Health system and service delivery structure.....	7
1.9 The Current Health situation/indicators .....	9
1.9.1 General main causes of deaths and burden of disease.....	9
1.9.2 Maternal and infant health indicators .....	10
Chapter 2: Problem Statement, Justification, Objectives and Methodology for study.....	12
2.1 Problem Statement.....	12
2.2 Justification .....	14
2.3 Objectives.....	14
2.3.1 General objectives .....	14
2.3.2 Specific objectives .....	14
2.2 Methodology .....	15
2.2.1 Search Strategy.....	15
2.2.2 Conceptual framework.....	16

2.2.3 Limitations of study.....	18
Chapter 3: Factors influencing access and utilization of Free Maternity Services.....	19
3.1 Factors influencing decision to seek health care/ Delay 1/ Demand side factors.....	19
3.1.1 Perception/previous experience with health facility.....	19
3.1.2 Informal and formal payment.....	19
3.1.3 Demographics.....	20
3.3.4 Traditional birth attendant (TBA)/ Community health workers (CHW).....	21
3.3.5 Social culture and religious factors.....	21
3.2 Factors associated with delay in accessing health facilities/delay 2.....	23
3.2.1 Geographic access.....	23
3.2.2 Economic access.....	24
3.2.3 Socio-cultural barriers/community factors .....	25
3.3 Supply side factors/health system and quality of care .....	25
3.3.1 Service Delivery.....	26
3.3.2 Human resources for health .....	28
3.3.3 Supplies, Medications .....	29
3.3.4 Health information /data.....	29
3.3.5 Health financing.....	30
3.3.6 Leadership Governance .....	30
3.4 Contextual Factors .....	30
3.4.1 Political will, policies and law .....	31
3.4.2 Human rights/Treaties and consensus documents.....	32
3.4.3 Gender equality and women empowerment (GEWE) .....	33
3.4.4 Sustainable development goals (SDGs).....	33
3.4.5 Global financing facility (GFF).....	35
3.4.6. Multisectoral .....	35
3.4.7 Equity.....	35
3.4.8 Partnership .....	36
Chapter 4: Discussion .....	37

4.1 Factors influencing decision to seek health care/ Delay 1/ Demand side factors.....	37
4.2 Factors associated with delay in accessing health facilities/delay 2.....	37
4.3 Health system factors (supply side)/ Delay 3.....	37
4.4 Contextual factors.....	40
4.4.1 Human right.....	40
4.4.2 Gender and women empowerment.....	40
4.4.3 Sustainable Development Goals (SDGs).....	41
4.4.4 Global Financial Facility (GFF).....	41
Chapter 5: Conclusions and Recommendations.....	43
5.1 Conclusions.....	43
5.2 Recommendations.....	43
References.....	45
Annex.....	52
Annex 1: Shares of Total Health Expenditures (THE).....	52
Annex 2: Skilled Birth Attendance by County.....	52
Annex 3: Skilled Birth Attendance by Wealth Quintile.....	53
Annex 4: Hierarchical document and planning process in Kenya.....	54

## List of tables

Table 1: Leading causes of death and disability in Kenya, 2009.....	9
Table 3: Trends in Key Maternal and Infant Health Indicators.....	11

## Lists of Figures

Figure 1: Population pyramid Kenya .....	2
Figure 2: Map of Kenya _ 47 counties.....	7
Figure 3: Kenya health sector leadership and governance framework.....	9
Figure 4: High impact interventions by causes of maternal deaths in Kenya, based on regional estimates.....	10
Figure 5: Conceptual Framework.....	16
Figure 6: SDG 3_Health .....	34
Figure 7: Global finance facility .....	35

## **Acknowledgements**

I would like to thank the government of The Royal Netherlands for giving me this great opportunity through Nuffic Fellowship to study the International Course on Health Development 2015-2016.

I am grateful to my thesis advisor and back stopper and other academic advisors for wisely guiding me through the process of thesis writing.

Above all, I am grateful to God for His faithfulness mercy on me and my family during this one year.

## **Lists of abbreviation**

ANC	Antenatal Care
BEmOC	Basic Emergency Obstetric Care
CEDAW	Convention on the Elimination of All Forms of Discrimination Against Women
CEmOC	Comprehensive Emergency Obstetric Care
CHW	Community Health Workers
FMS	Free Maternity Services
FP	Family Planning
GDP	Gross Domestic Product
GEWE	Gender Equality and Women Empowerment
GFF	Global Financing Facility
HRH	Human Resources for Health
KDHS	Kenya Demographic Health Survey
KEMSA	Kenya Medical Supplies Authority
MDGs	Millennium Development Goals
OOP	Out of Pocket
PNC	Postnatal Care
RMNCAH	Reproductive Maternal Newborn Child Adolescent Health
SDGs	Sustainable Development Goals
TBA	Traditional Birth Attendant
UHC	Universal Health Coverage
UNAIDS	The Joint United Nations Programme on HIV/AIDS
UNFPA	United Nations Population Fund
WHO	World Health Organization



## Abstract

**Background:** In 2013, the Free Maternity Service (FMS) was introduced in Kenya to remove the financial barrier to accessing and utilizing maternity services in all public and private health facilities. However, mothers have not responded fully as expected due to various reasons such as the lack of money and other hidden costs, the long distance to the health facility, bad roads, human rights, gender inequality and inequities. This review gives a deeper and broader understanding of the factors influencing access and utilization of free maternity services as well as contextual factors that address the barriers.

**Method:** Literature review.

**Results:** On the demand side, for FMS, the following factors stood out: long distance to health facility, high cost, religious, socio-cultural beliefs and practices, the low status of women, the lack of knowledge and information. These affected the demand to accessing and utilization the FMS. In addition, the pregnant women's perception and experiences such as the health worker's bad attitude and poor quality of services discourage mothers accessing and utilizing free maternity services again. On the supply side, the focus was on the health system. The main challenges were: poor workforce and their distribution, funding gaps, shortages commodities for maternity services, incomplete and poor quality of routine data and information which greatly affected the quality of the FMS. The contextual factors in which the three delays occurred included global and national commitment to end preventable maternal deaths of women and adolescents.

**Conclusion:** The demand side, supply side factors and contextual factors affect the pregnant women accessing and utilizing FMS. The FMS only removes the financial barrier to accessing and utilizing maternity services. Therefore other factors associated with the 3 delays must be understood and addressed effectively.

**Key words:** Free Maternity Services, FMS, Demand Side Factors, Supply Side Factors, Contextual factors, Health System

**Word count:** 12,757

## **Introduction and organization of Thesis**

In Kenya maternal health outcomes have progressed slowly. The MDG 5 on improving maternal health was not achieved in 2015. Therefore maternal health is included in the Sustainable Development Goals (SDGs) under the SDGs 3 which the Health goal for the next 15 years.

There has been increased global and national commitment to end the preventable maternal deaths. Many policies and strategies have been developed. The government of Kenya in June 2013 introduced the free maternity service policy to help pregnant women deliver safely. This policy removes financial barriers to accessing and utilizing maternity services in public and private health facilities in Kenya.

This study looks at factors which influence pregnant women accessing and utilizing free maternity service. Factors have been looked at from the demand side, supply side and contextual/ enabling environment. The organization of the study is in chapter as follows:

Chapter one: Background information of Kenya

Chapter two: problem statement, justification, objectives and methodology for study

Chapter three: Findings on the Factors influencing access and utilization of the Free Maternity Services (FMS). The conceptual Framework of the three Delays by Thaddeus and Maine has been used This study has modified and expanded the concept by adding the demand side, supply side(health system), and contextual factors

Chapter Four: Discussions on three delays and contextual factors.

Chapter Five: Conclusion and Recommendations

## **Chapter 1: Background information**

In this chapter, the background of Kenya is described as an overview using the following sections: geography and demographic, socio-cultural setting, economy, agriculture, education, gender and women empowerment, political and governance system, health system and service delivery structure, and maternal health current situation.

### **1.1 Geography and Demography**

#### *Geography*

Kenya lies across the Equator. It borders Ethiopia in the North, Tanzania in the South, Uganda in West, Sudan is Northwest and Somalia in the East. Administratively Kenya has 47 counties and 209 districts/ sub-counties (1).

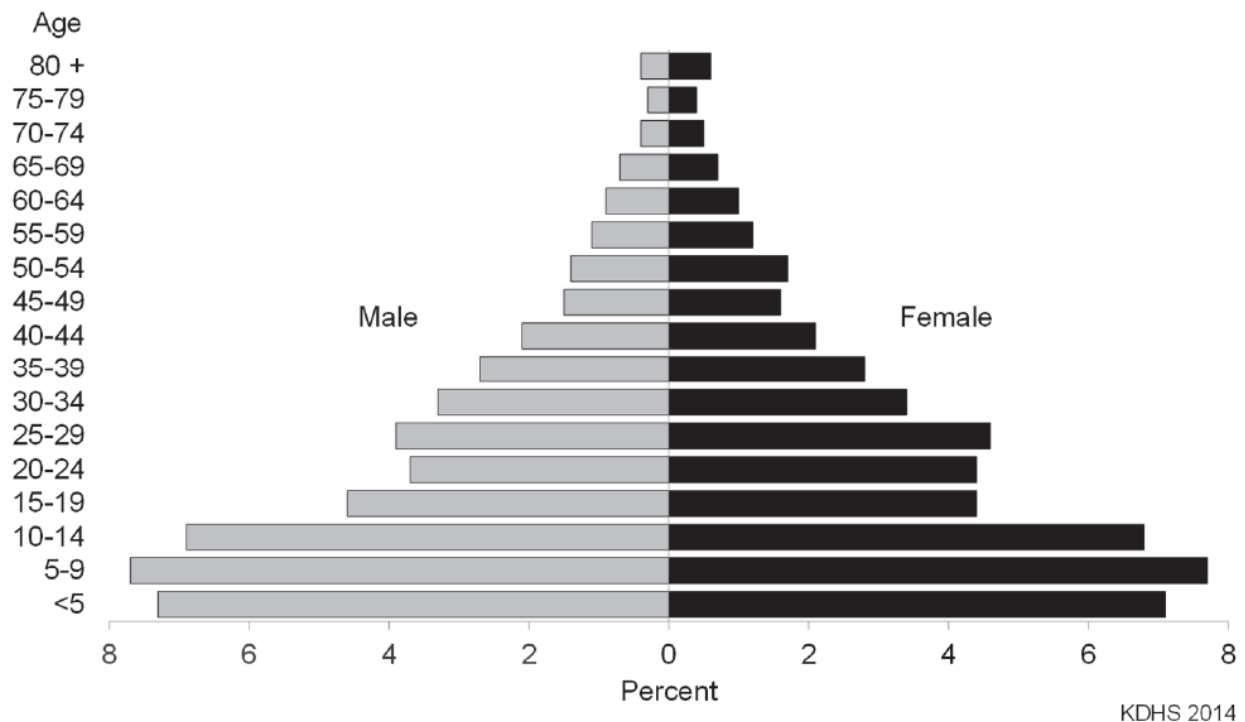
#### *Demography*

Kenya has a population growth of 3% annually. The current population is 40 million. The adolescents and youth are the majority. The average household size in Kenya is 3.9 members. The births of two out of every three children below age 5 are registered with the civil authorities (2,3).

In 2013, life expectancy was 60 years and is projected to rise to 62 years in 2016 and 65 years in 2018. The male-to-female population ratio is 1:1.04. The economically productive population is estimated to be 51.5 percent of the total population(4).

The Figure 1 shows the age-sex structure of the Kenyan population as a pyramid, with youthful broad base. Three in 10 Kenyans are below age 10 (3).

**Figure 1: Population pyramid Kenya**



### 1.2 Socio-cultural setting

Kenya has over 70 ethnic groups. They speak 68 languages. The socio-cultural norms, beliefs, attitudes and practice of these ethnic groups greatly affect maternal health differently as shown in the demographic health survey. In northeastern Kenya, they practice female genital mutilation (FGM) 98% and this negatively affect maternal health outcomes. In western Kenya, FGM is 1% ,but delivery is heavily associated with strong cultural practices which encourage home deliveries (75%)(3).

### 1.3 Economy

#### *GDP and Economic Growth*

Kenya's gross domestic product (GDP) is estimated to have grown by 4.6 percent in 2012, compared with 4.4 percent in 2011. All sectors of the economy recorded positive growth and, on the macroeconomic level, a surge in inflation recorded in 2011 was corrected through tightening monetary policy in 2012(4).

Kenya economy is the fifth largest in Sub Sahara Africa, with a strong private sector and an advanced human capital base. In 2014, Kenya rebased its GDP, joining the league of middle-income countries. As a result, there will be pressure for the country to finance health and other social sectors from its domestic resources(4). The percentage of Kenya living in poverty reduced from 47% in 2005 to 34% in 2013(5).

Kenya GDP is projected to increase by 6% in near future. This will be supported by low energy cost, investment in infrastructure, agriculture,

manufacturing and other industries. Kenya has the largest economic in East Africa with its GDP of 60.9 US dollars 2014 (3,5).

### *Sources of finance*

Public expenditure contributes about one quarter of the health funding and it accounted for 24 % of total health financing in 2012 (6). Private health spending contributes the largest share of health care financing. Private health expenditure accounted for about 42% of total funding for the health sector(6).

Donor funding accounted for 31 percent of total health expenditure in 2012 and reduced to 26% in 2014. However, most of this share is off-budget; therefore undermine strategic prioritization and future sustainability of health financing. A big and significant share of this funding is for disease programs such HIV/AIDS supported by the United States government(6).

### *Government revenue and expenditure*

Since 2002, the Kenya government expenditure on health has increased in absolute terms but its relative share in total spending has declined. Health budget allocation has increased fourfold in absolute terms, from KSh 18.3 billion in 2002/03 to KSh 87 billion in 2012/13. However, government health spending as share of the total budget has declined and averaged at 6% ,the lowest in the region, for the last decade(6). In 2014/15, 4% of total national government budget was allocated to health. Out of pocket (OOP) expenditure as a proportion of THE increased obviously from 2009 to 2013 (*Annex 1*)(7). The estimation on household expenditure represent  $\frac{3}{4}$  of private expenditure on health(8,9). A study in 2015 showed that 11.1% of household experience catastrophic health spending(10). Despite the increase in domestic contribution to health, Kenya is still dependent on donors with 57% of FY 2014/15. The development health budget was funded by development partners(8).

### *History of user fee in Kenya*

In financing health care, the developing countries including Kenya spend less than 15% of the national budget on health. Only 6 countries have gone beyond the Abuja 15%. Rwanda and Mozambique are at 18% and Kenya is at 6.1% (11). The government is required to achieve the commitment in the Abuja Declaration of allocating 15% of government expenditure budget to health. The measures include introduction of the National Health Insurance Fund, review of the cost sharing strategy, promotion of community pre-payment schemes and development of criteria for allocating public funds(4,6,7).

In Kenya, maternal health pregnancy and delivery force women to incur extra costs. These are transportation , medication and supplies , and fees for staff and facilities(12). The reimbursement are usually late, yet the

hospital had to cope with the increased number of referrals and complications(13).

After independence, health services in Kenya was free for 25 years, being financed by public resources. During the 1989, economic crisis, Kenya reduced health care user fee for medication, injection and laboratory test. This encouraged an increase in private care. This led to 50% health care services to be provided by the private sector(14).

In 2004, the government of Kenya introduced 10/20 policy at public primary health care level. This was to help the poor to access health facility. The policy made patients to pay 10 Kenya shillings at dispensary and 20 Kenya shillings at the health center. This amount was for registration only. Unfortunately, this amount was not enough to cover the running cost. Therefore, the user fees were reintroduced to cover the running cost(14).

By 2006, the household expenditure for out of pocket (OOP) spending on health grew a lot, to almost 30% of THE(14). The OOP was 10% of the annual household budget. This was too much for the poor families. 46% of population in Kenya lived below the national poverty line(6). This health expenditure put Kenya household deeper into poverty each year.

First June 2013, the president of Kenya, responding to health needs of Kenyans, removed the user fee and introduce free maternity services policy for pregnant mother delivering in public facility all over Kenya. This step was an attempt toward achieving universal health coverage (UHC)(15).

The goal of UHC is to have all people access good quality health services they need without financial hardship. UHC has two targets: 1) By 2030, all populations, regardless of household income, expenditure or wealth, place of residence or gender, have at least 80% essential health services coverage; 2) By 2030, everyone has 100% financial protection from out-of-pocket payments for health services. These indicators relate to health service coverage and financial protection coverage(15).

After one year of implementation of the free maternity service (FMS) policy, the access to key maternal health services like antenatal (ANC), and skilled delivery improved. Deliveries went up 26% in public primary level facilities and the ANC went up 75% (both and first and 4 visits)(16).

## **1.4 Agriculture**

Kenya depends heavily on agriculture. The main crops are tea, coffee, fresh horticulture produce maize, wheat and rice (1,5).

## **1.5 Education**

The Kenyan Demographic Health Survey (KDHS) of 2014 show that men have achieved more education than women. The urban-rural difference in

level of education is pronounced for women on either end of the educational attainment scale. Education increases with wealth. Women, 31% in the lowest wealth quintile have no education, as compared with 2 percent of women in the highest wealth quintile. Eighty-eight percent of women and 92 percent of men are literate(3).

## **1.6 Gender and women empowerment**

Women's empowerment encompasses women's sense of self-worth, access to opportunities, access to and control of resources, choices and the ability to exercise them, control over their own lives, and influence over the direction of social change. In 2014, one-third of households were headed by women. Women's empowerment has been recently recognized both internationally and in Kenya(3).

The 1994 International Conference on Population and Development declared that "advancing gender equality and equity and the empowerment of women and the elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility are the cornerstones of population and development-related programs" (17).

Furthermore, Kenya is a signatory to many international conventions on human rights, women's rights, reproductive health rights, and children's rights, as well as to agreements on international goals regarding education, health, and poverty eradication. As a signatory to the United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)(18) and as mandated by the Constitution of Kenya promulgated in 2010, the government of Kenya is committed to ensuring nondiscrimination, gender equality, equity, and social justice(19).

The status of women in Kenya, includes information on employment, access to and control over cash earnings, asset ownership, participation in household decision making, relative earnings of husbands and wives, and attitudes towards wife beating. The demographic and health indicators are affected by women's empowerment, as measured by the number of decisions in which women participate (3,18,19).

## **1.7 Political and Governance system**

### *Political*

Policy response and governance efficiency in Kenya is stronger than average countries in Sub Sahara Africa. In 2010, the new constitution introduced a devolved governance system (3).

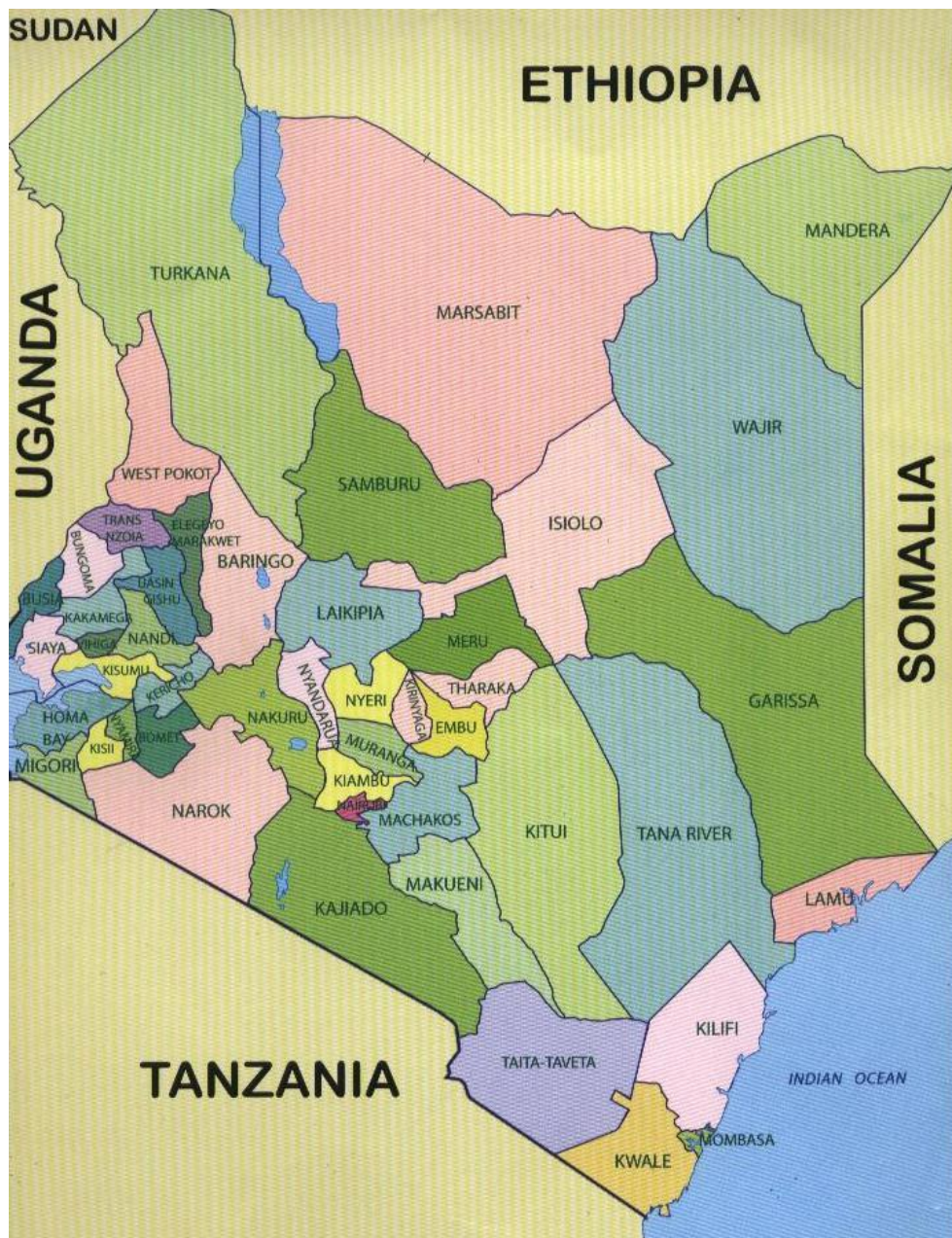
Policy and strategic priorities are both reflected in the budget. The public expenditure is aligned toward poverty reduction(7).

## *Devolution*

The Kenya Constitution of 2010 established 2 Level of the Governance structure. The 1<sup>st</sup> level is the central National government and the 2<sup>nd</sup> level is made of 47 County Governments (*Figure 2*). It also laid the foundation for the transfer of Political, and fiscal Power from Central Government to the 47 Counties. This Led to the Creation of Devolved Governance system whose aim is to improve local governance and service delivery through responsive institutions The national government is responsible for Policy, Legal, regulations and standards. The county government plans and implement integrated development plans. This is done through the participation, involvement and consultation of key stakeholders including the citizens(19).



Figure 2: Map of Kenya \_ 47 counties



Source: UN map

### 1.8 Health system and service delivery structure

In the new devolved health system, there are four levels (1 community level, 2 primary level, 3 county level and 4 national level) (19–21).

**Community level:** This is the foundation of the service delivery system, with both demand creation (health education and promotion interventions), and specified supply services that are most effectively delivered at the community. In the essential package, all non-facility based health and health related services are classified as community services (20).

**Primary care level:** The first physical level of the health system, which has health facilities such as dispensaries, health centers, maternity/ nursing homes in the country. This is the 1<sup>st</sup> level of care where most clients/patients with health needs are attended.

**County level:** This is made of the first level hospitals, whose services complement and back up the primary care level. It has a more comprehensive package of services closer to clients/patients.

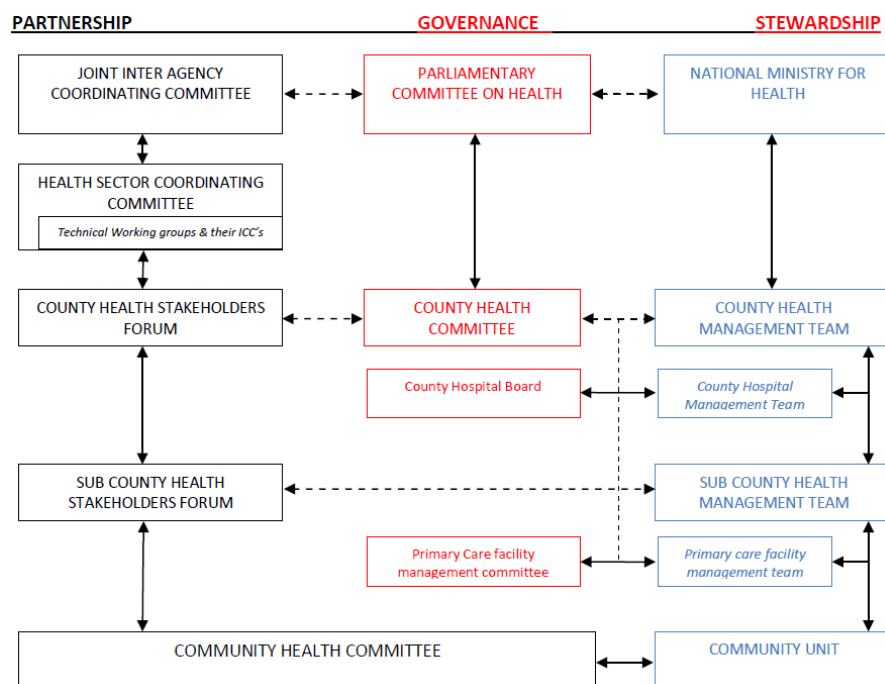
**National level:** The tertiary level hospitals, whose services are highly specialized and complete the set of health care available to persons in Kenya

**Leadership and Governance :** The leadership and governance framework guides the implementation of the KHSSP within the Health Sector as describe below (20).

Health Sector Leadership and Governance addresses three key objectives: 1) Stewardship, 2) Governance and 3) Partnership(20,22).

1. Health Stewardship by Government relates to the management function of the Government, through the Ministry of Health and is built around implementation of the mandate of the Ministry responsible for health.
2. Health Governance relates to the functioning of the institutions by which the authority of the State of Kenya is exercised. These address the regulatory and legal functions that all actors in the sector have to adhere to. Devolution has made health governance extend to the County level.
3. Health Partnership arrangements relates to the inter-relations and coordination of different actors working towards the same health goals (Figure 3).

**Figure 3: Kenya health sector leadership and governance framework**



Source: Kenya Health Policy

## 1.9 The Current Health situation/indicators

### 1.9.1 General main causes of deaths and burden of disease.

**Table 1: Leading causes of death and disability in Kenya, 2009**

Causes of Death			Causes of Disability		
Rank	Disease or injury	% total deaths	Rank	Disease or injury	% total DALYs
1	HIV/AIDS	29.3	1	HIV/AIDS	24.2
2	Conditions arising during perinatal period	9.0	2	Conditions arising during perinatal period	10.7
3	Lower respiratory infections	8.1	3	Malaria	7.2
4	Tuberculosis	6.3	4	Lower respiratory infections	7.1
5	Diarrhoeal diseases	6.0	5	Diarrhoeal diseases	6.0
6	Malaria	5.8	6	Tuberculosis	4.8
7	Cerebrovascular disease	3.3	7	Road traffic accidents	2.0
8	Ischemic heart disease	2.8	8	Congenital anomalies	1.7
9	Road traffic accidents	1.9	9	Violence	1.6
10	Violence	1.6	10	Unipolar depressive disorders	1.5

Source: GOK 2010. Review of the Kenya Health Policy Framework, 1994–2010.

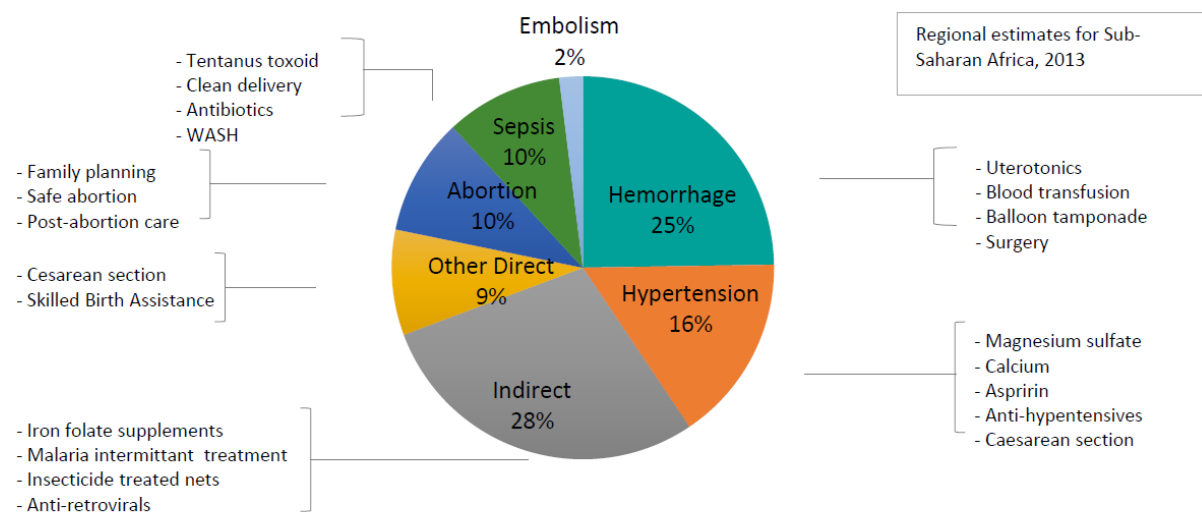
HIV/AIDS is the leading cause of death and also the leading cause of disability in Kenya, 29.3% total of deaths and 24.2% total DALYs

respectively. The second position is conditions of perinatal period (mostly maternal and neonatal deaths), 9% total of deaths and 10.7% total DALYs respectively. Malaria is still a disease burden in Kenya with 5.8% total of deaths and 7.2% total DALYs respectively. HIV/AIDS and Malaria are both the indirect medical causes of maternal deaths.

### 1.9.2 Maternal and infant health indicators

#### Causes of maternal deaths in Kenya

**Figure 4: High impact interventions by causes of maternal deaths in Kenya, based on regional estimates**



Sources: WHO 2014; Stenberg et al., 2014; PMNCH, 2011; Say et al., 2014; Benova et al., 2014; WHO 2012b; Requejo et al., 2012

The common direct causes of maternal deaths are obstetrical (severe bleeding, obstructed labor, infection, unsafe abortion) and indirect causes (pre-existing diseases like malaria, HIV/AIDS, severe anemia) (3)(Figure 4).

#### The trends in key maternal health indicators

The trends in key maternal health indicators show reduction. Neonatal mortality rate has come down from 33.0 in 2003 to 22.0 per 1,000 live births in 2014. The maternal mortality ratio has reduced from 414 in 2003 to 362 per 100,000 live births in 2014 (3).

Essential services utilization has had little progress since 2003. ANC four times visits has increased marginally from 52.3% in 2003 to 57.6 in 2014. Skilled birth attendance (SBA) has increased from 41.6% in 2003 to 61.8% in 2014. However this skilled birth attendance is still lower than the target of 90%. There are regional variation at Counties level, The Nyanza region has less than 53% SBA. Western region 28% SBA. Postnatal care within 2 days of delivery has increased from 48.7 in 2003

to 52.9% in 2014. Contraceptive prevalence rate (CPR) has increased from 31.5% in 2003 to 53.4% in 2014(3).

**Table 2: Trends in Key Maternal and Infant Health Indicators**

<b>Indicators</b>	<b>2003</b>	<b>2008/09</b>	<b>2014</b>
<b>Health status</b>			
Neonatal mortality rate (per 1,000 live births)	33.0	31.0	22.0
Infant mortality rate (per 1,000 live births)	77.0	52.0	39.0
Under-five mortality rate (per 1,000 live births)	115.0	74.0	52.0
Maternal mortality ratio (per 100,000 live births)	414.0	488.0	362.0
TFR (births per women)	5.0	4.7	3.9
HIV prevalence (% of population of ages 15-49 years)	7.2	5.6	6.0
<b>Utilization of Essential Services</b>			
Antenatal care (ANC) visits four times or more (%)	52.3	47.1	57.6
Skilled birth attendance (%)	41.6	43.8	61.8
Postnatal care (PNC) in 2 days (%)	48.7	47.1	52.9
Modern contraceptive prevalence rate (% of currently married women ages 15-49 using any modern method)	31.5	39.4	53.4



## Chapter 2: Problem Statement, Justification, Objectives and Methodology for study

### 2.1 Problem Statement

Worldwide, nearly a thousand young healthy women die each day due to complications of pregnancy and childbirth(23). Ninety percent (90%) of these deaths can be prevented if women accessed and utilized evidenced-based , high impact maternal health services and interventions (24).

In 2013, globally almost 289,000 maternal deaths occurred, with a maternal mortality ratio (MMR) of 210 maternal deaths per 100,000 live births. In developing countries, lack of equipment, training, information systems to correctly identify and register maternal deaths lead to underreporting. Global variation exist in regions and income groups. Sub-Saharan Africa has most (98%) of the global maternal deaths'. Lifetime risk of death due to pregnancy in developing countries is also higher than the developed countries. The risk of dying in pregnancy and childbirth complications in developing countries is 1 in 23 (23), in developed countries it is 1 in 4900 (25).

In Kenya, the Millennium Development Goal 5 (MDG) was not reached in 2015.which targeted 147 maternal deaths / 100,000 live births. The current maternal mortality rate is well above at 360/100,000 live births in 2014 (3). The Sustainable Development Goals (SDGs) have replaced the MDGs. Maternal health is in the goal for health, SDG 3. The target for maternal mortality is 70/100,000 lives birth(26). Kenya has to develop and implement new strategies to achieve these targets. For every woman who dies in childbirth, it is estimated that another 20-30 women suffer serious injury or disability due to complication during pregnancy or delivery(3).

Reasons why mother continue to die are: lack of access and utilization of maternal health services (ante-natal, delivery, BEmOC & CEmOC for managing complications, and post-natal). A significant number of mothers live long distance away from the nearest health facility and have no transport money; cannot afford to pay maternity fees. This makes most mothers deliver at home(3).

The past magnitude of maternal deaths in KDHS 2008 was 8,000 maternal deaths( women only) every year (27). Kenya was not at war, yet this number was close to the Somalis (men and women) dying because of war, losing 10,000 citizens per year. Like other developing countries with high maternal deaths, labour and maternity wards are almost like war zones or killing fields and this is not acceptable

Currently in Kenya, KDHS 2014, nationally showed 62% skilled delivery which is below the target of 90%. There are geographical variations in skilled delivery. Kiambu county in central Kenya, is at 93%. In Nyanza

and Western Kenya, 75% of mothers deliver at home due to very strong socio-cultural factors. Wajir county, skilled birth attendant is at 22% (*Annex 2 and Annex 3*). Post-natal care is only 51% nationally(3).

In Kenya, 20 counties out of 47 have the highest burden of maternal deaths. They account for 98% maternal deaths in Kenya(3,28). Currently, they are being targeted for high impact services and intervention. Governors have met and agreed way forward on strategies reduce maternal deaths.

Family planning is a strategy to prevent unintended pregnancy, and avert maternal deaths(28). Currently, there is a shift to focus on delivery (skilled birth attendance) instead of ANC, and to move from home delivery to health facility delivery where complications can be managed quickly(29).

The political will from the government shows responsibility and accountability for all mothers to deliver safely. Pregnancy is now being seen as a public good needing funding from the government just like roads, education, and defense. In other words, not to let the individual woman, bear alone the cost burden of pregnancy and delivery.

In the past, traditional birth attendant (TBA) in Kenya was trained to deliver mothers at community level. Lately, evidence has shown that TBA cannot manage complications and have not contributed to reducing maternal deaths in the past 10 years . It is known 15% of all pregnancies get complications and if not urgently managed, mother and baby die. In the past, the focus was on the risk approach during antenatal care(30). Currently evidence has shown that all pregnancies are risky, most complications are not predictable and cannot be avoided. However they can be manage if detected early using SBA, Basic Emergency Obstetric Care (BEmOC) and Comprehensive Emergency Obstetric Care (CEmOC) (31).

On 1<sup>st</sup> June 2013, as a response to the above problems, Free Maternity Service (FMS) was introduced in Kenya. In the first year, FMS only included deliveries as specified in the circular from the Ministry of Health. Later on, the FMS scope was expanded to include the following: ANC, delivery, new born up to six weeks, postnatal, Emergency Obstetric Care (EmOC) to manage complications and family planning(13,32). FMS help mother access antenatal care and skilled birth attendance (SBA) services. SBA are professionally trained health workers like doctors, nurses, midwives. Evidence has shown that SBA is critical strategy to improve maternal health and reduce maternal mortality. However, mothers have not responded fully as expected due to various reasons. It also shows FMS is not the ultimate answer to increasing access to maternal health services (13). There are other factors which are contextual or health system based.

## 2.2 Justification

Investing in maternal health is good business because of high returns. It is known that 1 dollar invested in maternal health gives 9 dollars of returns (28). There is a move globally and here in Kenya to invest in maternal health, therefore doing business unusual.

The majority of mothers do not still delivery in the facility even though FMS was introduced. The reason they give is the lack money, the long distance to the nearest health facility, no transport to the health facility, no reliable vehicles, bad roads and other hidden costs. In addition, there is a perception health workers and the health system are not friendly(13).

Some studies have shown free maternity service is not the only answer. There are underlying non-health determinants that cause health inequities in maternal health which needs a better understanding. There are also many factors causing low use of free maternity services. In the past, studies on maternal health have focused mostly at clinical and preventive elements of maternal health(33–35).

This current literature study has added the health system and contextual factors such as human right, gender equality, equity, which go beyond the health sector. In the past, donors focused on separate programs which were incoherent, fragmented, had separate planning, budgeting, monitoring & evaluation. This weakened the health system leading to poor service delivery and quality of care inevitably resulted in poor maternal health outcomes.

A critical, deeper and broader understanding of these factors can help develop evidence based policies and strategies; high impact interventions, services to improve maternal health.

## 2.3 Objectives

### 2.3.1 General objectives

To explore and understand factors influencing access and utilization of free maternity services. The recommendations will be used to inform health actors such as the Ministry of Health, Ministry of Education to improve policy and program in maternal health.

### 2.3.2 Specific objectives

- 1) To explore factors that influence women and pregnant women's t decision to seek maternal health care (*first delay*).
- 2) To explore factors which influence access to the health facilities (*second delay*).
- 3) To describe factors which influence quality of care at the facility and the health system (*third delay*).



4) To explore the contextual/ enabling environment factors which address the three delays.

5) To make recommendations for policy makers, program managers to improve policies on maternity services

## 2.2 Methodology

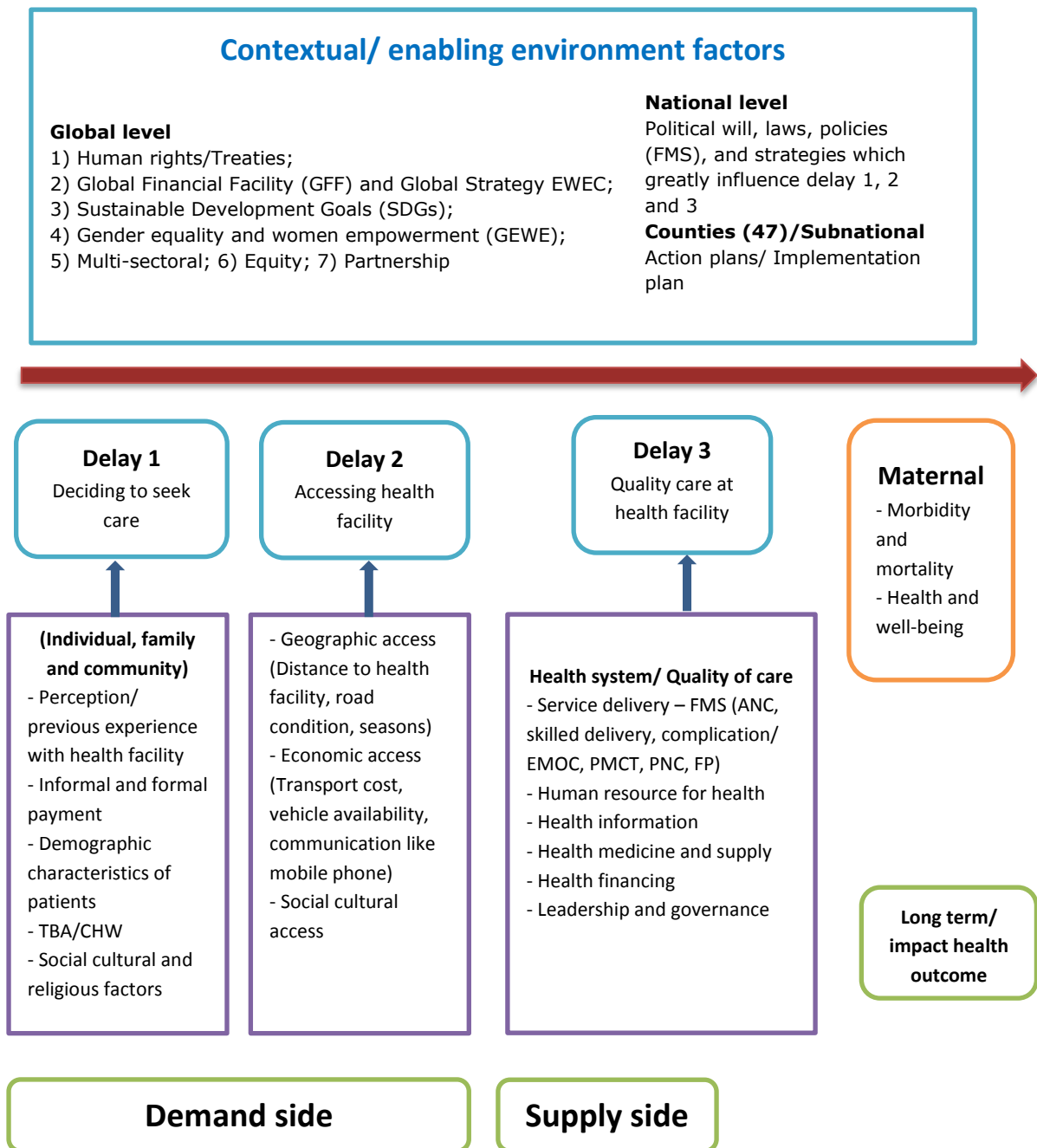
### 2.2.1 Search Strategy

**Search database** used in this review were pubmed, google scholar, and websites of WHO, UNAIDS, UNFPA, Kenya Ministry of Health and contacted experts in Kenya implementing the free maternity service program. Medical journals and presentation conferences and unpublished literature were also searched for maternal health and free maternal services.

**Key words** ANC, skilled birth attendant (SBA), family planning (FP), maternal health, pregnancy, maternal deaths, free maternity services (FMS), maternal mortality rate (MMR), contraceptive prevalence rate (CPR), total of fertility, adolescent reproductive health , health financing a, Kenya national health account (KNHA), health system, health services, accessibility, availability, acceptability, quality of care, effectiveness, framework, demand side factors, supply side factors, universal health coverage (UHC).

## 2.2.2 Conceptual framework

Figure 5: Conceptual Framework



This study uses the 3 delay conceptual framework created by Thaddeus and Maine(36), was later modified by others (12,37). The list of contextual factors (human rights, gender equality, women empowerment and financing, and the SDGs for the next 15 years) come from global mandates and commitment to end preventable maternal deaths emphasizing “No woman should die while giving life” (38,39). The international and national leaders are accountable for these mandates and

commitments. The Kenya constitution, health policy and health sector strategic plan are aligned to the global mandates(19,20,22,28).

This current study has modified the framework further by adding the contextual factors, health system and free maternity service elements. The conceptual framework is used to clearly understand the factors influencing pregnant women accessing and utilizing health facilities for safe delivery. The framework shows the three phases causing three delays(36).

**Delay 1:** Decision to seek care. A lot of factors lead to delay in decision making which impact on saving the life of mothers and babies. It can be at the individual level, family and community. At this level, socio-economic , gender inequality and cultural issues play a big role too.

**Delay 2:** Access to health facilities. Access to health facilities is affected by the uneven distribution of health facilities creating long distances from home to the nearest health facilities. WHO recommends 2.5 -5 km distance to health facilities. However most mothers especially in rural live very far from health facilities

**Delay 3:** Quality of maternal services received at the facility and the health system.

Usually, once the pregnant woman reaches the facility, there are many factors which hinder treatment. These can be in the health system itself or in the quality of care.

In the health system, the most important are human resource for health and supplies drugs and equipment for service delivery. Human resource is crucial in terms of shortages, skills (BEMOC/CEMOC) and competences, attitudes, the sex staff especially in matters ANC and delivery. These lead to low births by SBA and therefore inversely contribute to high maternal deaths.

The three delays are not operating in a vacuum. The contextual factors greatly influence the three delays. This is the enabling environment which includes human rights, gender, financing, policies, laws, strategies, community participation, intersectional/multi-sectoral collaboration and political commitment.

The Government as a duty bearer has the obligations to respect, protect and fulfill human rights especially those related to maternal health. At the community or household level, the women do not know their human rights in health. These days mothers are being empowered to know their human right (e g. right to information, right to life, right to dignity and security). When a woman dies while giving birth, it is the worst human right violation. In health facility in Kenya, patient right charters are displayed at every health facility for mother to read and know and apply them. Right to health messages are given to mothers during ANC .

Community workers also talk to pregnant women about the danger signs in pregnancy delivery and postnatal to improve their decision making in the first delay.

### **2.2.3 Limitations of study**

Free maternal services were introduced in 2013 and are still in their early phase.

However, study has been done. At the beginning a baseline study was conducted by health policy project(16), and later, other study have assessed the progress of FMS implementation(13).

There was no time finances to go home to collect primary data. Therefore a literature review was done.

## **Chapter 3: Factors influencing access and utilization of Free Maternity Services**

This chapter follows the conceptual framework of three delays to accessing and utilizing free maternity service. The conceptual framework which addresses the factors in delay 1, 2, and 3. The framework has been expanded to include contextual factors and health system factors and the free maternity service elements to give a bigger picture (*Figure 5*).

### **3.1 Factors influencing decision to seek health care/ Delay 1/ Demand side factors**

#### **3.1.1 Perception/previous experience with health facility**

Usually, the person's previous experiences and perceptions with the health facilities and health workers do affect her current decision making. These are poor quality of care, poor attitude of health workers, long waiting time and the cost of delivery(13,40).

In a study on "the effect of a multi-component intervention on disrespect and abuse during childbirth in Kenya" 2015 showed that health worker attitudes was bad, or the health workers were not friendly. Sometimes, health workers mistreated (slapping and pinching the woman in labor or shouting to the woman or saying bad words to her) and neglected patients leaving them to deliver on their own while in the hospital(41).

The free maternity service implementation status assessment looked at the perception of both the health workers and the users of the FMS. Those who had good experience with the health facility and workers were encouraged to come back more. Those who had negative experiences with the health facility and health workers prefer not to use the health facility again. In general, pregnant mothers liked and appreciated the FMS offered to them(13).

#### **3.1.2 Informal and formal payment**

After free maternity service (FMS) was introduced, the pregnant women were not sure the range of services covered under free maternity services. This was due to lack of clear communication to the users of services. Hidden costs which were not part of FMS had to be paid for by the users (28%). These hidden cost were on different services connected to FMS such as laboratory tests, drugs, ANC booklet, x-ray and delivery charges(13). Yet the goal of FMS is to remove financial barriers which hinder access to maternity service. However, the policy did not look at the aspects of hidden cost of maternity services, therefore were not included in FMS package.

### 3.1.3 Demographics

The demographic characteristics of women or pregnant women seeking care described the age, marital status, education, resident (urban, rural/county), religion, wealth, trends, fertility, teen pregnancy, family planning, contraception (CPR), unmet need and how these factors influenced health seeking behavior, and the actually first delay

#### *Age*

The adolescents in the age group 15-19 experiencing early forced marriage which expose them pregnancy because they do not use contraceptives. These pregnancies are vulnerable to complications. Most adolescent deaths in this age group are due to pregnancy complications(41). Adolescents younger than 14 years are at greater danger. The national programs overlooks this age group in term of accessing information and services on sexual and reproductive health(41). In addition the contraceptive use among adolescents is very low. They have unintended pregnancies which usually end up in unsafe abortion and maternal deaths(3,42).

The age of first sexual intercourse and first birth is usually below age 18. Ages less than 14 do not attend antenatal clinics when pregnant. This leads them vulnerable to complications. Studies showed that older women above 35 usually have risky pregnancy too. In other words, extreme ages leave women vulnerable to pregnancy complication (3,42).

#### *Marital status*

In Kenya, 26% of adolescent ages 20-24 married by age 18. Forty eight (48%) had sexual experience by age 18. Maternal health services are usually for married women. Adolescents and single women are usually not targeted by the maternal health programs(3,42).

#### *Teenage pregnancy*

Adolescent health in the age group 15 to 19 impacts negatively on maternal mortality (3). Usually, this age group has no information on family planning and services. Also high rate of teen pregnancy often lead to unsafe abortion which contribute 1/3 of maternal deaths(41). When adolescent is pregnant and is wanted they do not attend ANC. Yet their pregnancies are high risk with complications(41).

Most adolescents recent birth, (52%) took place without skilled attendant. Adolescent under age 20, 47% of their recent birth were an unintended pregnancy because of none use of contraceptive(27). Family planning services are only meant for marriage women. Adolescents when pregnant, they do not attend ANC because the program is for married women only (42).

The facilities offering basic essential obstetric care to adolescents and youth are few. The facilities offering youth-friendly services are also few(27).

### *Residence (rural/urban), income and education*

The KDHS of 2014 showed that poor women attend less ANC and use skilled birth attendants less(3).

Pregnant women from low income background have less access to skilled birth attendant compare to the wealthy woman(3) (*Annex 2*). This is due to other reasons like no money for transport to access health facility and opportunity cost at home(13).

Women with no education or primary education also has less skilled birth attendant compare to high educated woman(3). In addition, adolescents are lack of information or have no access to quality comprehensive sexuality education(42).

In term of education/knowledge, the pregnant woman's understanding of maternal health illness affects her ability to make decision making. The common danger signs are in pregnancy, delivery and postnatal. If the woman is not aware of these, she delays in her decision making.

### **3.3.4 Traditional birth attendant (TBA)/ Community health workers (CHW)**

There is a variety of how traditional birth attendants are used among the different ethnic groups and or counties in Kenya. A lot of mothers in Nyanza, Western, and Northeastern deliver at home without skilled birth attendant instead they usually use traditional birth attendant. These are preferred by mothers because they are friendly and culturally acceptable, easy to access and cost less compare to facility delivery(43).

In Northeastern Kenya, most people are Muslim. Women cannot go to the facility when there is no female provider and this forces them to deliver at home with support from TBA, mother-in-law or neighbor(3).

Unfortunately, it is known that 15% of the pregnancies end up with complications which a TBA cannot never manage. Therefore, this endangers the mother and baby (31). Complications are managed at facility with basic emergency obstructed care (BEmOC) or comprehensive emergency obstructed care (CEmOC).

### **3.3.5 Social culture and religious factors**

Socio-cultural factors are norms, values, belief, attitude related to delivery are deeply rooted in society. They greatly influence decision making on health seeking behavior related to maternal health. In Western Kenya, the culture emphasizes home delivery because the fear health facilities do not know how to dispose the placenta properly. In this culture, placenta is taking as a part of a child and has to be buried in the

parent's compound for identity and inheritance. KDHS 2014 showed only 28% facilities delivery in Western Kenya while in Central Kenya shows almost 80% facilities delivery(3).

Female genital mutilation (FGM) is a socio-cultural norm in Kenya. The counties which practice FGM are Northeastern Kenya with the prevalence of 98%, Nyanza 32% and Rift Valley 27%. The most ethnic groups are Somali (94%), Samburu (86%), Kisii (84%) and Maasai (78%)(3). In the Northeastern, type 3 is the commonest FGM. It is associated with a lot of complications at time of delivery(44,45). These people usually try to deliver at home as a socio-cultural norm. This delays the woman to access health facility.

#### *Gender and women empowerment:*

Women's empowerment encompasses women's sense of self-worth, access to opportunities, access to and control of resources, choices and the ability to exercise them, control over their own lives, health and influence over the direction of social change (18).

Individual behaviors such as sexual behavior and health seeking, are to a great extent determined by these socio-culturally construction/gender, norms and values of society. In casting women as subordinate, passive and ignorant in relation to sex, dominant gender norms on femininity greatly constrain the ability of women and girls to proactively negotiate for safer sex and access relevant information and health services(46,47). Gender inequalities, inequities and social cultural practices greatly hinder the ability of women and girls to access information and services on maternal health(48). This means women cannot decide for themselves to seek health services they need.

In addition, men are the decision makers in the family and community, but as key partners, they are not engaged in reproductive and maternal health. They lack information and skills to encourage women to seek health care early (49,50).

Pregnant women often cannot leave the home because the load of housework/unpaid work. Some of them do not want to leave because of opportunity cost, because going to health facility makes them lose their income.

Nearly half (49 percent) of currently married employed women who earn cash make independent decisions about how to spend their earnings(3), an increase from the figure of 42 percent reported in the 2008-09 KDHS(27).

Fifty-four percent of currently married women participate in four common household decisions, such as decisions to their own health care, major household purchases and visits to their family or relatives. Only 39% of



women have the main say in their own health care including free maternity service(3).

#### *Decision making/autonomy:*

In some parts of Kenya, women have no autonomy especially on matter to do the pregnancy and delivery. In Western and Nyanza region of Kenya, women have to ask for permission from the husbands or the mothers in law to go deliver in health facility for cultural reasons. A study showed that use of a skilled birth attendant is only 28% in Western Kenya compare to 90% in central Kenya where women have more autonomy. Muslim and nomadic areas, the women also do not have decision making power as the men have the final say(3).

Women and adolescent girls usually do not have autonomy because of cultural and gender norms. They also have low status to decide on their own to access maternal health care services(3).

### **3.2 Factors associated with delay in accessing health facilities/delay 2**

Access is a measure of the ability of a person/community to receive available services. Access barriers can be geographic, economic and socio-cultural factors/community factors (12,36,51).

For complications, urgent access to basic emergency obstetric care (BEOC) and comprehensive emergency obstetric care (CEOC) facilities are is very critical. Transport systems are sometimes weak which might hinder access to facilities. Mothers spend a lot time on the poor roads going to the facilities. Ineffective communication in term of mobile or telephone also affects access to facilities, although there is a rise of coverage and use of mobile phone also in the rural areas.

#### **3.2.1 Geographic access**

All persons shall have adequate physical access to health and related services, defined as "living at least 5 km from a health service provider where feasible, and having the ability to access the health service"(52).

In Kenya, poor distribution of facilities, poor public transport, weak referral systems, insufficient community health services and weak collaborations with other service providers have perpetuated poor geographical access to health services(20). There are imbalances in geographical distribution of health facilities in terms of the numbers and types of facilities available(20).Some areas have disproportionately more facilities than others(20).

Consequently, while the average distance covered to reach the nearest health facility is reasonable (20). WHO recommends average distant to health facility from 2.5 to 5 km (52).

There are under-served areas in the Country, particularly in the Northern Counties of Isiolo, Turkana, Mandera, West Pokot, Marsabit, Samburu, Wajir, and Garissa(3,20).

The physical distance separates a pregnant woman and the nearest health facility. The distance can be perceived distance or actual distance. If the woman in the rural areas, this barrier is made worse because of the poor roads and few vehicles and poor communication(12).

The distance or lack of transportation, not costs are also mentioned as the most commonly cited reasons that women in Kenya give for choosing not to delivery at a professional health care facility. However, a statistical measurements indicated no significant correlation between the distance and the location of delivery (53).

### **3.2.2 Economic access**

Economic access is defined as the affordability of health services. This can hinder access to services. It expressed as low house-hold income, low prioritization of health at household level and low allocation of resources by the state to the health sector(37).

In Kenya, 46% people live below the poverty line. Many households cannot afford to pay for health services. Health is not given high priority compare to other competing needs(6,54). As we have seen since 2013 there are FMS cover antenatal, delivery, postnatal and family planning. For any policy to be effective, it needs a budget. Therefore, the government of Kenya committed money for this policy. At first, it gave 3.8 billion Ksh for free maternity service and following 700 million Ksh to allocated for health center and dispensary to compensate lost revenue in user fee removal(55). Later on 3.1 billion Ksh was for recruitment 30 communities health nurses constituency, 522 million Ksh for recruitment of 10 community health workers per constituency. 1.2 billion Ksh was set aside for housing the health workers. All this was put on the 2013/14 budget. Sixty billion Ksh allocated directly to cover health at county government. In total, almost 95 billion Ksh was set aside for health(56). This however has till now not resulted in increase in access and utilization

#### *Health insurance*

The Kenya national health insurance fund (NHIF) has been made demand purchaser of FMS on behalf of government of Kenya. This covers pregnant women only(57).

In general population, few people (7%) have health insurance(6). This insurance is mostly paid by the urban and the wealthy population(58).

National hospital insurance fund (NHIF), this covers workers in public and private sector. In Kenya, insurance covers only 11% of the workforce in the formal sectors. Most Kenyan work in the informal sector where they do not purchase insurance(58).

The voluntary national hospital insurance fund (NHIF), Kenyan voluntary pay 160 Ksh/month but membership is very low(58).

### **3.2.3 Socio-cultural barriers/community factors**

Social-cultural barriers associated with low literacy levels, religion, beliefs, values, attitudes, practice and gender bias hinder access to health services, especially by women, children, adolescents, the disabled and other vulnerable groups(3).

In response to these problems, the government has made the provision of health services more humane, compassionate and dignified. Service delivery, especially for women must ensure confidentiality and privacy on matters of reproductive and maternal health(28).

### **3.3 Supply side factors/health system and quality of care**

A health system consists of all organizations, people and actions whose primary interest is to promote, restore or maintain health.

The six building blocks (WHO, 2010) contribute to the strengthening of health systems in different ways. The blocks are 1) service delivery; 2) human resource for health; 3) medicines and supplies; 4) health information for decision making; 4) health financing; 6) leadership and governance(59). All these are a foundation of quality of care.

From the status of implementation after introduction of FMS, the quality of care has been affected by free maternity services because they were high demand and the facilities were not prepared for that. Therefore, mothers had to sharing beds. The amenities like toilets, bathrooms were affected. In other words, there was in adequate essential amenities and equipment(13).

Reduction or lack of resources (HRH, finance, leadership and government) usually lead to weak health system which in turn lead to low quality of care(6,14,23).

International assistance accounts for 31%. For reproductive maternal new born child adolescent health, with this scenario, quality of care is usually reduced(23).

In Kenya, a lot of households spend a lot of out- of- pocket(OOP) (74% of private source of finance) to pay for health services(6,14). The FMS removed financial barrier to accessing maternal health care. This enabled more women including the poor to access FMS But studies are showing mothers are still not coming because of various reasons(60–64).

### 3.3.1 Service Delivery

Good health services delivery is effective, safe, and of quality interventions to those who need them, when and where needed, with minimum waste of resources (20,59).

The free maternity services (FMS) increased demand of services. There was high workload for the staff, where 3 staffs had to look after 20 patients. It was reported in the same study that the space was inadequate and there was no privacy. Patients experienced long waiting time due to staff shortage and increased demand. In the 24 counties in 2015 where the FMS implementation assessment study was done, the waiting time ranges from 22 -180 minutes. The waiting time is the time a patient arrives at the facility to the time she is attended by the health worker(13).

#### *Utilization free maternity services (FMS)*

In 2015, an assessment report on the status of implementation of free maternity services (FMS) program in the devolved health system in Kenya showed the trend in different elements of FMS. These included ANC, prevention of mother to child transmission (PMCT), skilled delivery, complication/EMOC, PNC and family planning.

The report showed availability of The FMS services and the Facility readiness to provide FMS services. The report showed some challenges in FMS implementation such as inadequate amenities, inadequate equipment and inadequate human resource(13).

Data from district information system (DHIS)/Ministry of Health regularly received data on maternity services. This data was analyzed, by Kenya health policy project funded by USAID, over three fiscal years from 2011/2012 to 2013/2014 to see the progress of maternity services shows the following

**Maternal Services** (ANC, PMCT, Type of Delivery, Complications, PNC and FP)

*Antenatal care (ANC)* Due to free maternity services (FMS), ANC increased in the year FMS was started. ANC 4<sup>th</sup> visits increased by 11% in the 24 counties out of 47(13).

*Prevention of mother to child transmission (PMCT)* There were increased partners HIV testing. Counsellor and tested for HIV mothers increased by 12% and 11% respectively. Delivery of HIV positive mother increased by 10%(13).

#### *Type of delivery*

Normal deliveries and caesarean section deliveries increased at 22% and 17% respectively in the year FMS was introduced. Institutional mortality

rate reduced from 215/100,000 live births (2011/12) to 124/100,000 live births (2013/14) (13).

For skilled birth attendant, there was an increase from 44% to 61% in national data KDHS 2014. It is important to know nearly 39% of mothers did not have skilled birth attendant(3). There are some variations due to geographic and economic factors. In northeastern region, skilled birth attendant 22% and in central of Kiambu is 93%. Thirty one percent in the poorest wealth quintile compared to 93% in the richest wealth quintile.

### *Complication/EMOC*

In the previous years before FMS, the commonest complication was obstructed labour. In the years of FMS between 2011/12 , 2012/13 and 2013/14, there was a reported reduction in obstructed labour from 3.2% , 1.6% to 1.3% respectively (13).

All facilities visited had basic obstetric care (BEmOC). Among these, 24% had comprehensive obstetric care (CEmOC)(13).

### *Postnatal care (PNC) in two days after delivery*

A lot of mothers die from complications soon after delivery. This happens in two hours to two days after delivery. Postnatal care is critical to reduce maternal deaths.

In 2014 KDHS showed 51% mothers had skilled postnatal care(3). It is not enough because all mothers should have postnatal care. A lot of maternal deaths occur 2-48 hours post-delivery due to complications such as severe bleeding and obstructed labor(13).

### *Family planning (FP)*

Over the years, few clients (1.5%) enrolled for use of the FP methods. Between 2012/13 and 2013/14, there was a 9% increase of clients for FP. The implant insertion was the commonest method at 53% over the 3 years of FMS. Family planning method were available in most facilities(13).

### *Free maternity service availability*

A survey in Kenya looked at service availability for free maternal services. The survey looked at the total of 283 facilities from 24 counties which sampled randomly. Three of these (1.1%) were private and the rest were public facilities. They also looked at the services offered, the majority provided child health, ANC, maternity and laboratory services. About 31.6% of facilities offered operative services, mostly at levels 4, 5 and 6. Generally maternity services were available at all levels except level 2 and 3 facilities(13).

A total of 283 facilities from 24 counties in Kenya randomly sampled, all of these facilities had basic obstetric care to manage complications. In addition, 24% of these offered comprehensive obstetric care at level 5 and 6. Youth friendly services was the least offered reproductive service at 25%(13).

#### *Facility readiness to provide FMS*

Sixty percent of the sampled facilities had referral systems. Majority of the facilities (75%) had ambulances and telephones (88%) used for referral (13).

The same study, implementation status assessment, showed inadequate staff. The most shortage was in specialized doctors like obstetricians and medical officers. A lot of staff were given duties in many department. Seventy five percent of health facility staff were trained in reproductive health(13).

Most facilities had IEC material for ANC and family planning. The waiting time for mothers coming ANC range from 22 minutes to 180 minutes (3 hours). The long waiting time due to increased demand for ANC without corresponding staff to serve the mothers. Since the FMS introduce, utilization of maternity services increased to 26% in deliveries, 22% increase in caesarean section and 50% increase in ANC visit. This reflected and huge increase in workload(13). This showed FMS can improve access to critical maternity services.

#### *Essential amenities*

In total of 283 facilities surveyed, (87%) had toilets, 79% had bathroom, 64% had running water. They were few because mother sharing beds, there is no privacy. This compromised quality of care (13).

### **3.3.2 Human resources for health**

Health workforce are people recruited primarily for health and health related services provision and management. They must have under gone a defined and recognized training program. They should be in adequate number and equitably distributed.

Well organized human resources is crucial for a strong health system and quality of care. WHO gives standard for human resources for health per population. It has been estimated that countries with fewer than 23 physicians, nurses and midwives per 10 000 population generally fail to achieve adequate coverage rates for selected services (59).

A well-performing health workforce works in ways that are responsive, fair and efficient to achieve the best health outcomes possible, given the available resources and circumstances. i.e. There are (65) sufficient numbers and mix of staff, fairly distributed; competent, responsive and productive(59).

A report from Ministry of Health on the status of free maternity services implementation showed that human workers absenteeism, knowledge and practice gaps affect quality of care(13). The health sector human resource for health strategy in 2014 also gives evidence of the problem in staffing. Kenya health sector has inadequate crucial health staff like doctors, nurses and diagnostic scientists. In addition there are regional disparities in the distribution of the existing health workers and the hard-to-reach get disadvantaged with less staff. WHO recommends at least 23 doctors, nurses and midwives per 10,000 people. Kenya has one doctor, 12 nurses and midwives per 10,000 people(66).

Low pay and poor working condition force staff to leave (66). These problems make health system weak and leading to poor quality of care.

The free maternity service policy, human resources were not planned for. Increasing demand created shortage of staff. In some areas, three staff had to look after 20 patients and overworked. They were not motivated. In some places, they even went on strike like Kenyatta Hospital(60,67).

### **3.3.3 Supplies, Medications**

A well-functioning health system ensures equitable access to the essential medical products, vaccines and technologies of assured quality, safety, efficacy and cost-effectiveness (59).

The study on assessment of free maternity services showed that the supplies and medications were not enough to meet the increased demand. The high demand of patients created shortage in drugs and supplies. Some patients were forced to go outside the hospital to buy medicine(13,63).

### **3.3.4 Health information /data**

A well-functioning health information system ensures the production/generation, analysis, dissemination and use of reliable and timely information on the risk factors, health determinants, health systems performance and the population health status(59).

In Kenya health information, there is poor quality of data from the routine health information systems. The reporting is low and incomplete especially in births and deaths in maternal health. This makes it difficult to plan and monitor what is happening in the in free maternity service program (28).

Recently, the government launched HIV and Reproductive Maternal Newborn Child Adolescent Health (RMNCAH) dashboard used by senior policy makers to track progress and identify gaps in the free maternity service(28).



### **3.3.5 Health financing**

A good health financing system raises adequate funds for health, in ways that ensure people can use needed services, and are protected from financial catastrophe or impoverishment associated with very high out of pocket(OOP) paying at the point of service(59).

The free maternity services policy, shows that the government of Kenya is committed to reducing out of pocket fees paid for maternity services(13,63). In reality there is still a lot of OOP as mentioned above.

In Kenya there are two broad sources of finance: public and private. The financing sources for health care are taxes, social insurance, out-of-pocket payment, private health insurance, donor partner contribution. In Kenya, internal sources are considered significant source of health care financing(68).

Kenya hopes to move the income status and reduce donor dependency for the health sector by 2030. They are trying to raise domestic resources and increase public health spending from the tax revenue (6,69,70).

#### *Reimbursement of funds*

Reimbursement was only for delivery. ANC and PNC were not included at the beginning. Dispensary was 2500 Kshs and health center was 5000 Kshs reimbursement. Patients were complained the delay in reimbursement(13). Later on, other services were included because the FMS was expanded to include ANC, PNC and FP.

### **3.3.6 Leadership Governance**

Leadership and governance as part of a health system, please refer to background information page 7-9.

### **3.4 Contextual Factors**

This is the enabling environments impacting on the free maternity service. The previous studies have not reflected much on these factors, yet they have a great influence on health services(13,37,63). They include factors as follow: 1) Human rights/Treaties and consensus documents; 2) Global Financial Facility (GFF) and Global Strategy EWEC; 3) Sustainable Development Goals (SDGs); 4) Gender equality and women empowerment (GEWE); 5) Multi-sectoral; 6) Equity; 7) Partnership. All these factors that translated to country level political will, policies (FMS, domestic resource allocation), strategies and laws.

The global and national partners are coming up with policies, financing, strategies and cost effective interventions to end preventable maternal deaths at country level.



### 3.4.1 Political will, policies and law

Kenya is committed to human right in health. Most of the treaties have been interpreted into policy documents at country level such as vision 2030(70), the constitution of Kenya 2010(19), the Kenya health policy 2014-2030(22), Kenya health strategic plan 2014-2018(71), Reproductive maternal newborn child adolescent health (RMNCAH)(28) (*Annex 4*). For instance, the constitution provides for devolution to the county where people are. This empowers people to engage and participate in decision making in their own health including maternal health and FMS. At the county level, people are required to give their input during planning and budgeting so that the real health needs and concerns of the people are reflected.

#### *Health Sector and the Vision 2030*

The vision 2030 is new long-term development plan for Kenya. It aims to create “a globally competitive and prosperous country with a high quality of life by 2030” through transforming the country from a third world country into an industrialized, middle income country(20,22).

#### *The constitution 2010*

The constitution is the overarching legal framework for ensuring a more comprehensive and people -driven health services, and a rights – based approach to health is adopted, and applied in the country(19).

#### *The Kenya health Policy (2014-2030)*

The Kenya Health Policy, 2014–2030 gives directions to ensure significant improvement in overall status of health in Kenya in line with the Constitution of Kenya 2010, the country’s long-term development agenda, Vision 2030 and global commitments(22).

#### *Kenya health strategic plan 2014-2018*

The Kenya Health Sector Strategic and Investment Plan 2013-2017 is guided by the Kenya’s Vision 2030. It acknowledges that improved health is a critical driver to the achievement of this vision(71).

#### *Reproductive maternal newborn child adolescent health (RMNCAH 2016)*

The national RMNCAH Investment Framework is relevant to all 47 counties and will serve as a guide for the development and implementation of county RMNCAH implementation plans(28).

#### *New policies*

The new policies such as free maternity service for all public health facility(57), removal of user fee at primary health care facility(64), the

output based aid (OBA) voucher system(72). These are related to maternal health services.

### **3.4.2 Human rights/Treaties and consensus documents**

#### *International treaties*

Kenya is signatory to a lot of international and regional treaties and agreements. Therefore has an obligation to translate these into national policies, laws and programs to benefit its citizens

Free maternity services is the government obligation to allocate resources to fulfill realization of the right to health at both the national and county level. This is aligned to the regional and international mandates which are the source of human rights related to health, gender issues, financial matter, and universal health coverage.

International Covenant on Civil and Political Rights (Political Covenant)(73) and International Covenant on Economic, Social and Cultural Rights (Economic Covenant), articles 1 talk on self-determination in matter of economic, social and cultural development(74). Economic empowerment enable pregnant mother to access and utilize skilled birth attendants.

International Convention on the Rights of the Child (Children's Convention) protects children from early marriage which lead to complicated pregnancy and maternal death of adolescents(75).

International Convention on the Elimination of All Forms of Discrimination Against Women (Women's Convention or CEDAW). This is the most important human right instrument for women and girls. Its principles are equality, non-discrimination and state obligations. It has seventeen articles which protect women and girls. FMS reflects most of these articles(76).

Apart from treaties, there are international consensus documents such as ICPD Programme of Action, Beijing Platform for Action(77).

#### *Regional*

- African Charter on Human and People's Rights
- Maputo Protocol

#### *National*

The Constitutions of Kenya in 2010, it has many articles which protect women health (19).

The Kenya National Patients' Rights Charter (2013) outlines the right to access health care, the right to receive emergency treatment in any health facility irrespective of ability to pay, the right to the highest

attainable quality of health care products and services, the right to be treated with respect and dignity, the right to information, and the right to complain among others(78).

World health organization clarified the principle of right to health as 3AAAQ (available, accessible, acceptable and good quality health services)(24).

In Kenya, there are many Laws created by the Act of Parliament to protect women and children such as the Anti FGM Law(79), the Children Act(80). Kenya also has Institutions created by the Act of Parliament on Human Right e.g. the Kenya National Commissions on Human Rights (KNCHR)(56).

#### *Purpose of Human Rights legal Instruments*

- Direct **Governments, Institutions and individuals** to make policies, laws and programs to protect pregnant women.
- Equip Governments with **Principles and Language** of human rights to improve Policies, Programs , Practices and service delivery.
- **Individuals and groups** find Human Rights empowering because they can legitimately assert their interests/claim.
- **Government Agencies** can use Human rights to advance SOCIAL JUSTICE among all people (pregnant women included) they lead and serve.

### **3.4.3 Gender equality and women empowerment (GEWE)**

Women's empowerment is supported both internationally and in Kenya. The 1994 International Conference on Population and Development declared that "advancing gender equality and equity and the empowerment of women and the elimination of all kinds of violence against women, and ensuring women's ability to control their own fertility are cornerstones of population and development-related programs"(77).

Furthermore, Kenya is a signatory to many international conventions on human rights, women's rights, reproductive health rights, and children's rights, as well as to agreements on international goals regarding education, health, and poverty eradication. As a signatory to the United Nations Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW)(18) and as mandated by the Constitution of Kenya promulgated in 2010, the government of Kenya is committed to ensuring nondiscrimination, gender equity, and social justice(19).

### **3.4.4 Sustainable development goals (SDGs)**

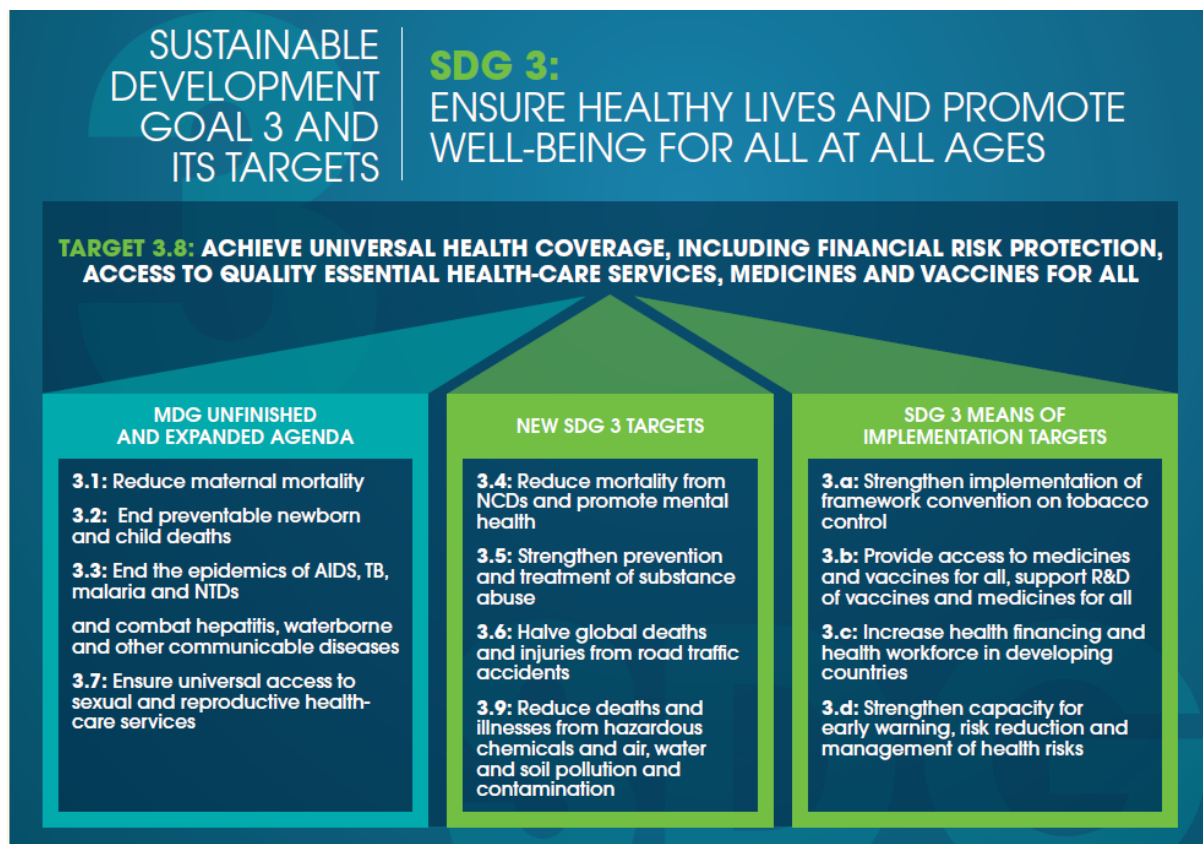
For the past 15 years, Millennium Development Goals (MDGs) five and four have not progress well(81). Therefore, these have been carried over

to the next 15 years under the Sustainable Development Goals (SDGs)(82). The SDGs also put Health Governance at the centre stage, focusing on institutional arrangement.

The MDGs for the past 15 years ,were narrowly focused on human development and had many separate health goals(81). The SDGs have a broader scope, with 17 goals. Only one goal SDG 3 covers health. This goal states that ensure healthy life and promote well-being for all at all ages(82). SDG 3 has many targets which are well aligned and coordinated (Figure 6). Target 3.8 is to achieve Universal Health Coverage (UHC) including financial risk protection, access to quality, essential health care services, medicine and vaccine for all. The UHC serves to increase logical and coherent relationships of all the 9 targets in health, reduces fragmentation and strengthens the health system. Target 3.1 reduces maternal mortality, target 3.2 ends preventable newborn and child mortality. Target 3.7 ensure access to Sexual Reproductive Health Services .Target 3c increase Health financing and Health workforce. These targets are all related to free maternity services.

Goals outside Health sector are Goal 5 on gender equality and Goal 10 on equity They both have an impact on FMS and maternal health (79, 80).

**Figure 6: SDG 3\_Health**

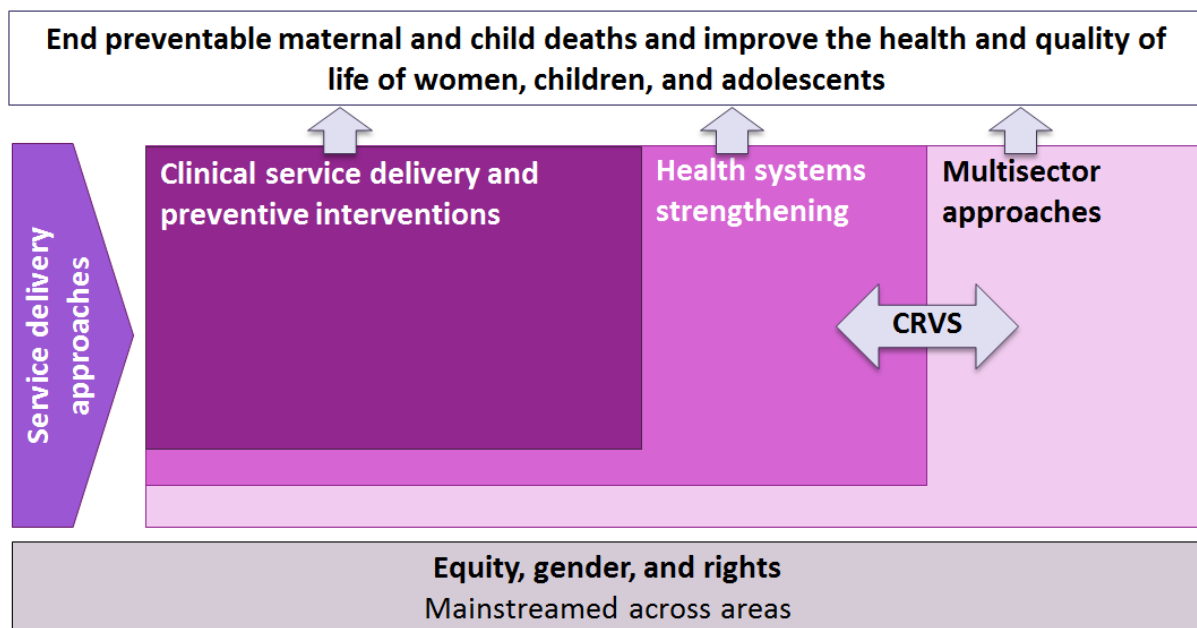


Source: SDGs reflection on the implication and challenges(83)

### 3.4.5 Global financing facility (GFF)

In the past 20 years, women, adolescents and children have died due to many factors such as inequitable access to quality health services including maternity services. This problem has been carried over to the post- 2015, SDGs Health goal 3. To address this, increased financing is needed both domestically and internationally. Therefore, in 2014 September, in respond, the GFF was announced to accelerate effort to end preventable deaths and improve health and quality of life of women, adolescents and children (Figure 7) (38).

**Figure 7: Global finance facility**



Source: GFF sector development

### 3.4.6. Multisectoral

Implementing free maternity service needs strategies which go beyond health sector eg. education, gender, financing, transport, communication. These sectors impact on maternal health(28,63).

### 3.4.7 Equity

This means all pregnant women can access maternal services without discrimination in term of age, residence, income differences. FMS tries to address equity(32). Equity is a foundation in GFF(84) and address in goal 10 of SDGs(39).

Kenya has improved economic growth and is largest in East Africa. Disparity in poverty like Kajiado county is wealthier of compare to Tukana county. This is creating inequity in access to basic health services. The constitution 2010 of Kenya emphasize devolution to 47 counties in order to correct historical inequity both geographical and economical.

Devolution made health services function to go to the county making them more accessible to the people.

#### **3.4.8 Partnership**

Under the GFF, partnership is encouraged at country level. The partnership is composed of the government, civil society (not-for-profit), private sector, affected population, technical agencies, and multilateral and bilateral agencies, and foundations. Each partner has specific role and responsibility(84).

## **Chapter 4: Discussion**

This study explains the factors influencing access and utilization of free maternity services

In Kenya reproductive health, maternal health and family planning financing has been mainly donor supported for the past 20 years. The contextual factors, the three delays factors will be discussed.

### **4.1 Factors influencing decision to seek health care/ Delay 1/ Demand side factors**

The most common factors which hinder mothers accessing and utilizing services are socio-cultural beliefs and practices, the low status women, the high cost of services, and poor health worker attitudes. Therefore, most of these affected demand for services.

Factors affecting demand can be address in various ways.

- 1) Behavior change communication can increase the knowledge of pregnant mothers, their husbands, partners and community. Improving knowledge encourages positive health seeking behavior such as deciding to seek maternal health services early.
- 2) Demand side financing where mothers can be given voucher to attend maternity services.
- 3) Community health strategy can be implemented to create an enabling environment to understand the importance of maternal health and accessing health services timely.
- 4) Right to health messages, especially using the patient charter on right in all health facilities. This help pregnant women to claim their right. This will only work when also male partners or decision-makers will be empowered and involved(85,86).

### **4.2 Factors associated with delay in accessing health facilities/delay 2**

Health services through devolution have been moved to the counties. Devolution focuses on primary health care (dispensaries and health centers), which are used more by women and children. This improves or addresses geographic access, economic access and socio-cultural access. This help to improve equity.

### **4.3 Health system factors (supply side)/ Delay 3**

The function in health system is a foundation of quality of care. WHO describes six building block of health system such as service delivery, human resources for health, medicine supply, health information, health financing and leadership and governance.

In Kenya, health service delivery has been devolved to the counties. However, the challenge is counties still have low capacity to manage financing, human resources for health, health information data for decision making(6).

#### *4.3.1 Service delivery*

Currently, more money (75% of health expenditure budget) is spent on tertiary hospitals for curative services which are used more by the richer people. The poor mostly use primary health care which are poorly funded (25%).

Twenty counties have poor maternal indicators. In response to this challenge, the governors have prioritized them for high impact interventions and increased resources for scale up.

Family planning showed an increase in the FMS implementation status. It has been used to avoid pregnancies which later avert maternal deaths. Contraceptives prevent half of maternal deaths and dramatically reduce unintended pregnancy, unsafe abortion. A study in Kenya using an impact modeling done by the Kenya National Council for Population and Development (NCPD) in 2015 estimated that with an increase of FP services reaching CPR of 64.7 percent by 2020. Kenya would save the lives of more than 20,000 mothers and 144,000 children, and avert more than 7.7 million unintended pregnancies and 1.4 million unsafe abortions(28).

#### *4.3.2 Human resources for health*

HRH play a significant role in maternal services, particularly in the high burden counties and hard to reach marginalized and underserved groups. Community health workers, they educate and promote right to health care. They give right to health messages which are culturally acceptable and empower women in decision making for their health. However, Kenya still faces a lot of challenges in HRH like staff shortage, uneven distribution, poor management of the HRH, high absenteeism and knowledge practice gap which contribute to poor quality of care.

In some places like northeastern Kenya, high maternal mortality ranges from 2000 to 3000. The region has HRH problems such as to recruitment, retention staff, poor communication networks, infrastructure and insecurity.

#### *4.3.3 Medicine, supply chain management*

From different studies, medical products and supplies are not always available leading to shortages and this was made worse by the free maternity services which increase the demand which was not anticipated planned for in time. Domestic financing is important to sustain supply.



Unfortunately in Kenya, procurement and distribution is usually donor funded.

Devolution will help to shift procurement, storage and distribution from the donors, national government to county governments. However, County governments have not yet budgeted for this important input. Poor supplies and shortages usually compromise quality of care. To ensure continuous supplies, Counties have signed an agreement with Kenya Medical Supply Agency (KEMSA) to buy supplies especially for maternal health.

#### *4.3.4 Health information*

Poor quality of data in routine health information system, low and incomplete reporting on births and deaths makes planning and monitoring difficult. For a strong health system depends on availability, quality and complete data. The culture of use of data for decision making is very low.

Devolution is giving attention to civil registration and vital statistics (CRVS). This is going to be supported by GFF to produce timely, reliable data. In the long run, policy makers and program managers will not have to wait for demographic health surveys.

#### *4.3.5 Health financing*

Health financing is central to successful maternal health services. Health financing assure adequate resources to deliver the essential package of health in equitable and efficient manner. The government Kenya is making effort to use domestic funding in addition to the donor support. The government has encouraged initiatives such as free primary care services, free maternity services in all public and private Health Facilities and the vouchers system of output-based aid (OBA). Financial risk pooling mechanisms are encouraged.

Kenya spends about 2.7 billion US dollars on health care. However, the share of health expenditure out of total government expenditure was still low at 6.1% (less than 15% Abuja commitment). This is less compared to the countries in the region eg Rwanda is at 18%. Sources of finance are public and private. The public is usually government and donors. The private source is mostly households financing or out-of-pocket (OOP). This account for 80% of private sources. OOP is usually paid by the user at point of services delivery. This usually inequitable and inefficiency.

The per capita health expenditure in Kenya has increased over the years, US\$ 69.6 per capita in 2014 above the WHO recommended o US\$ 62 per capita. A lot of donor fund, 26% of THE, is usually off-budget targeting few diseases like HIV/AIDS and Malaria. The donor funds are usually fragmented, not cost effective and have high transaction cost.

County health budget allocation varies greatly ranging from 5% to 40%. At the county level, planning budgeting is usually weak.

Kenya is trying to come up with health financing strategy and also progress towards universal health coverage (UHC). The free maternity service is meant to be a step toward UHC. This removes the burden payment of OOP by the households.

#### *4.3.6 Leadership and governance*

Governance structure is not yet in place. The Kenya health sector strategic plan guides how partnership, governance and stewardship will be implemented at county level.

Devolution is very new so the capacity of county health management team is still weak. They do not use data for evidence in decision making. Donors are still very strong at the county level. The programs and funding are fragmented. Stakeholders are not involved in planning, budgeting, implementing, monitoring and evaluation. Communities and private sectors are not fully involved.

### **4.4 Contextual factors**

This is the enabling environment in which the three delays conceptual framework is situated. The factors here greatly influence access and utilization of free maternity services. They include human rights, gender equality and women empowerment, Sustainable Development Goals (SDGs) and the Global Financial Facility (GFF).

#### **4.4.1 Human right**

Human rights are especial interest in maternal health. They are based in international and regional treaties. Kenya is signatory and has translated human rights into its policy, law and strategy. This makes the citizens especially pregnant mothers enjoy their rights. The government of Kenya being a duty bearer has obligation to respect, protect and fulfill these rights.

#### **4.4.2 Gender and women empowerment**

Gender is an important consideration in health and development. It is a way of looking at how social norms and gender role and the power relation impact on the lives of men and women. The pregnant women because of the unpaid housework cannot leave the house to attend services even if they are free. Men or partners have to give final permission to attend the FMS. Economic women are not empowered, they have to ask for money from their husbands or partners for transport to attend FMS.

Globally, more women than men live in poverty. Women are also less likely than men to receive basic education and to be appointed to a political position locally, nationally and internationally.

Understanding that men and women, boys and girls experience health and poverty differently, and face different barriers in accessing services, economic resources and political opportunities, helps to target interventions.

#### **4.4.3 Sustainable Development Goals (SDGs)**

In general, the SDGs have taken over the unfinished MDG 4 and 5 affecting child health and maternal health, respectively which were not achieved in 2015.

As a way forward women and adolescents health challenges have been addressed globally and nationally through the SDGs, the UN Global Strategy Every Women Every Adolescent, the World bank's Global Financing Facility (GFF), and the Reproductive Maternal Newborn child and Adolescents Health (RMNCAH).

In the next 15 years, the SDGs which have taken in 2015, are broader. Health is under one health goal (SDG 3). Countries including Kenya have agreed to strategically fund the SDGs using GFF. The GFF goals are smart, scale-up and sustainable. In being smart, they focus on results such as access, equity and quality. In scaling up, domestic resources will be mobilized. In addition, external international resources will also be used. On sustainability, the country will be responsible and therefore will ensure increased domestic resource to finance maternal health activity. Countries are encouraged to develop one health financing strategy. Kenya consultation with its stakeholders is in the process of developing its Health Financing Strategy (HFS).

#### **4.4.4 Global Financial Facility (GFF)**

GFF is there to support maternal health and global strategy for every woman, every child (EWEC). Free maternity services use domestic fund which are mobilized and put in the budget. This is commitment at a country level to end preventable deaths of women, adolescents and children and also improve their quality of life. Under GFF, Kenya is able to mobilized external fund to support women, adolescent health. GFF is a new financial initiative and very good opportunity to finance maternal health at country level. Political will is needed for implementation of GFF.- Kenya is a pilot country for GFF and has been given US\$40 million. The GFF money will be use to address disparities and inequitable coverage through underserved population and areas. This also be used for community engagement to generate demand for behavior change and increase social accountability in Kenya.

However, from the literature it is clear that free maternity service (FMS) is not the only solution to increasing access to maternal health care. One has to look beyond health sector to get the bigger picture (the contextual factors) and try to understand how these factors interact with the demand side factors, and the supply side factors to influence delay 1, 2 and 3.

We need a paradigm shift for government to take over the financing of these critical programs. Globally, there have been moves to support financing for reproductive, maternal, newborn, child, adolescent health (RMNCAH). In Addis Abba, Ethiopia, it was agreed to have the World Bank Global Financing Facility (GFF) to support every woman, every child and every adolescent program. Kenya, Ethiopia and Tanzania are in the forefront of this initiative.

## Chapter 5: Conclusions and Recommendations

### 5.1 Conclusions

On the demand side, Kenya is trying to remove barriers which limit access and utilization such barriers include long distance to health facility, high cost, religious and socio-cultural beliefs and practices. The low status of women and the lack of knowledge and information, these affect the demand creation. In addition, poor provider attitude, poor quality of services usually discourage mothers to access and use free maternity services. There have been no change in teen pregnancy. This group also has high unmet need for contraception and poor access to family planning services.

On the supply side, we focused on the health system. The main challenges are the poor workforce distribution, funding gaps, weak supply chain management for provision of maternity service commodities, incomplete and poor quality of data from routine health information system that hinder evidence-based decision making and accountability for results. The health functions has been devolved to the counties. However the counties have weak management skills for resources mobilization both domestic and partners. Counties have weak coordination between the national and the county levels.

The contextual/ enabling environment factors includes global commitment; national political will, health policies including the free maternity service policy and resource allocation; and health strategy. They address gender equality and women empowerment reflected in delay 1. The demographic elements like age, education, resident, wealth which are associated with delay 1. They also give guidance on how to address equity in term of geographical and financial access which are associated with delay 2. In delay 3, the global move toward strengthening the health system which is a foundation of good quality service delivery responsive to the health need of the population including women and adolescents.

### 5.2 Recommendations

For universal health coverage (UHC), policy makers and program managers should consider the following recommendations:

Policy makers both national and county level

- Must use evidence to make policy.
- Increase resource allocation more to primary health care.
- Increase domestic resources for public health spending.
- To advocate for external resources.
- Develop comprehensive health financing strategy (HFS) to cover health expenditure for health services including FMS.

- Equitable distribution of human resource especially for underserved population and areas.
- Encourage private-public partnership especially in the rural and remote areas. Private sector has a strong network of health facilities which the public sector can use without building new facilities.
- To encourage central procurement of medicine and supplies to reduce stock out in service delivery.
- Policy makers to take advantage of devolution because it can address historical inequities, inefficiency. The functions of health services were devolved to the counties nearer to the people who use them.

#### Program managers

- Improve quality of data by providing timely, complete and accurate data for decision making , monitoring , evaluation and accountability for results .
- Community engagement and participation to improve the design and implement of the FMS policy.
- The health workers have to be closely supervised to reduce absenteeism.

## References

1. Kenya National Bureau of Statistics. Kenya Facts and Figures. 2014;1–87.
2. Ministry of Health and Ministry of Planning of Kenya. Kenya Adolescent Reproductive Health and Development Policy: Implementation Assessment Report. 2013;(May):1–40. Available from: <http://www.prb.org/pdf13/kenya-policy-assessment-report.pdf> (Accessed May 16, 2016).
3. KNBS. Key Indicators 2014 Kenya Demographic and Health Survey. 2015.
4. Ministry of Health. Kenya National Health Accounts. Kenya Natl Heal Accounts [Internet]. 2012; Available from: [http://www.healthpolicyproject.com/pubs/523\\_KenyaNHA.pdf](http://www.healthpolicyproject.com/pubs/523_KenyaNHA.pdf) (Accessed May 15, 2016).
5. Kenya National Bureau of Statistics. Economic Survey 2016. 2016; Available from: [https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjthtP1oYrOAhWD1RQKHfwEDc8QFggcMAA&url=http://www.knbs.or.ke/index.php?option=com\\_content&view=article&id=369:economic-survey-2016&catid=82%3](https://www.google.nl/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjthtP1oYrOAhWD1RQKHfwEDc8QFggcMAA&url=http://www.knbs.or.ke/index.php?option=com_content&view=article&id=369:economic-survey-2016&catid=82%3) (Accessed May 16, 2016)
6. World Bank Group. Laying The Foundation For A Robust Health Care System In Kenya: Kenya Public Expenditure Review. 2014.
7. Health Policy Project\_Ministry of Health Kenya. Health Financing Profile - Kenya. 2016.
8. Ministry of Health. Kenya Household Health Expenditure and Utilisation Survey 2013. Gov Kenya [Internet]. 2014. Available from: <http://bmchealthservres.biomedcentral.com/articles/10.1186/1472-6963-12-413> (Accessed May 15, 2016).
9. Chuma J, Maina T. Catastrophic health care spending and impoverishment in Kenya. BMC Health Serv Res [Internet]. 2012;12:413. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3561146&tool=pmcentrez&rendertype=abstract> (Accessed June 3, 2016).
10. Kimani D. Catastrophic Health Expenditures and Impoverishment. 2015.
11. Declaration M, Union A, Assistance D, Countries AU, Income GN. The Abuja Declaration : Ten Years On. Heal (San Fr. 2001;(September 2000):1–4.

12. Gabrysch S, Campbell OMR. Still too far to walk: literature review of the determinants of delivery service use. *BMC Pregnancy Childbirth*. 2009;9:34.
13. Health MOF. Ministry of Health Status of Implementation of Free Maternity Services ( Fms ) Program in the Devolved Health System in Kenya. 2015.
14. Chuma J, Okungu V. Viewing the Kenyan health system through an equity lens: implications for universal coverage. *Int J Equity Health* [Internet]. BioMed Central Ltd; 2011;10(1):22. Available from: <http://www.equityhealthj.com/content/10/1/22> (Accessed June 4, 2016).
15. Joint WHO / World Bank Group. Monitoring progress towards universal health coverage at country and global levels: a framework. 2013.
16. Health Policy Project. Health Policy Project/ Kenya: Overview Evidence guides planning and monitoring for improved maternal health New Policies and Guidelines Strengthen Health System Outcomes. 2015.
17. Tobergte DR, Curtis S. Program of Action\_Adopted at the International Conference on Population and Development, Cairo 1994. Vol. 53, *Journal of Chemical Information and Modeling*. 2013. 1689-1699 p.
18. Nation U. Report of the committee on the elimination of discrimination against women\_Fiftieth session. 1995; Available from: <http://www.un.org/esa/gopher-data/ga/cedaw/14/a50--38.en> (Accessed June 5, 2016).
19. Kenya G of. The Constitution of Kenya. 2010; Available from: [http://www.lcil.cam.ac.uk/sites/default/files/LCIL/documents/transitions/Kenya\\_19\\_2010\\_Constitution.pdf](http://www.lcil.cam.ac.uk/sites/default/files/LCIL/documents/transitions/Kenya_19_2010_Constitution.pdf) (Accessed June 15, 2016)
20. Ministry of Medical Services and Ministry of Public Health & Sanitation. Health Sector Strategic and Investment Plan (KHSSP) July 2013-June 2017. 2013;(July):1-123. Available from: [http://www.who.int/pmnch/media/events/2013/kenya\\_hssp.pdf](http://www.who.int/pmnch/media/events/2013/kenya_hssp.pdf) (Accessed May 5, 2016).
21. Kibui AW, Mugo RK, Nyaga G, Ngesu L. M, Mwaniki I. N, Mwaniki B. Health Policies in Kenya and the New Constitution for Vision 2030. *Int J Sci Res Innov Technol* [Internet]. 2015;2(1):127-34. Available from: [http://www.ijssrit.com/uploaded\\_all\\_files/2737275308\\_g12.pdf](http://www.ijssrit.com/uploaded_all_files/2737275308_g12.pdf) (Accessed May 15, 2016).
22. Kenya Ministry of Health. Kenya Health Policy 2014-2030. 2014;



23. Unicef. Annual Report 2014 [Internet]. 2014. 78 p. Available from: [http://www.sanmiguel.com.ph/PDF/CMS\\_AR\\_PDF/SMC\\_AR2014\\_cd11.pdf](http://www.sanmiguel.com.ph/PDF/CMS_AR_PDF/SMC_AR2014_cd11.pdf) (Accessed May 16, 2016).
24. UN High Commissioner for Human Rights, World Health Organization (WHO). The Right to Health Factsheet 31. 2008;(31):1–52.
25. World Health Organization. Maternal mortality [Internet]. 2015 [cited 2016 Jul 31]. Available from: <http://www.who.int/mediacentre/factsheets/fs348/en/> (Accessed June 13, 2016).
26. National Council Population and Development. SDG Indicator Brief SDGs in Kenya. 2015;1–4.
27. Kenya National Bureau of Statistics (KNBS); ORC Macro. Kenya Demographic and Health Survey 2008-09. Heal (San Fr. 2010;1–314.
28. Kenya Ministry of Health. Kenya reproductive, maternal, newborn, child and adolescent health (RMNCAH). 2016.
29. Chola L, McGee S, Tugendhaft A, Buchmann E, Hofman K. Scaling up family planning to reduce maternal and child mortality: The potential costs and benefits of modern contraceptive use in South Africa. PLoS One. 2015;10(6):1–16.
30. Myint T. Orientation on Quality Maternal Health Care Service Package. In 2010.
31. WHO, UNFPA, UNICEF. AMDD: Monitoring emergency obstetric care: a handbook. Geneva WHO [Internet]. 2009;152(4):430. Available from: <http://informahealthcare.com/doi/abs/10.3109/01443611003791730> (Accessed June 20, 2016).
32. Ministry of Health Kenya. Draft free maternity service policy and implementation framework. 2015.
33. Paudel YR, Mehata S, Paudel D, Dariang M, Aryal KK, Poudel P, et al. Women’s Satisfaction of Maternity Care in Nepal and Its Correlation with Intended Future Utilization. Int J Reprod Med [Internet]. 2015;2015:783050. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4657080&tool=pmcentrez&rendertype=abstract> (Accessed June 15, 2016).
34. HERA, Health Partners Ghana. 2012 Ghana: Evaluation of the Free Maternal Health Care Initiative in Ghana. 2013;1–63. Available from: [http://www.unicef.org/evaldatabase/files/Ghana\\_130517\\_Final\\_Report.pdf](http://www.unicef.org/evaldatabase/files/Ghana_130517_Final_Report.pdf) (Accessed June 7, 2016).

35. Nahar S, Costello A. Research report. The hidden cost of “free” maternity care in Dhaka, Bangladesh. *Health Policy Plan* [Internet]. 1998;13(4):417. Available from: <http://heapol.oupjournals.org/cgi/content/abstract/13/4/417> (Accessed June 3, 2016).
36. Thaddeus S, Maine D. Too far to walk: Maternal mortality in context. *Soc Sci Med*. 1994;38(8):1091–110.
37. Davidson S. Examining Barriers to Maternal Health Care in Kenya Using the Three-Delay Framework.
38. Goals MD, Health A, Health C, Initiative M, Survival C, Renewed P, et al. Global Financing Facility in Support of Every Woman , Every Child. 2015.
39. World Health Organization (WHO). Health in 2015 from MDGs to SDGs. 2015.
40. Project P. ANNUAL EVALUATION OF THE ABOLITION OF USER FEES AT PRIMARY HEALTHCARE FACILITIES IN KENYA This publication was prepared by Thomas Maina of the Health. 2015.
41. Abuya T, Ndwiga C, Ritter J, Kanya L, Bellows B, Binkin N, et al. The effect of a multi-component intervention on disrespect and abuse during childbirth in Kenya. *BMC Pregnancy Childbirth* [Internet]. *BMC Pregnancy and Childbirth*; 2015;15:224. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=4580125&tool=pmcentrez&rendertype=abstract> (Accessed May 6, 2016).
42. Williamson N. Motherhood in Childhood: Facing the Challenge of Adolescent Pregnancy. *State World Popul* 2013. 2013;132.
43. Angelo Tomedi, Sophia R. Stroud, Tania Ruiz Maya, Christopher R. Plaman and Mutuku A. Mwanthi. From home deliveries to health care facilities: establishing a traditional birth attendant referral program in Kenya. *J Heal Popul Nutr* [Internet]. *Journal of Health, Population and Nutrition*; 2015;33(6):[7] p. Available from: <http://dx.doi.org/10.1186/s41043-015-0023-z> (Accessed May 17, 2016).
44. Wilson Ann-Marie. Country Profile: Fgm in Kenya. 2013;(May):52.
45. Banks E, Meirik O, Farley T, Akande O, Bathija H, Ali M. Female genital mutilation and obstetric outcome: WHO collaborative prospective study in six African countries. *Lancet*. 2006;367(9525):1835–41.
46. African Medical and Research Foundation (AMREF). AMREF Gender Policy And Guidelines. 2008.

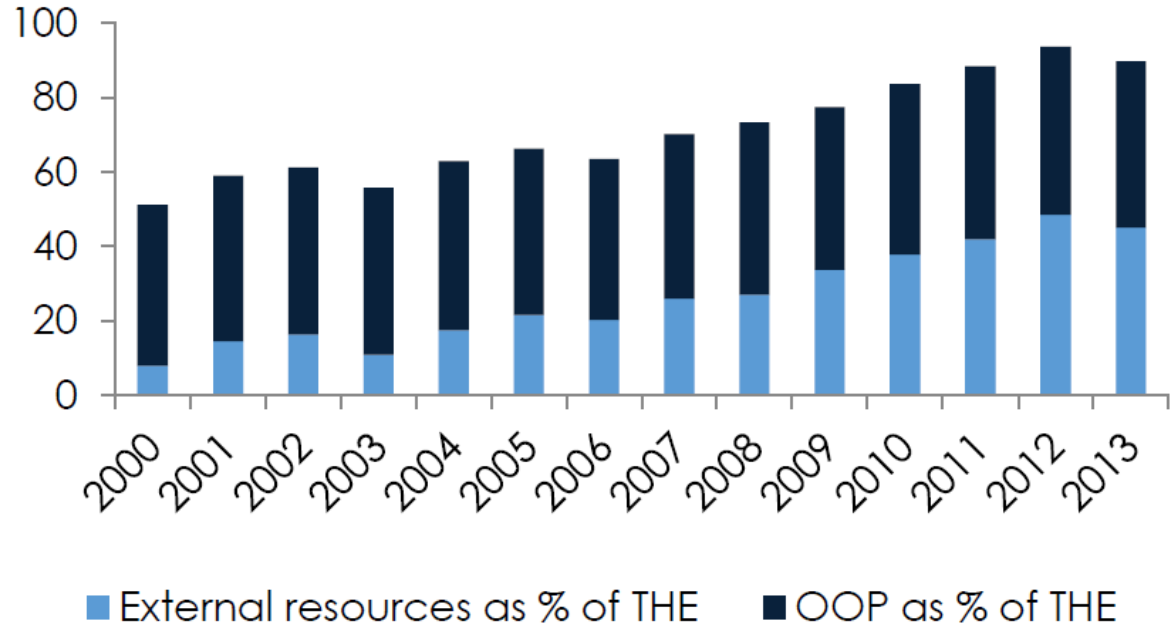
47. Charlotte Ornamark MO. Gendered Dimensions of Health Kenyan health sector. 2010.
48. World Health Organisation. Human rights and gender equality in health sector strategies: how to assess policy coherence. World Health [Internet]. 2011;1–163. Available from: [http://whqlibdoc.who.int/publications/2011/9789241564083\\_eng.pdf?ua=1](http://whqlibdoc.who.int/publications/2011/9789241564083_eng.pdf?ua=1) (Accessed April 23, 2016).
49. Ministry of Public Health and Sanitation & Ministry of Medical Services. National Reproductive Health Strategy 2009-2015. 2009;(August):1–80.
50. Bureau PR. Kenya Adolescent Reproductive Health and Development Policy: Implementation Assessment Report. 2013;(May):1–40. Available from: <http://www.prb.org/pdf13/kenya-policy-assessment-report.pdf> (Accessed May 18, 2016).
51. MoH. Joint Assessment of Kenya’s Health Sector Strategic Plan (KHSSP) November 2012. 2012.
52. World Health Organization (WHO). Toolkit on monitoring health systems strengthening: Service delivery. word Heal Organ. 2008;26(4):1–18.
53. Kitui J, Lewis S, Davey G. Factors influencing place of delivery for women in Kenya: an analysis of the Kenya demographic and health survey, 2008/2009. BMC Pregnancy Childbirth [Internet]. 2013;13:40. Available from: <http://www.pubmedcentral.nih.gov/articlerender.fcgi?artid=3585789&tool=pmcentrez&rendertype=abstract> (Accessed June 8, 2016).
54. World Bank. International Development Association Project Appraisal Document to The Republic of Kenya. 2016.
55. Williamson T, Mulaki A. Devolution Of Kenya’s Health System: The Role Of HPP. 2015.
56. The Republic of Kenya. The Kenya National Commission on Human Rights Act, 2011. 2011; Available from: [file:///C:/Users/magmeme/Downloads/The\\_Kenya\\_National\\_Human\\_Rights\\_Commissions\\_Act\\_2011\\_1.pdf](file:///C:/Users/magmeme/Downloads/The_Kenya_National_Human_Rights_Commissions_Act_2011_1.pdf) (Accessed June 20, 2016).
57. Ministry of Health. Technical Concept Note on Afya Jamii Health Plan: Delivering essential health package for Kenyans April 2015 Draft. 2015.
58. Business Monitor. Kenya insurance report. 2012.
59. World Health Organization. Monitoring the building blocks of health systems: A handbook of indicators and their measurement

- strategies. 2010;1–93.
60. Otieno KO, Submitted R, Partial IN, The OF, For R, Award THE, et al. Factors Influencing the Implementation of Free Maternal Healthcare Services in Kenya : a Case of Public Hospitals in Nairobi County. 2014.
  61. Bourbonnais BN. Implementing Free Maternal Health Care in Kenya. 2013;(November):3.
  62. Khan SH. Free does not mean affordable: maternity patient expenditures in a public hospital in Bangladesh. *Cost Eff Resour Alloc.* 2005;3(1):1.
  63. Wamalwa EW. Implementation challenges of free maternity services policy in kenya: The health workers' perspective. *Pan Afr Med J.* 2015;22.
  64. Chuma J, Maina T. Free maternal care and removal of user fees at primary-level facilities in Kenya: Monitoring the implementation and impact - Baseline Report. 2013;(May):48.
  65. Policy D. Improving Human Resources for Health :
  66. Kenya Ministry of Health. Health Sector\_Human Resources Strategy 2014-2018. :1–82.
  67. Wamalwa EW. Implementation challenges of free maternity services policy in Kenya the health workers' perspective. 2015;8688:1–5.
  68. Maina T, Chen A, Perales N. Healthcare financing options for Kenya. 2014.
  69. The World Bank. Project appraisal document to the Republic of Kenya for a Transforming Health Systems for Universal Care Project. 2016.
  70. The Republic of Kenya. Kenya Vision 2030. 2007;
  71. Kenya Ministry of Health. Ministerial Strategic & Investment Plan. 2014.
  72. Government of Kenya. Kenya Voucher Program: An Output Based Aid Initiative [Internet]. 2008 [cited 2016 Aug 11]. Available from: <https://www.k4health.org/toolkits/fpsuccess/kenya-voucher-program-output-based-aid-initiative> (Accessed June 20, 2016).
  73. UN General Assembly. International Covenant on Civil and Political Rights. United Nations, Treaty Ser [Internet]. 1966;999(14668):171. Available from: <http://www.refworld.org/docid/3ae6b3aa0.html> (Accessed June 18, 2016).

74. Nation U. The International Covenant on Economic, Social and Cultural Rights. 1996.
75. United Nation. Convention on the Rights of the child. 1990.
76. Nations U. Convention on the Elimination of All Forms of Discrimination against Women. Annu Rev Popul Law. 1987;14(September 2009):133.
77. United Nations Population Fund. Programme of Action of the International Conference on Population Development. 20th Anniversary Edition. 2014. 1-296 p.
78. Ministry of Health Kenya. The Kenya National Patients' Rights Charter. 2013. p. 1-14.
79. The Republic of Kenya. Prohibition of female genital mutilation act. 2012;(32).
80. Republic of Kenya. Laws of Kenya\_The Children Act. 2009.
81. Bhutta ZA, Chopra M, Axelson H, Berman P, Boerma T, Bryce J, et al. Countdown to 2015 decade report (2000-10): taking stock of maternal, newborn, and child survival. Lancet. 2010;375(9730):2032-44.
82. United Nations. Sustainable Development Goals. Statew Agric L Use Baseline 2015. 2015.
83. Nation U. The SDGs: Reflections on the implications and challenges. 2015.
84. The World Bank. Business Plan for the Global Financing Facility in Support of Every Woman Every Child. 2015.
85. Barker, G., Greene, M., Nascimento, M., Segundo, M., Ricardo, C., Taylor, A., Aguayo, F., Sadler, M., Das, A., Singh, S., Figueroa, J. G., Franzoni, J., Flores, N., Jewkes, R., Morrell, R. and Kato J. Men who Care: A Multi-Country Qualitative Study of Men in Non-Traditional Caregiving Roles. Internatonal Cent Res Women Rio Janeiro Inst Promundo. 2012.
86. Barker, G., Contreras, J.M., Heilman, B., Singh, A.K., Verma, R.K., and Nascimento ME. Evolving Men: Initial Results from the International Men and Gender Equality Survey (IMAGES). Int Cent Res Women Rio Janeiro Inst Promundo. 2011.

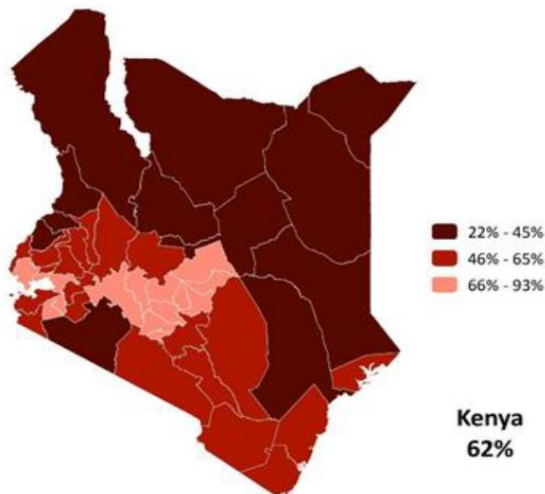
## Annex

### Annex 1: Shares of Total Health Expenditures (THE)



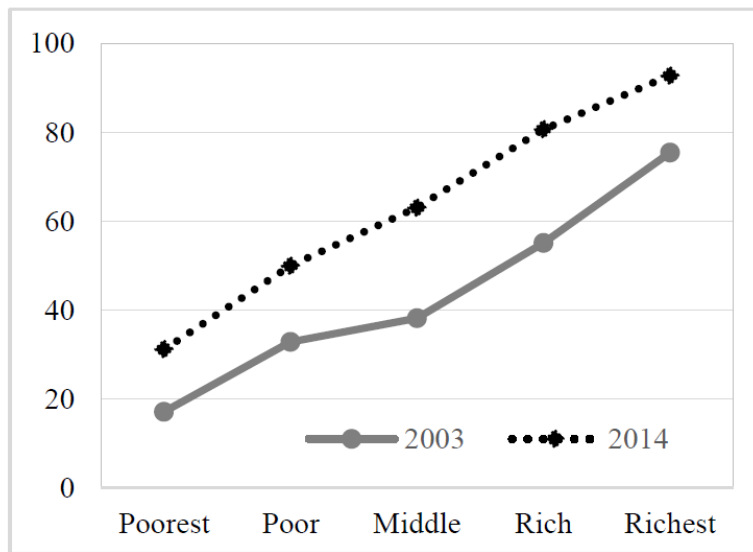
Source: WHO, 2015.

### Annex 2: Skilled Birth Attendance by County



Source: KDHS 2014.

### Annex 3: Skilled Birth Attendance by Wealth Quintile



Sources: KDHS 2003; KDHS 2014.

## Annex 4: Hierarchical document and planning process in Kenya

