

**LITERATURE REVIEW ON FACTORS AFFECTING
THE UTILIZATION OF FAMILY PLANNING
SERVICES AMONG WOMEN LIVING WITH HIV IN
TANZANIA**

JEAN GILLEARD LYATUU

TANZANIA

48TH International Course in Health Development
September 19, 2011 – September 7, 2012

KIT (ROYAL TROPICAL INSTITUTE)
Development Policy & Practice/
Vrije Universiteit Amsterdam

A literature review on factors effecting the utilization of family planning services Among Women Living With HIV in Tanzania.

A thesis submitted in partial fulfilment of the requirement for the degree on Master of Public Health

By

Jean Gilleard Lyatuu
Tanzania

Declaration:

Where other people’s work has been used (either from a printed source, internet or any other source) this has been carefully acknowledged and referenced in accordance with departmental requirements.

The thesis “A literature review on factors effecting the utilization of family planning services among women living with HIV in Tanzania”.

” is my own work. I have no objection against publishing my thesis on website

Signature.....

48Th International Course in Health Development (ICHHD)
September 19, 2011 – September 7, 2012
KIT (Royal Tropical Institute)/ Vrije Universiteit Amsterdam
Amsterdam, The Netherlands

September 2012

Organized by:

KIT (Royal Tropical Institute), Development Policy & Practice
Amsterdam, The Netherlands

In co-operation with:

Vrije Universiteit Amsterdam/Free University of Amsterdam (VU)
Amsterdam, The Netherlands

Table of Contents

LIST OF FIGURES	II
LIST OF TABLES	II
DEDICATION	III
ACKNOWLEDGEMENT	IV
DEFINITION OF TERMS	V
ABBREVIATION	VI
ABSTRACT	VII
INTRODUCTION.....	VIII
CHAPTER ONE: BACKGROUND INFORMATION	1
1.1 TANZANIA PROFILE.....	1
1.2 HEALTH SECTOR	1
1.3 HUMAN RESOURCE FOR HEALTH	3
1.4 FAMILY PLANNING SITUATION IN TANZANIA	3
1.5 HIV IN TANZANIA	5
1.6 UNMET NEEDS	6
CHAPTER TWO: PROBLEM DESCRIPTION, OBJECTIVES AND METHODOLOGY	7
2.1 PROBLEM DESCRIPTION	7
2.2 OBJECTIVES	8
2.3 METHODOLOGY -LITERATURE REVIEW	8
2.4 CONCEPTUAL FRAMEWORK	9
2.5 LIMITATION OF THE STUDY.....	11
CHAPTER THREE: POLICY RELATED FACTORS-RESULTS	12
3.1 NATIONAL HEALTH POLICY	12
3.2 RIGHT TO ACCESS AND UTILIZE FAMILY PLANNING SERVICES	14
3.3 AVAILABILITY, USE AND APPROPRIATENESS OF FAMILY PLANNING SERVICES GUIDELINE	15
3.4 AVAILABILITY OF HUMAN RESOURCE	15
3.5 SUMMARY OF POLICY RELATED FACTORS	16
CHAPTER FOUR: SERVICE RELATED FACTORS.....	18
4.1 SKILLS AND ATTITUDE OF HEALTH CARE PROVIDERS	18
4.2 AVAILABILITY OF FAMILY PLANNING SUPPLIES.....	19
4.3 ACCESS TO AFFORDABLE FAMILY PLANNING SERVICES FOR HIV POSITIVE WOMEN.....	20
4.4 ACCESS TO QUALITY FAMILY PLANNING SERVICES	21
4.5 AVAILABILITY OF USER FRIENDLY SERVICES	21
4.6 LINKAGE OF FAMILY PLANNING AND HIV SERVICES.....	21
4.7 SUMMARY OF SERVICES RELATED FACTORS	22
CHAPTER FIVE: CLIENTS RELATED FACTORS	24
5.1 KNOWLEDGE ABOUT FAMILY PLANNING AND USE	24
5.2 FERTILITY DESIRE.....	24
5.3 EDUCATION LEVEL	25
5.4 HIV STATUS	26
5.5 SUMMARY OF CLIENT RELATED FACTORS	26
CHAPTER SIX: COMMUNITY RELATED FACTORS	27

6.1 MISCONCEPTION AND ACCEPTANCE OF FAMILY PLANNING METHODS	27
6.2 RELIGION BELIEFS	27
6.3 CULTURAL INFLUENCE, FAMILY AND PARTNER SUPPORT	28
6.4 SUMMARY OF COMMUNITY RELATED FACTORS	28
CHAPTER SEVEN: DISCUSSION, CONCLUSION AND RECOMMENDATION	29
7.1 POLICY RELATED FACTORS	29
7.2 SERVICE RELATED FACTORS	31
7.3 CLIENTS AND COMMUNITY RELATED FACTORS	33
REFERENCE	36
ANNEXES.....	44
ANNEX1: MAP OF TANZANIA	44
ANNEX 2: THE CURRENT CONTRACEPTIVE USE BY AGE	45
ANNEX 3: CONCEPTUAL FRAMEWORK FOR HIV PREVENTION	46
ANNEX 4: CONCEPTUAL FRAMEWORK FOR FERTILITY DESIRE	47
ANNEX 5: CONCEPTUAL FRAMEWORK ON THE UTILIZATION OF FAMILY PLANNING AMONG SEXUALLY ACTIVE HIV PEOPLE.....	48

LIST OF FIGURES

Figure 1: Organization of Health Services in Tanzania	2
Figure 2: The percentage of married women using family planning in Tanzania from 1991-2010	5
Figure 3: Adapted Conceptual Framework (Egessa, 2010)	10
Figure 4: Sources of family planning supply verses the use in Tanzania.	19
Figure 5: Family planning discussion in HIV care & treatment clinic.....	25

LIST OF TABLES

Table 1: Types of health facilities and ownership	2
Table 2 : Summary of Human Resorce for Health Situation	16

DEDICATION

This thesis is dedicated to my lovely parents Mr& Mrs Gilleard Reuben Lyatuu for their encouragement, spiritual and moral support towards my studies and life.

ACKNOWLEDGEMENT

I thank God for giving me His guidance throughout the year and good health. For caring for my parents and others who depend on my support.

My sincere gratitude and thanks goes to Netherland Organization for international cooperation (NUFFIC) for granting me scholarship to pursue my Masters studies here in Netherland.

My heartfelt goes to the course administration and coordination and the whole education team in Royal Tropical Institute (KIT) for their support and guidance towards my studies and knowledge gained which will develop my career

My very special thanks go to my thesis back stopper, whom I have worked with closely since the initial development to the end.

A special word goes to my parents, who kneeling down and call God with all their faith and ask for my success, I should not forget to mention my elder sister Jane, who decide to step on my shoes throughout my absence despite her being in a Masters course also.

Lastly, my classmates ICHD "cohort group" for making the year end peaceful and joyful with lots of fun and sharing of constructive ideas. I will miss them.

DEFINITION OF TERMS

Accessibility of services	proximity/ distance to reach the services area
Dual protection	Is the strategy used to prevent both unwanted pregnancy and sexual transmitted infections including HIV where there is correct and consistence use of condom in conjunction with other contraceptive method
Family planning	is allowing individual or couples to have the desired number of children they want and at what interval.
Family planning methods	are methods used to prevent pregnancy or space children or limit the number of children
Fertility desire	need/wish for couples or individual to reproduce
Misconception	false perceptions
Modern family planning	Hormonal contraceptive methods that includes: oral, injectables and barrier methods
Natural family planning	Methods includes calendar, rhythm and breastfeeding
Utilization	Use
Permanent family planning	Includes surgery (bilateral tubulisation and vasectomy)
Primary level	First level of contact in health care service can be at the community or dispensary or health centre.
Secondary level	Second level of health care services District hospital
Tertiary level	advanced/specialised level of health services
Traditional family planning	Differ with tribes
Unmet need	is the discontinuation between women's fertility preference and what she does to avoid or prevent pregnancy

ABBREVIATION

ANC	Ante-Natal Care
ART	Anti-Retroviral Therapy
FHI	Family health international
FP	Family Planning
HIV	Human Immune Virus
HSR	Health Sector Reform
HSSP	Health Sector Strategic Plan
IUCD	Intra Uterine Contraceptive Devise
LGA	Local Government Authority
MCHA	Maternal and Child Health Aide
MOHSW	Ministry of Health and Social Welfare
MSD	Medical Store Department
MST	Marie Stopes Tanzania
NACP	National AIDS Control Program
NBS	National Bureau of Statistics
NBS	Tanzania Demographic Health Survey
NHA	National Health Account
NIMR	National Institute for Research
NPGRCH	National Policy Guideline for Reproductive and Child health
PMTCT	Prevention of Mother To Child Transmission
PRSP	Poverty Reduction Strategic Plan
PSI	Population Service International
RCH	Reproductive and Child Health
RH	Reproductive Health
SSA	Sub-Sahara Africa
STI	Sexual Transmitted Infection
TACAIDS	Tanzania Commission for AIDS
TBS	Tanzania Baseline Survey
THMIS	Tanzania HIV/AIDS and Malaria Indicator survey
UNAIDS	United Nation on HIV/AIDS
UNGASS	United Nations General Assembly
UNICEF	United Nations Children’s Fund
URT	United Republic of Tanzania
VCT	Voluntary Counselling and Testing
WHO	World Health Organization

ABSTRACT

Background: Despite known advantages of family planning (FP) services, there has been a slow increase in uptake of services in Tanzania. HIV positive women have limited access to FP services. Governments' policies and guidelines have ensured access to free Reproductive Health (RH) and FP services. Several challenges contributed to low uptake of family planning services in HIV positive women.

Objective: To determine relevant factors affecting the utilization of FP services among women living with HIV and provide recommendations to improve the uptake of FP services.

Method: Literature review done on utilization of family planning services among HIV positive women in Tanzania and SSA.

Findings: A combination of factors contributes to low uptake of FP services in HIV positive women these includes policy and services delivery related factors studied focused on public, private, private for profit providers. Unavailability of FP guideline is among challenges observed that are within government capacity to improve RH services including FP to HIV positive women.

Other factors were related to clients and community. Knowledge on FP services is importance to HIV positive women is a major issue.

CONCLUSION: In spite efforts by the government to improve access to FP services, women living with HIV are not targeted. It is important for the government to replicate efforts of FP implementing partners and roll out FP services to HIV positive women.

RECOMMENDATION: The government should reinforce RH policy to ensure FP services to HIV positive women and educate community on benefits of modern FP to HIV positive women.

Key words: Utilization; socio-cultural practices; family planning; fertility desire; HIV

Word count: 11,174

INTRODUCTION

As midwife with clinical and administrative experience, I faced several challenges in implementation of RH interventions at different levels of health services. My interest was particularly in HIV reduction strategies and family planning (FP) implementation. A particular concern from my personal experience was the challenges faced by HIV positive women in accessing FP services.

In Tanzania the unmet need for FP is currently at 50% and contraceptive prevalence is 29 % (NBS, 2010). HIV prevalence in the country is 5.7% and is 9% among pregnant women. This data accounts for the total population.

Globally the prevalence rates of the contraceptives are 63% and Unmet need for family planning is 11% (WHO, 2010).

FP is among 7 components of RH which includes; Safe Motherhood, Family Planning, prevention mother to child transmission, malaria, expanded program of immunization, integrated management of childhood illness and adolescents. The implementation has been a challenge in the country. There is a chronic scarcity of resources in RH with limited funding and human resources.

The FP services are offered free of charge to all women in the country however utilization still remains a challenge.

The NBS (2010) reports low utilization of FP services among women aged 15-49. Speizer (2007) reported on provider related barriers to accessing FP resulting in low utilization of services in general.

Currently there are no studies done to assess access and utilization of FP services amongst HIV positive women in Tanzania.

I would like to conduct a study on factors affecting utilisation of FP use among HIV positive women.

The study is literature review based on literature available and personal experiences. The results of my study will be shared with the RH department in the Ministry of Health.

This paper comprises of seven chapters whereby chapter one provides background information of Tanzania including health sector information related to FP use. Chapter two describes the problem, objectives and methodology. The study findings are explained in three, four, five and six and chapter seven contains the discussion conclusion and recommendations.

CHAPTER ONE: BACKGROUND INFORMATION

1.1 Tanzania profile

United Republic of Tanzania is among East African covering approximately 94,500 square kilometres. About 60,000 square kilometres of the land surface is covered by water (includes 5 big lakes). Climatic conditions include two rainfall seasons, March to May ranging from minimum to heavy rains. A long dry period extended from June to October (NBS, 2010)

Tanzania has an estimated population of 43,187,823 (2012 census projection) with a growth rate of 2.4% per year and fertility rate 5.4 per child birth in a year (NBS, 2010). The life expectancy at birth for male and female lies between 53/58 years and the under 5 mortality is 108 in 1000 live births. Approximately 65% of the population is below the age of 25 (MOHSW, 2008b).

The country has political stability with an increasing Gross Domestic Product rate of 6.7% per year. Despite this increase, an estimate of 57% of the population is living under the poverty line of \$1 per day (MOF, 2011).

1.2 Health Sector

In Tanzania, the health sector strategic plans and poverty reduction strategy are amongst the government's strategies set to ensure successful implementation of the health policy. These set of free policies includes access to maternal health services (UNFPA, 2011).

The health system in Tanzania covers the village health post referral up to tertiary level. The health system reforms led to decentralization in the chain of service delivery. The reforms included a merger of Ministry of Health (MOH) and Ministry of Social Welfare (MOHSW) in 2006.

Provision of services is divided into three levels.

The primary level comprise of village health posts, dispensaries and health centres. The village health posts were identified to serve at household level through trained village health workers (VHW) who provide basic FP services.

Dispensaries work within the population of 10,000 within 5km radius. It provides basic primary health care and supervises the village health posts.

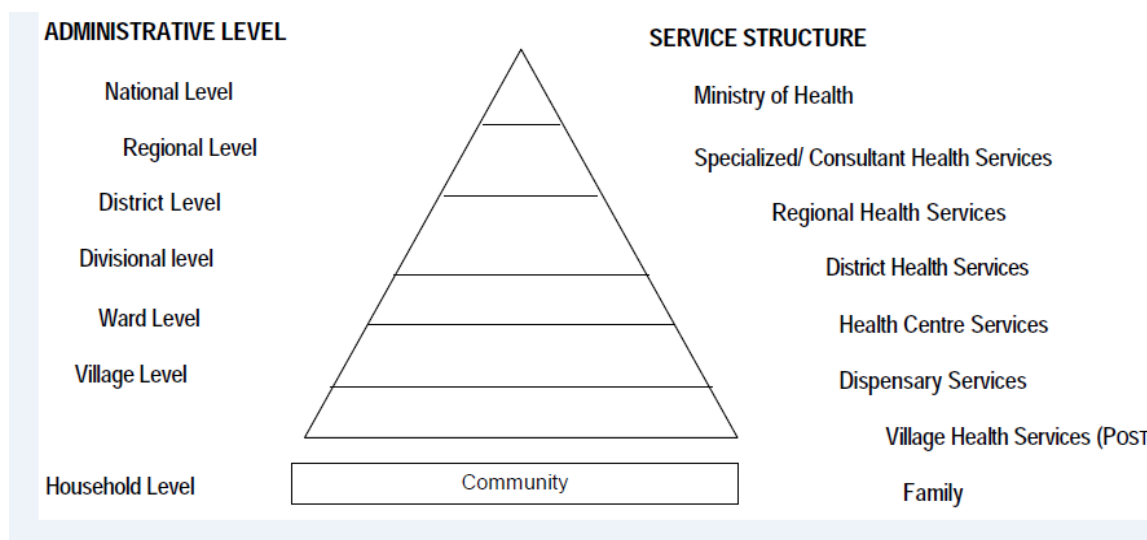
The Health centres works within the population of 50,000 and provide a higher level of service compared with the dispensary. It has the capacity

to perform minor procedures including 24hours admission. FP services are also available.

The secondary level contains District Hospital as the first referral. It serves up to 250,000 populations with specialised medical personnel to provide back-up surgery, meeting obstetrical emergencies and other life saving procedures and referral services. They provide access to comprehensive family planning. Permanent family planning services (Vasectomy, tubal ligation) are also available.

The tertiary level includes the regional hospital and advanced specialized services. It serves up to 1,000,000 populations. The tertiary level of health care is mostly teaching institutions with all advanced technology (MOHSW, 2007a). Major medical/ gynaecological conditions, post abortion care, management of infertility are performed.

Figure 1: Organization of Health Services in Tanzania



(Source: <http://www.moh.go.tz>, 2006)

Delivery of health services is by the public and private sector. However the public sector through MOHSW covers 60% while the private sector covers 30% and private for profit covers 5% of health service delivery (NHA, 2006).

Table 1: Types of health facilities and ownership

Type	OWNERSHIP			TOTAL
	GOVERNMENT	PRIVATE/PARASTATAL	FBO	
National Hospital	1	-	-	1
Specialized Hospital	5	2	-	7
Regional Hospitals	21	-	-	21

District Hospital	55	35	13	
Health centre	379	61	125	565
Dispensaries	3324	924	658	4930

Source: MOHSW 2008b

The Health Sector Strategic Plan has 5 components of which three among the strategies have an impact on increasing utilization of family planning to women living with HIV. These include; health promotion at primary level, preventive services and care and treatment at secondary level (MOHSW, 2008c).

1.3 Human resource for health

Shortages of qualified personnel are among the challenges facing the public and private health sector. Inadequate or low number of qualified health personnel is evident in the rural and hard to reach areas.

The contributing factors include geographical location, poor infrastructure, lack or poor staff retention strategies, low output of qualified staff from medical schools. The human resource demand for medical cadre is at 65%. Currently, the doctor-patient's ratio is 1: 23,000-25,000 and nurse-patients' ratio is 1:6000-10,000 (Msuya *et al.*, 2004). WHO standards recommendations for human resource for health are 1 medical doctor per 10,000.

1.4 Family planning situation in Tanzania

Sub-Sahara Africa's (SSA) current fertility rate is 2.5 (Cahu, 2011). The use of modern family planning methods among women of reproductive age including HIV positive women is low. Women living with human immune-deficiency virus (HIV) and acquired immune-deficiency syndrome (AIDS) in SSA constitute 59% of all infected adults.

Family planning if used appropriately can prevent one in every three maternal deaths that are likely to occur by allowing women to delay pregnancy, space birth, avoid unintended pregnancies and abortion (Chibwasha *et al.*, 2011). Family planning also contributes to the reduction of vertical transmission of HIV and transmission among couples (WHO, 2011).

The unmet need of family planning is still an obstacle on the uptake of contraceptive in Sub Saharan African countries. Approximately 25% of HIV positive women aged 15-49 years have unmet need to family planning (UNAIDS, 2012c and Maki, 2012)¹. Moreover, there is no data showing use of family planning services among HIV positive women in SSA (Delvaux *et al.*, 2007)

¹ Definition of unmet need: not desiring pregnancy for the next 6 months and not using any FP method.

In Tanzania, the current fertility rate is estimated to be 5.4% (NBS, 2010). However, there are service indicators for measuring fertility rates which includes; population growth rate (2.9%), contraceptive prevalence (29%) and unmet need for family planning is 50%. This figure does not separate the unmet need for women living with HIV (NBS, 2010). According to guidelines for FP services, both women and men of reproductive age group 15-49 years are allowed to decide and use FP services (MOHSW, 2010).

Several studies have been done to assess the trends of family planning services in the country. MOHSW as the main implementer, contribute to 65% on availability of modern contraceptive in public, private and private for profit health facilities (NBS, 2010).

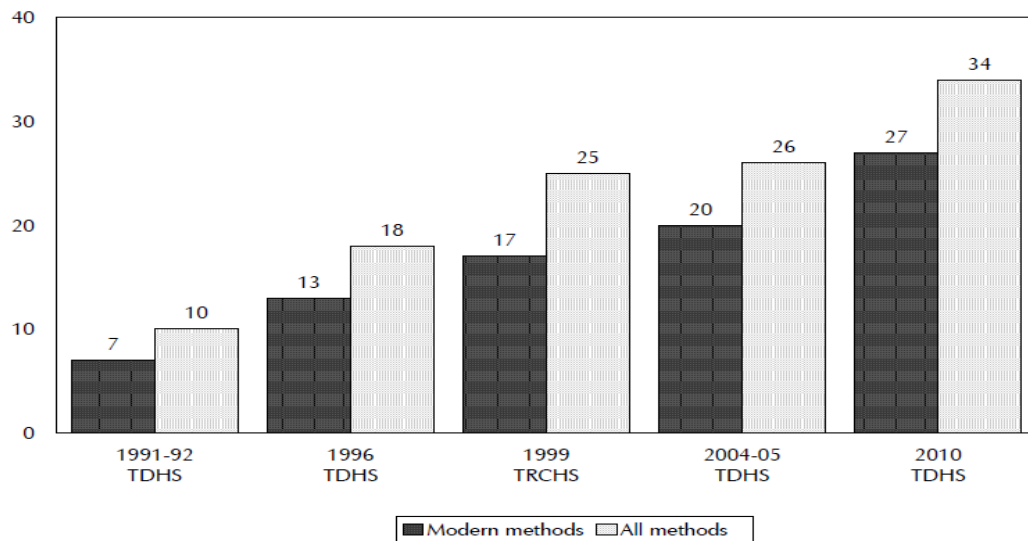
Types of family planning methods available in Tanzania include; modern and traditional family planning. These methods are provided in primary and secondary level. The modern family planning methods includes; hormonal and barrier methods for example pills, injections, implanol, condom and Intra Uterine Contraceptive Device (IUCD). Permanent FP methods available include tubal ligation and vasectomy. Traditional FP methods (sometimes mixed with natural methods are popular methods practiced. These methods include; prolonged breastfeeding, rhythm (through vaginal secretion) and calendar (NBS, 2010). There are other local FP methods used depending on different tribes includes; tying a piece of stick around the waist and other herbs (Ernest, 2011).

According to NBS (2010), hormonal injectables methods are the most popular (11%). Emergency contraceptive methods are also available.

Stock out of contraceptives is common in both rural and urban (Fleischman, 2012).

Since 1992 there has been an increase in trends of family planning utilization. However, it has stagnated since 2005 (NBS, 2010).

Figure 2: The percentage of married women using family planning in Tanzania from 1991-2010



Source: (NBS, 2010)

Family planning services are among four strategies of comprehensive PMTCT. These strategies are aimed at helping women living with HIV to prevent unintended pregnancies, transmission of HIV from mother to child (MTCT), HIV transmission to women of reproductive age and prevention of unintended pregnancies (WHO, 2007; Fleischman, 2012).

WHO continues to recommend consistent use of condom and hormonal family planning methods as effective prevention of unintended pregnancy and HIV transmission (IRIN, 2012).

1.5 HIV in Tanzania

Tanzania is among the Sub Saharan African countries with high prevalence of HIV infection. The first case of HIV was identified in 1983 in the northern part of the country from Uganda. The prevalence of HIV in Tanzania has been decreasing from 12.4% in 2005 to 5.7% in 2011. HIV prevalence differs within the country whereby at the northern highlands HIV prevalence is 15 and the lowest 1% in the islands (THMIS, 2010; TACAIDS, 2012).

The important mode of HIV transmission is heterosexual contributing to 80% of infected the cases. The HIV prevalence is currently 3.4% for women and for men 1.4% (UNGASS, 2012).

High risk behaviours contributing to increase HIV transmission in the country include; concurrent partnership, early sex initiation, injecting drug use, increase in mobile and displaced households in mining and fishing areas, men having sex with men and female sex workers (UNGASS, 2010).

As part of the health sector reforms responding to the HIV epidemic, the government established the national HIV control program (NACP) as the technical implementer.

More than 85% of the budget for HIV prevention activities is covered through external donor funding.

1.6 Unmet needs

In Tanzania, there is 50% of unmet need for family planning to women. However this figure does not separate the unmet need for women living with HIV (NBS, 2010). In reference to the study done by Pebody (2011) on contraception and conception found 21% of HIV positive women have unmet need to family planning. Nine percent (9%) of pregnant women attending ANC were found to have HIV (UNAIDS, 2009; TACAIDS, 2011)

The effectiveness of preventive programs has contributed to the reduction of HIV prevalence from 12% in 2006 to 5.7% in 2011 (UNAIDS, 2009; TACAIDS, 2010). Currently, 93% of health facilities in the country are providing PMTCT services through reproductive and child health clinics (UNGASS, 2012).

The comprehensive HIV prevention strategies include family planning interventions that are implemented by government and non-governmental institutions/health facilities based on national HIV policy guide (Mujinja *et al.*, 2009).

CHAPTER TWO: PROBLEM DESCRIPTION, OBJECTIVES AND METHODOLOGY

2.1 Problem Description

Family planning services began as a component of maternal and child health services in 1989; implemented by the government through the family planning association (UMATI). The FP guidelines for service delivery were developed in 1994. Currently, FP services are provided at primary and secondary levels. 90% of the population has been reached with family planning information (NBS, 2010).

The second component of the 5th millennium development goal targets increasing FP prevalence to 60%, by 2015 (UNDP, 2011). Tanzania is yet to achieve its expected target for family planning prevalence, despite family planning services are available to all when you say all you are including HIV-infected women of reproductive age for free. However, there are no family planning services targeted to women living with HIV.

According to Kinemo (1997) the reasons for using FP services include fertility control, preventing unintended pregnancies, birth spacing and preventing STI's including HIV. The effective use of family planning methods (as dual protection) to HIV positive women may contribute to the primary prevention of HIV to the unborn child by 30% (Chibwasha *et al.*, 2011; Duerr *et al.*, 2005)

Approximately 760,000 women in Tanzania, are living with HIV/AIDS (UNAIDS, 2010a). Only 38% of women living with HIV reported to have discussed their fertility desire and family planning issues with health care provider (Mbatia *et al.*, 2011).

No specific study has been done to assess the uptake of family planning services among HIV positive women. Further, studies show that 50% of unintended pregnancies among women living with HIV occur as a result of lack of social support and access to family planning services (Duerr *et al.*, 2005; WHO, 2011).

A literature review on factors affecting access and utilization of family planning services among HIV positive women needs to be explored and documented. I would like to investigate relevant factors affecting the access and utilization of family planning targeted at HIV positive women, do women living with HIV use FP methods? What are the barriers they face to access FP services?

2.2 Objectives

Main Objective

To explore relevant factors affecting the access and utilization of FP services among women living with HIV and provide recommendations to improve the uptake of family planning services.

Specific Objective

A literature review on factors affecting access and utilization of family planning services among HIV positive women needs to be explored and documented. I would like to investigate relevant factors affecting the access and utilization of family planning targeted at HIV positive women, do women living with HIV use FP methods? What are the barriers they face to access FP services?

- To analyse clients related factors and community related factors that affecting the utilization of family planning among women living with HIV in Tanzania.
- To identify gaps in and recommend the implementation of family planning services to HIV positive women

2.3 METHODOLOGY -Literature Review

The accomplishment of this thesis is based on the review of literature and studies done on utilization of family planning among women with HIV in Tanzania and other Sub Saharan African countries. The information gathered includes the family planning situation and related unmet need, family planning and HIV policy and guidelines on implementation of services. The stem of information was driven from the report of Tanzania Demographic Health Survey (TDHS). Other sources were from the National AIDS control program, Tanzania Commission for AIDS and other HIV implementing partners.

Data was collected from electronic databases published in English including: Science direct, Google scholar, PubMed, Biomed Central. Review of reports from international organizations and local non-governmental organization implementing family planning and HIV programs in Tanzania was done. Government website like MOH, NACP, TACAIDS, and RH were also visited. Gray literature from UN bodies such as WHO, UNFPA, UNDP, World Bank was accessed and reviewed.

Inclusion Criteria: Literature from Tanzania is included from 1994 after first review of FP guideline to 2012 where discussion on comprehensive FP services included in draft FP/HIV implementation guideline (still unpublished). Other literature the best practices found on as the result of linking family planning and HIV in Sub Saharan African Counties.

Exclusion criteria: Literature prior to 1994 before implementation of the FP guidelines was excluded.

Key search words included combinations of the following words using logical co-ordinators and; in; to Unmet needs for family planning, HIV, Family planning methods, Barriers, Utilization, Contraceptive prevalence

2.4 Conceptual framework

The identification of an appropriate conceptual framework was done through intensive review of various research studies conducted in Ethiopia, Uganda, Kenya and Zambia.

Several conceptual frameworks for reproductive health were reviewed containing elements of HIV, family planning and both HIV and family planning. The first framework was based on fertility desire of HIV positive women whereby variables like clinical indicators, HIV optimism regarding health, childbearing mothers, knowledge on mother to child transmission (MTCT), provider communication and perceived desire for children were analysed. It further analyse socio demographic variables associated with fertility. However, this framework did not consider external factors like policy, services related and community factors.

The second conceptual framework was based primary prevention of HIV which includes prevention of unintended pregnancy among HIV positive women, PMTCT, provision of appropriate treatment for STI's and HIV prophylaxis. However, the framework was not adopted because it focused more on the community factors and did not consider individual factors that may contribute to low use of services.

The Egessa (2010) conceptual framework on "family planning and HIV to sexually active people living with AIDS" in Uganda was adopted.

Egessa described that utilization of family planning in people living with HIV was influenced by complex of factors.

These factors include:

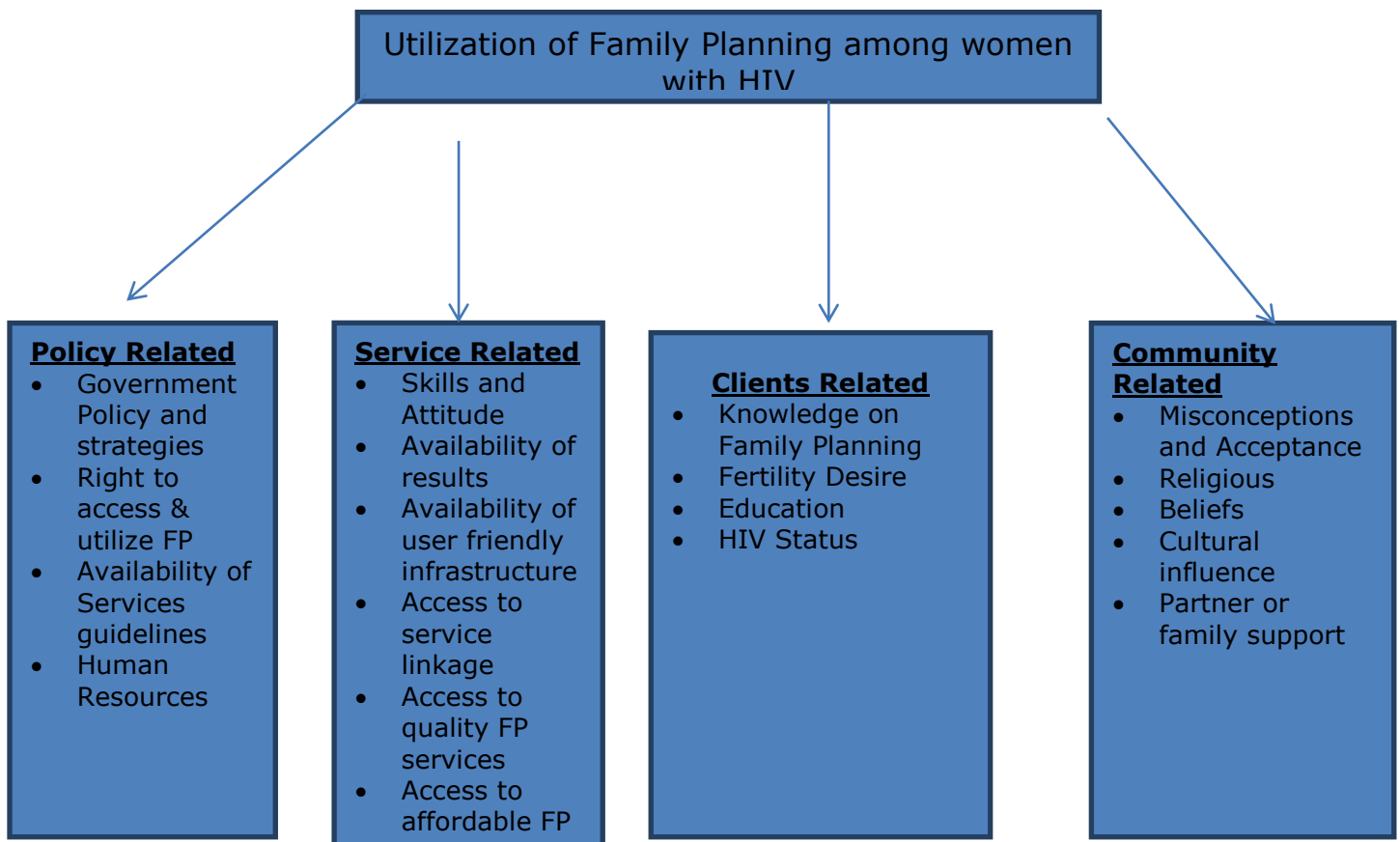
- Client related factors were; knowledge on family planning, level of education, fertility desire in HIV positive status and age.
- Community related factors influencing family planning use to HIV positive and HIV negative women includes; religious teachings, cultural norms that discourage family planning use, peer pressure and lack of partner/family support.
- Policy related factors involve right to have children and access to free health services.
- Service related factors include skills and attitude of the provider, availability of FP supplies, access to FP services, integration of family planning and HIV services and quality of FP services in the Uganda.

During the adaptation of the framework, some amendments were done Egessa’s conceptual framework to make let the framework suitable for the target group.

Four chapters were developed; Policy related, Service related, Clients related and Community related factors were reviewed to analyse factors affecting the utilization of family to HIV positive women in Tanzania. For simplicity of the study, the following variables were studied;

- Policy related factors include relevant government policies and strategies, right of clients to access and utilize FP services, availability of updated family planning and HIV guidelines and human resource factors that contributes to low utilization of family planning to HIV positive women.
- Service related factors that were studies includes; provider skills and attitudes on provision of FP/HIV services HIV positive women, availability of friendly infrastructure (privacy, staff approach during services), access to service linkages (FP/HIV), access to comprehensive FP services and access to affordable FP services.
- Client related factors include variables like knowledge on FP, fertility desire, education levels and HIV status of a woman.
- Community factors include; Misconceptions and acceptance of family planning, religious beliefs, cultural influence, partner and family support.

Figure 3: Adapted Conceptual Framework (Egessa, 2010)



2.5 Limitation of the study

There are no specific interventions done under MOHSW with regards to access of family planning among the HIV positive women.

Most studies done by MOHSW on family planning, focused on the whole population and not the target group of women living with HIV.

Data available was collected was from FP and HIV implementing partners like Pathfinder, FHI and private public partnerships with the government of Tanzania.

Due to time constraints, the researcher was limited a literature review that was subject to data availability. An in-depth research could have come up with more information if primary data was collected from Reproductive Health and HIV care and treatment clinics.

It was difficult to access the updated versions of the guidelines for family planning and new HIV policy on the government websites as only draft versions (Unpublished).

CHAPTER THREE: POLICY RELATED FACTORS-RESULTS

This chapter aims to present the findings and analyse based on literature review of factors affecting utilization of family planning services among HIV positive women in Tanzania. It will focus on various variables found in the conceptual framework of Egessa. The analysis of variables related other government policies and strategies having an impact on increasing the uptake of family planning service.

The operation of the Tanzanians' health sector is under the directives of the Government health Policy. HSSP III in partnership with millennium development goals ensured family planning services were accessible to the population. Several policies have direct or indirect impact to utilization of family planning or reproductive health services.

3.1 National Health Policy

The first health policy in Tanzania was formulated in 1967 and revised in 1990 and 2001. It has incorporated challenges facing Tanzania's health sector. The health policy aimed at providing support to the health sector and strengthens its capacity on delivering of health services to the population.

In Tanzania, government priorities are focused to the Health sector. This is due to the believe that, health sector contributes to the increase of the country development. The vision of health policy focuses on ensuring responsiveness in delivering of health services. The policy directs its attention to the key population which include pregnant women, under-five children and elderly people. The MOH is responsible to ensure people/community have access to quality basic health care services which is equitable, accessible and affordable including free reproductive health services and family planning in both rural and urban communities. The National policy guideline for reproductive health services emphasized that RH services incorporate dual protection among family planning services to HIV positive women (NPGRCH, 2003)

The last review of the policy was done in 2001. Among other objectives to increase uptake on FP services, the policy will;
Ensure availability of medical supplies and equipments, availability of qualified/competent medical personnel; create awareness of health problems to other sectors and to the whole community through health promotion and increase partnership with private health providers.

In order to ensure effectiveness on implementation of the national health policy, strategies were developed that will improve family planning uptake and contributes to the reduction of HIV among community.

Health Sector Reforms

The aim of establishing health sector reform was to implement the challenges facing the health sector and improve the quality of service delivery. According to a study by Semali (2003) on “*understanding stakeholder role on HSR*”, the overall goals includes: improve health service delivery and ensure satisfaction to the user, increasing access to the key population (pregnant women, under-five and elderly); efficiency and effectiveness in health services delivery.² The health sector reforms have different components of which decentralization is the main component. In Tanzania, the health sector involves devolution where there is shift of power and authority from the national level to the lower, including, administration, personnel, political and financial power. The central level (MOH) is deliberately looking on policy issues (Semali *et al.*, 2003).

The local government authorities (LGA) were given responsibilities to support and improve the capacity of service delivery at primary health care. The development of comprehensive council health plans and budget were done LGA based on priority health problems and targets and indicators to be achieved. The MoH main task is to ensure health service delivery are adhered to standards of national health policy of practice and building capacity to local government authorities to ensure deliverable services (MOHSW, 2008b and MOHSW, 2007a). Health sector strategic plans were develop with focus on improving health care service. Improving reproductive health services that include family planning is among the priority health interventions to comprehensive council health planning (CCHP).

Health sector strategic plan (HSSP)

HSSP is a government document that gives the direction on how to achieve the strategic objectives by overcoming challenges that occur in the process of health service delivery. The document has been developed in 3 phases: HSSP I, HSSP II and HSSP III.

The HSSP I, also known as Program work period 1999-2002, focused on defining systems and structures in the health sector.

The HSSP II (2003-2008) focused on ensuring access to quality health services inline with standards set by URT leading to satisfaction of services.

HSSP III period (2009 to 2015) was developed to work in partnership with the MDGs and merged with health sector reforms and stands as the key guide in health sector implementation. HSSP III also focuses on strengthening health services from the District level. This is to increase the access of quality health services close to the community. Reproductive health was among the services that were extended to health facilities available in each catchment area. On improving maternal health,

² HSSPIII 2009-2015 decentralization of health services, financial reforms, health research reforms and organizational reforms as main dimensions in HSR.

family planning services is among the indicators to be achieved (MOHSW, 2007a; MOHSW, 2003a). Together with HSSP III, the PRSP is the strategy developed to work in hand for accomplishment of the MDGs 2015 which is still an on-going process.

National strategy for growth and reduction of poverty (NSGRP)

The NSGRP was developed to give opportunity to the MOHSW for effective and efficient use of resources in country. Priority setting for NSGRP focused on rapid increased population growth in relation to health services to the population. Health interventions included in NSGRP are RH and family planning, malaria control, HIV, tuberculosis and leprosy (MOHSW, 2003b). In order to increase utilization of health services and improve health conditions, RH including family planning was among the health services provided free to ensure access and affordability to the poor and in rural areas. HIV and AIDS prevention was among the cross cutting issue that was given priority based on socio-economic factors as explained in the profile (MOHSW, 2010a).³ NSGRP together with other health sector strategies have contributed to improving reproductive services and increased family planning uptake to 29%. This prevalence did not separate the information on family planning use women living with HIV (NBS, 2010).

National HIV and AIDS Policy

The first Tanzanian HIV and AIDS policy was developed in 2001. Several HIV preventive interventions have been implemented since the first case was detected. Most HIV implementation activities in the country are facilitated by the collaborating HIV Implementing partners and the Government of Tanzania. The role of the Ministry of Health is to ensure policy and guidelines for implementation are available and used (NACP, 2012). HIV policy documents focus on ensuring rights of people living with HIV and AIDS have access to care and treatment services including further research on progression of the disease (NACP, 2001). The second review of policy is currently in progress and is yet to be published. HIV service guidelines for implementation were also reviewed. According to the country progressive report 2012 and the national guidelines for management of HIV and AIDS 2012 there is a need to include family planning rights in the HIV policy (URT, 2012⁴; NACP, 2012).

3.2 Right to access and utilize family planning services

The HIV/AIDS prevention and control Act allows the right for people living with HIV to basic health care and to marry and have a family (NIMR, 2010; FHI, 2010; MOHSW 2010).

³ Details MoHSW primary health services development program 2007-2017

⁴ "Family planning and safe pregnancy counselling" are among health interventions that was also given attention

93 % of the Health facilities are providing family planning services (Fleischman, 2012; NBS, 2010)

Based on the guideline in use (developed 1989), there is age limit for one to access and use family planning method because of fear of physiological effects in the body in young age. According to the national family planning costed implementation plan, woman aged 15-19 and do not have children can use condom or sexual abstinence until after 19years of age (MOHSW, 2010b). After the age of 19, there is high risk of unintended pregnancies, sexual transmitted infections including HIV. At this age they have the right to access FP services as are not able to negotiate for unprotected sex increasing chances to STI including HIV infection (Mchallo, 2008).

3.3 Availability, use and appropriateness of family planning services guideline

In Tanzania, the available family planning guideline was last reviewed in 1994 and disseminated throughout the country after followed by training of health care providers from the primary level. The available guidelines for family planning are old and currently being updated. FHI (2012) did a study to assess the impact of use of family planning guidelines during service delivery and found that none of the health providers used the guidelines during counselling sessions with clients. Standard operating procedures and methods of family planning are available with health education and promotion materials visible in most health facilities across the country.

HIV and RH are closely linked; the national policy guidelines for RH developed in 2003 direct all family planning implementers in public and private health facilities to ensure they provide dual protection to HIV positive women (NIMR, 2010; MOHSW, 2010; FHI, 2010)

In 2011, FHI in Tanzania conducted a study on the impact of the use of family planning guideline and increase use of services especially to women living with HIV. According to this study, HIV services within family planning clinic were not given attention. Health care providers focused on FP and did not discuss further on prevention of HIV. Treatments of STI's were also among the strategies of RH services (FHI, 2011).

The new family planning guidelines (still on draft) is expected to incorporate the access to FP services to women living with HIV in the country based on WHO standards (Unpublished).

3.4 Availability of human resource

The on-going shortage of qualified personnel in the health system has contributed to low quality of reproductive health services. According to the human resource document for Health Strategic framework, the

demand of qualified health personnel in health system for all cadres is 65% (MOHSW, 2008b).

This is because; there is a weak system of task shifting and professional development from the Ministry to community level (AMREF, 2010).

Lack of motivation and unfriendly scheme of services contribute to high staff turnover especially in the public sector. A study done to assess motivation of health workers reported that most doctors and nurses are dissatisfied with low salaries paid (Leshabari *et al.*, 2008). The government has been paying minimal attention on improving salaries of doctors and nurses leading to recurrent unsolved strikes in the country contributing to poor commitment and irresponsiveness to health care providers (Ng'wangakilala, 2012). In the context of HIV care treatment and prevention services, there are standard human resource guidelines for the qualifications required for the health facility to be accredited (NACP, 2005) while the guideline for family planning extended provision on services up to the village health posts. Most of the primary level health facilities are managed by non-qualified health personnel responsible for multiple activities in the facility including family planning services (TACAIDS, 2010).

Table 2 : Summary of Human Resorce for Health Situation

Cadre	Total required	Current staffing level	Gap (shortage)	Shortage % of requirements
Specialists	171	96	75	43.9
Doctors	2057	1483	574	27.9
Nurses	14743	9093	5650	38.3
Pharmacist/chemists	328	87	241	73.5
Technician	1506	741	765	50.8
Other medical staff	7780	6478	1302	16.7

Source: HSHSP, 2007

3.5 Summary of policy related factors

The HSSP III in Tanzania has targets to increase the family planning access and contraceptive prevalence. The National Policy guidelines for Reproductive and Child health services (2003) states that "all the RH and CH interventions in public, private NGOs and voluntary sectors shall integrate STIs/HIV/AIDS prevention interventions such as dual protection and care."

Government efforts have ensured access to free RH including FP services. However, there is minimum use of the services from both HIV positive and negative women in the community.

Availability of updated family planning service guidelines in health facilities is an important component in the provision of services. The use of updated guidelines promotes the sense of confidence during family planning service delivery and can contribute to the increase uptake.

CHAPTER FOUR: SERVICE RELATED FACTORS

4.1 Skills and attitude of health care providers

In 1994, MOHSW made amendments to the family planning service guideline followed by provider training to update skills. Family planning services are provided by midwives, clinical officers, maternal and child aides (MCHA), public health nurses (PHN) trained and medical aides. In spite of trainings done, the follow-up observations showed 50% of health care providers are still unnecessarily restricting family planning use based on age, parity and husband's consent. Health care providers who were trained on FP counselling and those who did not get training observed to have poor skills (TBS, 2006). Speizer *et al* (2007) reported resistance by health cadres to give family planning methods to young girls of less than 19 years especially at primary level (Speizer *et al.*, 2007).

In the context of family planning services to women living with HIV, most of the unintended pregnancies occur as a result of difficulty in accessing FP services due to barriers created from negative attitudes of health care providers in FP as well as in HIV care and treatment clinic (Lemens, 2003).

There is still a knowledge gap among health care providers on rights to family planning services to HIV positive women on informed choices. In a study on family planning counselling to women living with HIV at HIV care and treatment clinics in Tanzania, 6% of health providers found advising for IUCD as the most appropriate contraceptive method to HIV positive women and 16% were recommending bilateral tubal ligation. None of the health care providers talked about dual protection (TBS, 2006). In comparison to a study done in Kenya whereby the MOH in Kenya has ensured health care providers provide accurate information on services for effective family planning through training. The providers are able to discuss in depth family planning methods preferred in connection to HIV prevention in the family planning clinics. Therefore all women attending family planning clinic or ANC for PMTCT are provided with family planning information and given attention (Berhane *et al.*, 2006).

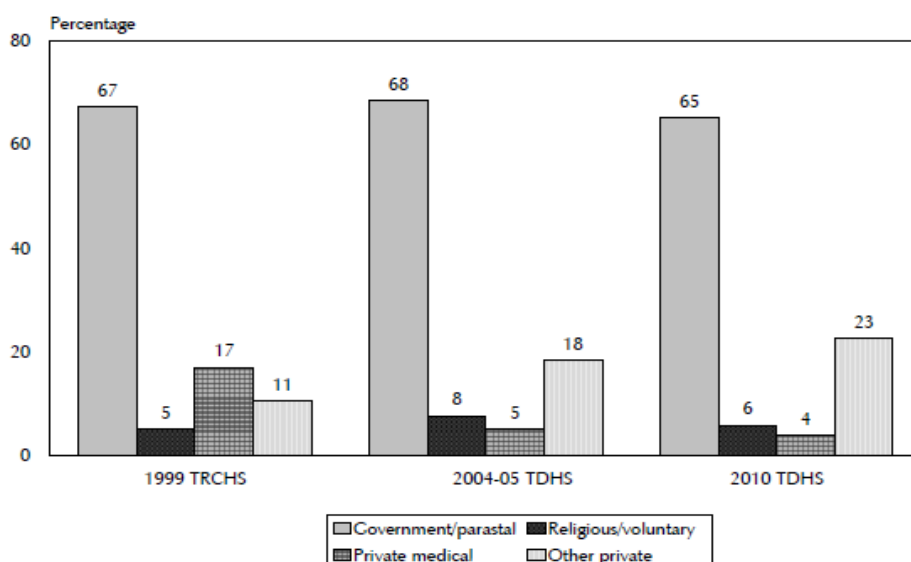
Further studies done in Tanzania, to assess the impact of family planning counselling sessions in RH clinics showed that insufficient information on HIV prevention was shared during the process of client's education. Health care providers do mention condom use to prevent STI's like HIV. However little or no emphasis was made on HIV transmission and prevention during discussions with clients. Lack of knowledge by Providers on dual protection for HIV prevention to health care providers leads to limited access of accurate information to women living with HIV (Richey, 2003).

4.2 Availability of family planning supplies

The family planning services available in the country include; natural, modern and traditional. Modern family planning includes pills, injection, intra uterine device, implants, condom and diaphragm. Approximately 24% of family planning users prefer the artificial methods. Within the artificial modern methods, condom use is 4%. An estimate of 5% of women using traditional methods of family planning (Ernest *et al.*, 2011) and 7% are using natural family planning.

The aim of MOHSW in RH services is to ensure there is a constant availability of family planning supplies in health facilities. However, budget constraints contribute to either delay in receiving the supplies or incomplete consignments leading to limited choices (NBS, 2006a, MOHSW, 2008). In Tanzania, the government remained the main provider of family planning methods (65%) (NBS, 2010).

Figure 4: Sources of family planning supply versus the use in Tanzania



Source: NBS, 2010

UMATI, a family planning association in Tanzania deals with procurement of FP supplies and supplies to the Medical Store Department (MSD) at national level. Each health facilities receive Essential drugs and Medical supplies which include reproductive health kits.

Other stakeholders include Marie Stopes Tanzania (MST) whose operation covers 20 Districts, Engender Health and Pathfinder who operate public and private health facilities in 110 of the Districts through distribution of coverage under government supervision.

The main responsibility includes supporting mobile and outreach family planning services to the community.

MST also provides VCT services and support clients with family planning methods and condom promotion for both HIV concordant and discordant couples.

PSI is a non-organization also providing FP services in Tanzania, has extended its services to civil society organizations and community groups. It ensures delivery of comprehensive family planning, access to HIV counselling and testing and education to couples on dual protection⁵ (PSI, 2012). It also focuses on coverage of FP services in regions with high prevalence rates like northern highlands and central regions.

Purchasing and delivering of all medical supplies and equipment's in is contracted to MSD that has branches located in the zones.

MSD is tasked to deliver consignments on quarterly bases but due to poor transport and infrastructure and sometimes logistics delays are common often arriving at the required destination late or with incomplete consignment.

4.3 Access to affordable family planning services for HIV positive women

Since FP services started, the government was the main implementer in collaboration with family planning association (UMATI), Pathfinder International, PSI, MST and Engender Health. Intrah was the main funder as well as technical partner to the government. During that time the access to family planning services was estimated to be less than 42%. The intension was to expand family planning services points and improve deliver a facility based (Igras, 2001).

The government of Tanzania provides free reproductive health services for all women based on the RH policy. Women can access the services within public health facilities in their catchment areas. However, there are few accredited private pharmacies and health facilities providing family planning services through payment (Simba *et al.*, 2011). MOHSW has trained VHW in basic family planning services in order to increase coverage and uptake at the primary level. The VHW were also used as home based care providers for people living with HIV. Through this initiative, 20,000 women living with HIV were able to access FP services from their homes (Pathfinder, 2011). There are still 40% of women in rural areas who had limited access to family planning facility approximately 10 to 30 kilometres' distance. (Kuenning *et al.*, 2005). With the poor infrastructures like roads (rural and sub-urban), during rainfall season are flooded with water that destroys some of the bridges. This creates difficulties for people to reach the health facilities for medical services (PRSP, 2010; NBS, 2012).

⁵ Dual protection is use of both, hormonal family planning method together with condom to prevent pregnancy as well as STI/HIV infection.

4.4 Access to quality family planning services

Quality and acceptable family planning services are provided in an environment with qualified health personnel, enough space for providing counselling with privacy, laboratory facilities, drugs and treatment guides and constant availability of supplies.

Only 43% of the health facilities in Tanzania are able to provide comprehensive family planning (NBS, 2006).

A study on assessing the effect of quality family planning uptake and continuation of services in Tanzania, Kenya and Ghana showed, there is an increased number of clients who stopped using family planning because of poor quality of service delivery (Hutchison *et al.*, 2011).

There are many reasons leading to poor quality of health services including insufficient training of personal, poor supervision, lack of motivation especially in public health facilities and staff overworked and shortage of qualified service provider (Hutchison *et al.*, 2011)

Quality family planning services contributes to increased uptake by women living with HIV and others. There is client satisfaction to services (Okkoth *et al.*, 2009).

4.5 Availability of user friendly services

According to national HIV policy in 2001 which focused to ensure there is availability of quality and user friendly RH services to women living with HIV in Tanzania (NIMR, 2010; FHI, 2010; MOHSW, 2010).

Lack of privacy in most health facilities interferes with effective family planning counselling including STI's and HIV counselling and testing. Providing family planning information needs cooperation among provider and clients in order to reach convenient choices (NBS, 2007).

Lemens (2003) reported reasons for unintended pregnancies among women living with HIV in Tanzania, as fear to ask for family planning services at health facility due to the setup of the clinic and or underlying stigma to her HIV status.

4.6 Linkage of family planning and HIV services

In Tanzania, linking of family planning and HIV services started as a global health initiative to the government through Public Private Partnership (PPP). The aim is to ensure comprehensive services to people living with HIV (Fleischman, 2012).

There is limited data on family planning use among HIV positive women at National level. The data available is from pilot studies done by FP

implementing partners in specific areas and results were generalised to the whole country (Clement *et al.*, 2003).

FP services are linked to PMTCT whereby pregnant women are tested for HIV during ANC visits and if found HIV positive are linked to FP after delivery. However, there is no open operating mechanism developed to find where and when the woman delivered. For VCT and HIV care and treatment clinic there is no formal linkage made to access family planning services (FHI, 2011).

Pathfinder as FP implementer is specialised in providing comprehensive care to people living with HIV at home (HBC). Through HBC and FP programs, Pathfinder has managed to reach 20,000 HIV positive women with family planning services in 2009. However due to lack of funds the government has delayed rolling out FP/HIV services to whole country (Simba *et al.*, 2011; Pathfinder, 2009).

Though Tanzania has not yet managed to link FP into HIV services, Ethiopia has succeeded. HIV positive women on ART are linked to family planning services within the same clinic. This has contributed to increased uptake of family planning services to women living with HIV. HIV positive clients do favour health facilities capable to deliver multiple services rather than doing regular visits to different facilities (Berhane *et al.*, 2006).

Other countries that have succeeded with the integration of family planning and HIV include Uganda. Uganda's HIV prevalence was 18.7% in 2004/05 and through several preventive strategies and political commitments Uganda HIV prevalence dropped to 6% (UNAIDS, 2009).

4.7 Summary of services related factors

Health care providers were observed to have low skill and poor attitude to clients in family planning clinics. It contributes to low utilization of services by women including women living with HIV. The stigma towards the clients is a barrier to utilization of FP methods.

Lack of training on updated skills in comprehensive family planning services to health service providers impairs the quality of services and decreases uptake of FP by HIV positive women.

FP services are available at no cost to all women of reproductive age in the country. However, this has not translated to increased utilization of FP by women living with HIV.

Lack of privacy in health facilities contributed by poor infrastructure set ups, hinders decision to the use of family planning services among HIV positive women.

Distance to health facilities in the rural areas, is an obstacle for women living with HIV to access family planning services.

The history of erratic family planning supplies, limit the choices for FP methods available.

Tanzania currently has no linkages between FP and HIV programs. This makes difficult for women living with HIV to access and utilize family planning methods. Lack of one stop shops that contains FP and HIV services are hindrance/ barriers to HIV positive women who need to access.

CHAPTER FIVE: CLIENTS RELATED FACTORS

The non-health system factors elaborate factors outside the health system that contribute to low access and utilization of FP services among HIV positive women.

5.1 Knowledge about family planning and use

The NBS reports that, 98% of Tanzanian population has access to information on the availability of family planning services. Health promotion, health education and advocacy through multi-media, print media and improving communication skills in family planning facilities to pursue family planning messages to the community. However, use of family planning is still a challenge. NBS (2010) reports 29% of women used family planning services. There is no information on the use of family planning to HIV positive women.

In spite women having access to FP information, there is little knowledge on family planning methods in Tanzania. More studies were showing men lack knowledge on modern FP methods. This is because; family planning education did not involve men since from the beginning of services and was known as maternal service as opposed to RH to date. Education on family planning use were provided to women and told to bring husband for consent (Schuler *et al.*, 2011).

5.2 Fertility desire

Fertility desire is the need/ wish of couples to reproduce and is among the WHO interventions to extend family planning services to HIV infected and non-infected women (Padian *et al.*, 2011).

In the context of reproductive health choices, HIV positive women or men who opt not to have children are free to use any permanent family planning method like surgery (Delvaux *et al.*, 2007).

Women living with HIV are able to access family planning services when pregnant through ANC services. During ANC a pregnant woman is counselled on available and appropriate FP methods to use postpartum. Unfortunately, HIV positive women (not pregnant) have not been targeted and have to access family planning services available to the greater population (Keogh *et al.*, 2009). Fleischman (2012) reports, since Tanzania has yet to roll out the FP and HIV service link, HIV positive women who need FP services have to attend to FP clinic that has no direct link with the HIV care and treatment clinic. Women would not attend family planning unless they are escorted voluntarily by health care provider.

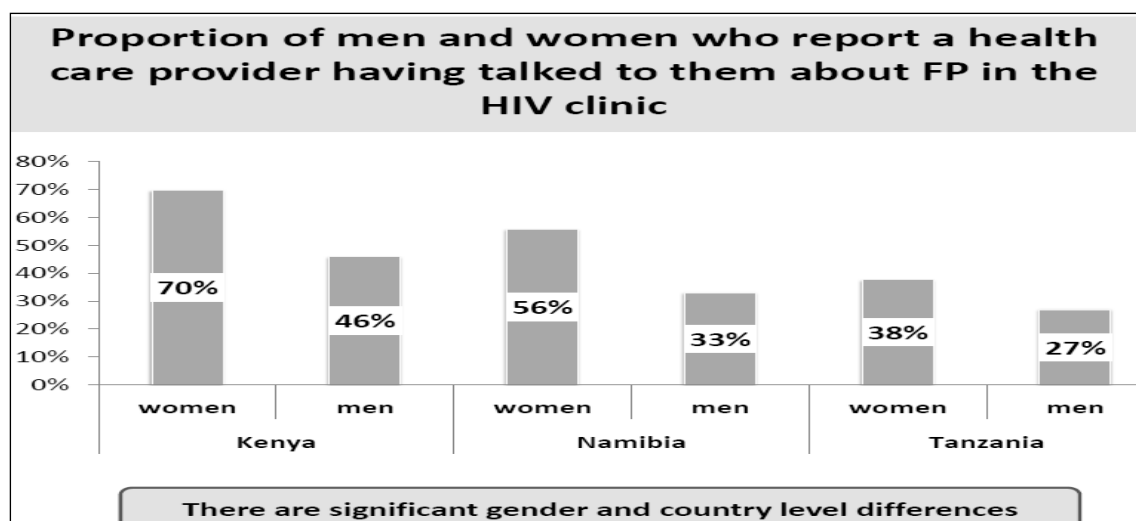
Lemens (2010) study in "Preventing unintended pregnancies in resource poor settings" that was done in South Africa and Tanzania reported reduce fertility desire due fear to infect the partner.

During the study by Lemens to discordant couples HIV positive women fear to infect HIV negative partners and un born child.

There is lack of information and education on fertility desire of HIV positive women who attend HIV clinics for ARV services in Tanzania. Most of these women who get unintended pregnancy say, "We need the FP service but we are afraid to ask because we will be abused by the health providers," others fear to be stigmatized (Pathfinder, 2010). The same happened in Rwanda where 74% of unintended pregnancies occur in HIV positive women who were afraid to ask for family planning services within HIV care and treatment clinics (Wilcher, 2009).

Initially, HIV positive women did not discuss fertility desires in HIV care and treatment clinics. Exposure to different services and available options has enabled them to discuss with providers about child desire. Mbatia *et al* (2011) in her multi country study (Kenya, Namibia and Tanzania) shows a proportion of women who reported to have discussed their fertility desire during HIV care and treatment services.

Figure 5: Family planning discussion in HIV care & treatment clinic



(Mbatia *et al*, 2011)

5.3 Education level

Low educational level attainment among women has an influence on the access and utilization of family planning (NBS, 2010). In reference to a study done in Sudan, where there are high levels of illiteracy among women, most were not ready to use family planning, want more children and were are afraid of the effects. The use of condom is almost negligible due to religious beliefs (Ali *et al.*, 2011).

In Tanzania, the highest source of information on family planning is through media campaigns'. However, the coverage of media in rural areas has not been studied. The fact that education is used to measure the socio-economic status, this could contribute to the variation of decision to

the use of family planning to HIV positive women (Clements, *et al*, 2003; Montez, 2011).

5.4 HIV status

In Tanzania, HIV positive women attending HIV care and treatment clinic reported to have increased utilization of condoms to avoid unintended pregnancies. However, unintended pregnancies among HIV positive women are still reported because, the HIV guidelines directs counsellors to discuss about family planning to HIV positive women after delivery only and not to all women despite HIV status (Keogh *et al.*, 2009).

Moreover, studies show no drug interaction between the use of family planning methods and anti-retro viral therapy (ART). However, ART can reduce the effect of emergency contraceptive leading to unintended pregnancy if condom was also not used. The intra uterine device can be used within 5 days from the sexual occurrence (Lemens, 2010). In comparison with Zambia, approximately 40% of HIV positive couples prefer to use modern contraceptive methods to prevent unintended pregnancies. Limited access to family planning services was a major factor hindering family planning uptake (Chibwasha *et al.*, 2011).

5.5 Summary of client related factors

Men have no knowledge on the functions of family planning methods and the relationship of FP methods reduction in HIV transmission.

HIV positive women do not get information of fertility desire when attending HIV care and treatment clinic. Moreover, HIV positive women are not ready to express their fertility desire to neither the health care provider nor to the partner.

Stigma is still the problem in most African countries. Education status to women contributes to lack of decision on health issues like use of family planning to prevent unintended pregnancy.

CHAPTER SIX: COMMUNITY RELATED FACTORS

Despite efforts of the MOH to educate communities on benefits of family planning services, there are barriers within the communities that contribute to low use. These include:

6.1 Misconception and acceptance of family planning methods

The low use of family planning methods is associated with negative perceptions towards different methods in the community. Decision for family planning should be discussed and agreed between couple/partners for the benefit of their health and the family.

In reference to a study done in Tanzania an assessment was made towards gender norms and decision making in family planning use. FGD results included

"I don't like using family planning methods because I hear people are complaining about their effects. Pills cause cancer, implants needs an operation to be inserted and its real irritating on the side inserted and can travel, injection makes someone to have too much weight which makes me very scared. Few participants said, condom have some lubricants that contains harmful bacteria and HIV virus and also causes cancer. Others say condom is good but there are times even if you use them properly, it heats up due to friction and bursts" (Schuler, et al, 2011).

6.2 Religion beliefs

More than 35% of the citizens are Christian, Catholics represent the majority and encourage use of calendar⁶, rhythm⁷ and abstinence⁸ also called traditional FP methods (Ukwuani *et al.*, 2003). Zanzibar as part of URT has more than 90% of the population as Muslims. Women in Zanzibar do not have access to family planning information due to strong religious belief and other social norms (Prickett *et al.*, 2011).

Commitments of the government of Uganda, the citizens, religious organization and political parties joined their President on HIV prevention campaign through abstinence, being faithful and use of condom contributes to HIV reduction. The MOHU through HIV implementers in Uganda have integrated FP program into HIV care and treatment (MOHU, 2004). In Tanzania, religious leaders are aware of family planning to HIV positive women but are not vocal and advocate for natural methods only. Furthermore, the National AIDS control program involved religious leaders in Tanzania during development of national HIV preventive strategies on sexual education and reproductive health schools and out of schools (NACP, 2007). NACP strategy on HIV prevention and management has included religious leaders on implementation, so the education they got will not interfere with the use of family planning to the target group.

⁶ Counting days from the first day of menstruation to the 17th day.

⁷ A change in the vaginal secretion, thick is safe and dry, slippery is unsafe.

⁸ Avoid doing sex completely.

Religious leaders continue to educate the out of school adolescent/youths on the importance of abstinence in the concept of HIV prevention.

6.3 Cultural influence, family and partner support

Tanzania has a very patriarchal culture that favours male dominance where women cannot decide to use family planning services without her partners consent. Furthermore, women do not have power to ask for condom use to the husband. Evidence of gender violence has occurred due to use of family planning (Schuler *et al.*, 2009).

The underlying socio-cultural behaviour contributing to HIV transmission includes; widow inheritance, polygamous marriages, early marriages, that contribute to ineffective or non-use of modern family planning methods (UNAIDS, 2009).

Despite known advantages of modern family planning, still women who prefers to use traditional method. These involve tying a piece of stick around the waist, prolonged breastfeeding with abstinence for two years and other herbs (Ernest *et al.*, 2011). According to Richey's (2004) study on construction, control and family planning in Tanzania, health care providers were found directing women to use traditional methods. However, the traditional FP methods are ineffective as FP methods and the practice is still common.

Community participation on supporting HIV prevention strategies, used of VHW in community family planning and home based care services has contributed to tremendous reduction of HIV prevalence from 12% to 6% in Kagera Region (Lugalla *et al.*, 2004).

6.4 Summary of community related factors

Community related factors are a barrier to access and utilization of family planning services to all women. Women living with HIV are unable to seek family planning services due to stigma. They often opt to use traditional family planning methods.

The government plan, to improve access to RH services, has extended family planning services to the community. However, limited knowledge on the effects of family planning methods in the community, hinder utilization of FP services among all women. Lack of family and community support systems contribute to the stigma faced by women living with HIV. Thus, they do not use FP services. The patriarchal culture in the country affects women as they have no power to make decisions for their health including family planning use.

Religious beliefs have influence of family planning use.

CHAPTER SEVEN: DISCUSSION, CONCLUSION AND RECOMMENDATION

The study intend to determine the findings on the literature on health system and non-health system factors effecting the of family planning use to women living with HIV in Tanzania.

7.1 Policy Related Factors

Tanzania has several policies in place to address utilization of family planning among women living with HIV and AIDS. However, there are still gaps observed.

The national health policy is quite broad and does not target issues of family planning to women living with HIV. There were several strategies developed to implement the national health policy. This includes;

The health sector reform focuses on ensuring equity in accessing health services to the general population. The health policy ensures the community have access to improved maternal health services including family planning. However, there is no specific focus made to ensure RH services are targeted to women living with HIV. The devolution has brought access to health services closer to the community that has made easy to the poor and the rural population.

The absence of a national RH policy contributes to failure to the policy gaps presents in addressing FP needs of women living with HIV.

Following the ICPD conference in 1994, MOH released a RH policy document. Several amendments to the documents have been submitted. Family planning services were incorporated within PMTCT program for HIV positive pregnant women to access. The HIV positive women who are not pregnant and want family planning services could access through the normal FP clinic which has no link to HIV care and treatment or voluntary counselling and testing clinic. In Kenya, the national RH policy available has components such as maternal neonatal health, FP and HIV and AIDS. The policy document targets specific population groups. In comparison with RH policy guideline for Tanzania, family planning clinic is a stand alone clinic unlike all the other components. Moreover, RH services also include PMTCT services where HIV positive pregnant women access family planning information through antenatal visits.

The implementation of HSSP III focused on strengthening health services delivery and improving access to maternal health services. Apart from that, the HSSP III increased attention to prevention of HIV and AIDS as

cross cutting issue. However, HIV prevention strategies were to the general population and did not focus interventions to specific target group and their need for example family planning and HIV.

The HIV and AIDS policy of Tanzania was developed in 2001, whereby the first review is still on progress. However, there are several guidelines for implementation that have direct focus to women living with HIV. For example, a national guideline for HIV management care and treatment focused on provision of family planning to HIV positive women (dual protection). According to the comprehensive PMTCT approach has a direct link to family planning services to HIV positive pregnant women. HIV positive women who are not pregnant and are attending HIV care and treatment, have limited access to family planning services. Integration of programs is important as it has benefits to continuum of care, monitoring of disease progression and others. There is a need to review the current policy documents with an aim of integrating various services to have focus on specific target groups.

Protocols and guidelines on HIV services were reviewed (2012) and have included a component of access to family planning services within HIV care and treatment clinic. This is beneficial for HIV positive women who are non-pregnant.

The national HIV and AIDS Act of Tanzania describe rights of HIV positive people to decide to have family or not. The government ensured provision of free FP services to all. However, HIV positive women have not benefited since their not ready to use the services due to the underlying fear and stigma. In comparison to the context of Ethiopia, HIV positive women easy to access FP services as it is within the HIV care and treatment clinic.

There is a shortage of qualified health personnel especially in the public sector. High turnover, lack of motivation and low salaries are some of the reasons attributing to shortages. Qualified staff trained in FP and HIV are driven to work with International NGO's due to financial incentives and remuneration.

CONCLUSION

The health policy document is too generic; it does not put into consideration how women living with HIV can access family planning services. The policy has explained the eligibility criteria for family planning services to women of reproductive age but did not put into consideration specific needs of HIV positive groups.

There is limited data available from the RH policy of Tanzania.

RH services in Tanzania focused to ensure rights of women living with HIV and AIDS. The government of Tanzania has not created an environment for HIV positive women to receive services.

Shortage of human resource for health must be addressed through various strategies of human resource retention. The implementation of task shifting in critical shortages is important.

Protocols and guides serves as guides to health care providers in best practices of health care deliveries. There is need to update and acceleration the completion of current documents and avail them to all health care providers.

RECOMMENDATION

- The national health policy should make amendments to the RH policy to ensure access of family planning services to women living with HIV. This will be linked with PMTCT as part of the continuum of care.
- The government should have consistence timelines for updating family planning guidelines for women living with HIV.
- The MOHSW should organize pre-service and in-services training on updated current trends on RH services including family planning to women living with HIV.

7.2 Service related factors

Inadequate provider skills on assessing fertility desire to HIV positive women has been observed in studies done in HIV care and treatment clinics. However, factor like lack of skills result to poor quality of service delivery. Since in Tanzania, not all health facilities provide family planning services within HIV care and treatment clinics. Richey in his study on analysis of health system in 2003 show there is an on-going bureaucracy in coordination of the two programs. There is no clarity information on accountabilities leading to fear of losing position to some of health care providers. Pathfinder as among organizations implementing HIV home based care in the Country initiated the integration of family planning through use of community based distributors (VHW). Findings from pilot study were shared to all HIV and FP implementing partners and the MOHSW. The roll out is yet to be done by the government due to financial constraints. The findings of studies done by FP implementing partners focusing on HIV positive women are not be used to generalize to the whole country since donors have specific targets and areas of operation.

In Tanzania, the implementation of family planning is under reproductive health section where PMTCT is among the components. HIV positive women are identified during their antenatal visit when they are already pregnant. HIV negative or unknown status can be identified through voluntary counselling and testing (VCT) clinic. At VCT there is no linkage with family planning clinic. Due to lack of information from health care

providers, most HIV positive women find themselves with unintended pregnancies and expose their un-born babies to HIV infection. According to Fleischman's (2012) study on assess the integration of family planning and HIV with PMTCT services, there are some weaknesses observed from the national level in organizing the two programs. Furthermore, there was no open mechanism to trace a HIV positive woman on where she has decided to deliver so that she can join FP services.

Attitude of health care provider is also barrier for HIV positive women to utilize family planning services. Living with HIV cause psychological trauma therefore health care providers need to have positive attitudes to clients during services provision. Moreover, there health care providers are also obstacles in the utilization of family planning as there is unnecessary restriction occurs to adolescents and unmarried women mostly in rural areas. Moreover, women were told to bring their partners which made some not to turn up. The attitude of health care provider hinders the utilization of family planning to women living with HIV as they will not be free to express their fertility desire.

There is lack of staff motivation (also explained in human resource part) contributes to not completing of tasks leading to recurrent stock out of family planning supplies. However, despite that RH services including family planning were made free, but still clients could not use the facility due to lack of medicines, investigations and other barriers. Poor infrastructures like roads to most rural areas where health facilities are located are rough. During raining seasons some bridges are flooded and some broken hence transportation of medicines and other supplies becomes difficult. Moreover, health facility set-up did not favour linkage as most do not have privacy due to limited room space. There are cultural barriers making a woman would not like the husband or parents knows that she is attending family planning clinic. According to HIV policy, it target to improve the infrastructure (health facility) to ensure access to RH services to women living with HIV.

Since family planning implementation in Tanzania depends on government budgets and HIV prevention programs is donor dependent, the integration desire was focused more on FP and PMTCT to HIV positive pregnant women.

CONCLUSION

Inadequate skills and poor attitude of health care provider contribute to low use of health services. Role of the health care provider's includes being supportive and empathetic to clients problems especially those affected by HIV.

93% of health facilities in the country are providing family planning service. However, the set-up of the facilities (clinic) as per directions of

the Ministry of health could not consider the future use of the health facility and upcoming programs. The primary level health facilities have limited room space for confidentiality and privacy to client especially women living with HIV.

There is a delay by the Ministry of health to adapt to the linkage of program (family planning into HIV) even after the shared results from Pathfinder and other FP and HIV implementation partners.

The government tried to ensure each community is reached by health services. However, infrastructure like roads contributes to improper utilization because of recurrent erratic supplies including essential medicines.

RECOMMENDATION

- The government should develop strategies to improve infrastructure in the health facilities especially in rural areas to ensure privacy during family planning counselling session to HIV positive women. This can be effectively done through collaboration of the government and FP/HIV implementing partners.
- Health care provider should ensure confidentiality as among the rights to HIV positive and negative women attending family planning and HIV clinics.
- The government should strengthen the continuum of care coordination committee at all levels responsible for ensuring availability and effective linkages to FP and HIV services to women living with HIV.
- The government should established linkages between FP and HIV services to increase coverage of family planning uptake to the population. This can be done by replicating successfully program from neighbouring countries.

7.3 Clients and Community Related Factors

In Tanzania, there is evidence that approximately 98% of the population have access to family planning information. However, the information has not translated into practice as there is low use of the FP services among women including those living with HIV.

Evidence shows that, men lack knowledge concerning modern methods of family planning. Previously FP services were offered under maternal and child health clinics which men did not attend because it was known as the clinic for mothers and children.

With the term reproductive health, men are encouraged to attend in order to receive accurate information on family planning and other RH services.

Low education levels are shown to have a negative impact on the utilization of family planning services. Studies show, women who have low levels of education are less likely to use modern family planning methods

and opt for traditional methods. In the context of HIV positive women, the modern family planning methods are effective on prevention of vertical transmission and well as reducing the risks of STI's.

Little is known about fertility desire of HIV positive women in Tanzania due to lack of data. Stigma and fear of infecting the partner and the unborn child were mentioned as motivating factors for use of family planning methods in South Africa and Tanzania. Condoms were mentioned as the most popular family planning methods.

Tanzania, no data is available on the use of family planning services among women living with HIV. However, Lemens (2010) in a study of prevention of unintended pregnancies to HIV positive women, elaborated that HIV status motivates women to use family planning methods as they fear to get unintended pregnancy that worsen HIV progression. It is also found that, use of ART's have high rises fertility desire.

Several misconceptions have been put forth concerning FP methods in the general population. The community believe that, contraceptives can cause cancer also believe that Implanol if inserted to the body it travels throughout the body etc. Limited knowledge and understanding of modern family planning methods among the general population contribute to misconceptions and negative attitudes towards utilization of services in the community.

The major religions in the country include Islam and Christianity. Both advocate for abstinence and natural family planning methods. Religion has been mentioned as a major deterring factor to utilization of family planning services. Various Faith based organisations are custodians of people living with HIV and would be in the best position to advise on Family planning and refer to FP providers.

Health promotion campaigns have adopted religious leaders to sensitize the population on HIV prevention interventions of which FP is a component.

Traditional family planning methods are common and contribute to unmet need to modern methods. The TDHS report estimated that 7% of women reported to use traditional family planning methods in 2010. The report did not clarify what traditional methods were used.

The patriarchal nature of the African society is evident even in accessing and utilization of FP services. Men make all decisions including family size and the decisions to seek for health services. Women who are dependent on their husbands are obligated to obey his demands including not using contraceptive methods even when this may endanger his life. A study showed that use of contraceptives was common reason for intimate partner violence especially among HIV positive women.

Women living with HIV are faced difficulties in fulfilling their gender role of being mothers and face pressure from relatives and the community. The social norms and community expectations towards married women expect them to give birth and have children despite women's personal wishes or health status.

There is family and community discrimination as explained by Lemens (2010) in the study on prevention of unintended pregnancies among women living with HIV in resource poor settings.

CONCLUSION

Women are reported to use traditional methods but they do not define the traditional methods used. There is no separate information on family planning use among women living with HIV. Stigma due to HIV infection among women contributes to low uptake of family planning services.

Communities have an influence on the use of modern family planning uptake to the population. There is a role of religious leaders and male involvement towards family planning use to the women living with HIV.

RECOMMENDATION

- Through health promotion activities at the community level, the MOHSW should educate the community (including women living with HIV) on the use of modern family planning methods in prevention of unintended pregnancy.
- The government and key stakeholder of FP and HIV services should sensitize the community on avoiding harmful cultures like male dominance, widow inheritance that limits women's freedom to choose.
- The government including FP and HIV implementing partners should educate the community on benefits of using available family planning methods (modern and traditional FP) to women living with HIV.
- Community Based Organisations should be encouraged so as to education the community on stigma reduction to people living with HIV.

REFERENCE

Ali, A.A., Rayis, D.,A., Momoun,M. and Adam, I. (2011) Use of family planning methods in Kasalla Eastern Sudan

AMREF. (2010) Community health workers- an important resource towards achieving the MDGs.

Askew, I. and Berer, M. (2003) The contribution of sexual and reproductive health services to fight against HIV/AIDS.A review of Reproductive health matters Volume; 11(22): 51-73 [Online] from <http://www.rhmjournal.org.uk> [Accessed 12 August 2012]

Berhane, Y. and Tsui, A. (2006) Linking reproductive health, family planning and HIV /AIDS in Africa [Online] Available from http://www.jhsph.edu/sebin/e/m/Addis_ConfSum.pdf [Accessed 13 August 2012]

Chibwasha, Li, S., M., Matoba, K., C., Mbewe, R., K., Chi, H., B., Stringer, A., S., J. and Stringer, M., E. (2011) Modern contraceptive and dual method use among HIV infected women in Zambia. [Online] Available from: <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3189559/pdf/IDOG2011-261453.pdf> [Accessed 14 August 2012]

Clements, S., Baschieri, A., Hennink, M., Madise, N. and Stephenson, R. (2003) Explaining Areal variation in contraceptive use in East Africa

Delvaux, T. and Nostlinger,C, C. (2007) Reproductive choice for women and men living with HIV: Contraception, Abortion and Fertility.[Online]Available from: <http://www.ncbi.nlm.nih.gov/pubmed/17531748> [Accessed 14 August 2012]

Duerr, A., Hurst,S., Kourtis,A.,P., Rutenberg,N and Jamieson,J.,D. (2005) Integrating family planning and prevention of mother to child HIV transmission in resource-limited settings Lancet 2005; 366: 261-63.

Egessa, J., J. (2011) Utilization of family planning services among sexually active people living with HIV/AIDS in Taso Tororo. [Online] Available from:<http://news.mak.ac.ug/documents/Makfiles/theses/Egessa%20John%20Joseph.pdf> [Accessed 14 August 2012]

Ernest, H., Saiteu, G. and Maro, G. (2011) Promoting modern family planning among Tanzanian nomadic communities.[Online] Available from: http://smartsite.kit.nl/net/KIT_Publicaties_output/ShowFile2.aspx?e=1839 [Accessed 14 August 2012]

FHI360. (2011) Integration of family planning and HIV services in Tanzania. [Online] Available from http://csis.org/files/publication/120720_Fleischman_HIVFamPlanWeb.pdf [Accessed 12 August 2012]

FHI360. (2012) Effective use of national family planning guidelines includes dissemination and regular updating. [Online] Available from http://www.fhi360.org/en/rh/pubs/network/v19_1/guidelinesteps.htm [Accessed 12 August 2012]

Fleischman, J. (2012) HIV and Family planning integration in Tanzania [Online] Available from http://csis.org/files/publication/120720_Fleischman_HIVFamPlan_Web.pdf [Accessed 12 August 2012]

Hutchinson, L. Do, M. and Agha, S. (2011) Measuring clients' satisfaction and the quality of family planning services: A comparative analysis of public and private health facilities in Tanzania, Kenya and Ghana. [Online] Available from <http://www.biomedcentral.com/content/pdf/1472-6963-11-203.pdf> [Accessed 12 August 2012]

Igras, S. (2001) Capacity building for training and human resource development. The case of reproductive health services in Tanzania-PRIMEII [Online] available from: <http://www.prime2.org/prime2/pdf/TR27.pdf> [Accessed 12 August 2012]

IRIN (2012) HIV/AIDS: WHO clarifies guidance on hormonal contraceptives and HIV [Online] Available from: <http://www.plusnews.org/Report/94887/HIV-AIDS-WHO-clarifies-guidance-on-hormonal-contraception-and-HIV> [Accessed 12 August 2012]

KBS (2011) Kenya Demographic Health Survey final report 2008-2009 Available from: National Bureau of Statistics Kenya. [Accessed 14 August 2012]

Keogh, S. Urassa, M., Kumogola, Y., Mngara, J and Zaba, B. (2009) Reproductive behaviour and HIV status of antenatal clients of northern Tanzania :Opportunity for family planning and preventing mother to child transmission integration. Available from <http://paa2011.princeton.edu/download.aspx?submissionId=11138> [Accessed 12 August 2012]

Kinemo, R. (1997) Abortion and family planning Tanzania. Available from <http://www.tzonline.org/pdf/abortionandfamilyplanninintanzania.pdf> [Accessed 12 August 2012]

Kuenning, A., M and Kessy, F., L. (2005) The impact of demand factors, quality of care and access to facilities on contraceptive use in Tanzania. <http://www.ncbi.nlm.nih.gov/pubmed/16359581>
[Accessed 12 August 2012]

Lemens, C. L. (2011) Preventing unintended pregnancies in women living with HIV in resource poor settings.[Accessed 12 August 2012]

Leshabari, M. T. Muhondwa, E., P., Y., Mwangu, M., A and Mbembati, N., A., A. (2008) Motivation of health care workers in Tanzania. A Case Study of Muhimbili National Hospital. East African Journal of Public health volume 5 number 1.
[Accessed 12 August 2012]

Lugalla, J., Emellin, M., Mtembei, A., Sima, M., Kwesigabo, G., Killewo, J. And Dahlgren. (2004) Social, cultural and sexual behavioural determinants of observed decline in HIV infection trends: Lesson from Kagera Region, Tanzania. Social science & Medicine 59(2004):185-198[Accessed 12 August 2012]

Maki, S. (2012) Unmet need of family planning in developing countries.

Mbatia, R. Antelman, G., Pals, S., Brachanas, P., Carpenter, D., DeLuca, N., Muhenje, O. and Arthur, G. (2011) Unmet need of family planning among PLHIV attending HIV care and treatment services in Kenya, Tanzania and Namibia.[Accessed 12 August 2012]

Mchallo, J., C. (2008) Adolescent friendly health services in Tanzania
[Accessed 12 August 2012]

Msuya, E. and Shija R. (2004) Harmonization of reporting requirement Tanzania. [Accessed 12 August 2012]

MOF (2011) National strategy for growth and reduction of poverty MOH of Finance and economic affairs [Online] from <http://www.povertymonitoring.go.tz;www.mof.go.tz;www.tanzania.go.tz>
[Accessed 12 August 2012]

MOHSW (2007a) Health services in Tanzania.[Online] available from <http://www.moh.go.tz>[Accessed 12 August 2012]

MOHSW. (2007b) Health Sector HIV and AIDS Strategic Plan 2008-2012. [Online] from <http://www.hivaidsclearinghouse.unesco.org/search/resource/iiep>

MOHSW (2008b) Human resource for health strategic plan 2008-2013
Online from 12 August 2012]

MOHSW. (2008c) Health Sector Strategic Plan III. *"Partnership for delivering MDG's"* 2009-2015. <http://www.moh.go.tz>

MOHSW. (2009) Proposal for Tanzania health workforce initiatives.

MOHSW. (2011e) National family planning costed implementation program 2011-2015. United Republic of Tanzania.

MOHSW (2008d) National road map strategic plan to accelerate maternal, newborn and child deaths in Tanzania 2008-2015

MOHSW. (2003f) HSSP II. Reforming towards delivering quality health services and clients satisfaction.

MOHSW. (2010a) Primary health Service Development program 2007-2017

MOH of Health Uganda. (2001) The national policy guidelines and services standards for reproductive health services

Montez, D. (2011) Family planning and maternal health Tanzania: Women demand for more information. [Online] available from <http://www.audiencescapes.org/sites/default/files/AudienceScapes-ResearchBriefs-Tanzania-FP-MCH-Montez.pdf>
[Accessed 14 August 2012]

NACP. (2005) National guideline for voluntary counseling and testing and testing. MOH of health and social welfare Tanzania

NACP report. (2007) HIV and AIDS Surveillance report No. 16: MoH

NACP. (2012) National guideline for the management of HIV and AIDS. Tanzania, Mainland

NBS (2006a) Tanzania service provision assessment survey (TSPA)

NIMR, FHI, MOHSW. (2010) Rapid assessment of sexual and reproductive health and HIV linkages. [Online] available from info@nimr.or.tz

NHA. (2006) WHO, United Republic of Tanzania, National Health Account

Oliff, M., Mayaud, P., Brugha, R and Semakafu, A., M. (2003) Integration reproductive health services in reforming health sector. A case of Tanzania Reproductive health matters; 11(21): 37-48 [Online] Available from:

<http://www.jstor.org/discover/10.2307/3776669?uid=3738736&uid=2129&uid=2&uid=70&uid=4&sid=21101144868857> Accessed 14 August 2012]

Okkoth, Hiza, M and Chuwa G. (2009) Report on follow up of services providers trained on quality family planning.

Padian N. S. McCoy, S., Karim, S., A., S., Hasen, N., Kin., J., Bartos., M., Katabira, E., Bertozzi, S., M., Schwartlander, B and Cohen, M. (2011) HIV prevention transformed: the new prevention agenda. The Lancet, Vol 378, issue 9787, page 269-278 [Online] Available from:

<http://www.ncbi.nlm.nih.gov/pubmed/21763938> [Accessed 14 August 2012]

Pathfinder Tanzania. (2009a) Integrated reproductive health and family planning: Tanzania project. <http://www.pathfinderinternational.org>

Pathfinder Tanzania. (2011) Merging family planning and HIV services. [Online] from <http://www.pathfinderinternational.org>

Pathfinder Tanzania. (2011b) Leading the way to contraceptive technology Tanzania. <http://www.pathfinderinternational.org>

Pathfinder International Ethiopia (2011c) Integrating family planning and HIV in Ethiopia: An Analysis of Pathfinder's approach and scale-up.

<http://www.pathfinderinternational.org>

Pathfinder Uganda. (2011d) Addressing unmet need for contraception among HIV positive women to prevent infections through averted pregnancies.

<http://www.pathfinderinternational.org>

PRSP. (2011) National strategy for growth and reduction of poverty II. MOH of Finance and Economic Affairs, Poverty Eradication and Economic Empowerment Department Available from:

<http://www.tz.undp.org/docs/MKUKUTA.pdf>
Accessed 14 August 2012]

Richey, A. L. (2003) HIV/AIDS in the shadows of reproductive health interventions. Journal of reproductive health matters volume 11;(22):30-35.[Online]Available from:

<http://www.jstor.org/discover/10.2307/3776043?uid=3738736&uid=212>

[9&uid=2&uid=70&uid=4&sid=21101144868857](#)[Accessed 14 August 2012]

Sanders (2012) Big surprise: Kinsey study underscores that condoms only mitigate harm, don't erase it. [Online] Available from: <http://radfemworldnews.wordpress.com/2012/03/03/kinsey-study-underscores-that-condoms-only-mitigate-harm-dont-erase-it/> [Accessed [14 August 2012]

Schuler R., S., Rottach, E. and Mukiri, P. (2009a) Gender norms and family planning decision making in Tanzania: A qualitative study. Washington DC. [Accessed 14 August 2012]

Semali A., J., Savigny, D.,D. and Tanner, M. (2003) Health sector reforms and Decentralization of Districts in Tanzania. The case of expanded program on immunization at District level population.[Online]Available from: <http://onlinelibrary.wiley.com/doi/10.1002/hpm.794/abstract> [Accessed 14 August 2012]

Simba, D., Schuemer, C., Forrester, K and Hiza, M. (2011) Reaching the poor through community based distributors of contraceptives: Experience from Muheza District, Tanzania [Online] Available from: [Accessed 14 August 2012]

Smith, R., Ashford, L., Gribble, J and Clifton, D. (2009) Family planning saves lives. 4th Edition [Online] Available from: <http://www.prb.org/pdf09/familyplanningsaveslives.pdf> [Accessed 14 August 2012]

Speizer, S., I., Hotchkiss, R., D., Mganani, R.,J., Hubbard, B and Nelson, K. (2007) Do family planning service providers in Tanzania unnecessarily restrict access to family contraceptive use? [Online] Available from: <http://www.guttmacher.org/pubs/journals/2601300.pdf> [Accessed 14 August 2012]

Schuler, R., S., Rottach,E. and Mukiri,P. (2011b) Gender norms and family planning decision making in Tanzania: A qualitative study. Journal of public health Africa 2011; volume 2:e25 [Online] Available from: <http://c-changeprogram.org/resources/gender-norms-and-FP-decision-making-tanzania-qualitative-study> [Accessed 14 August 2012]

Tanzania Commission for AIDS. (2007) National Multi-sectoral Strategic Framework on HIV/AIDS 2003/07: National HIV policy. [Online] Available from:

<http://siteresources.worldbank.org/INTHIVAIDS/Resources/375798-1151090631807/2693180-1151090665111/2693181-1155742859198/Tanzania.pdf> [Accessed 14 August 2012]

TACAIDS. (2012) Country progress reporting. Part A: Tanzania Mainland.[Online] from <http://www.tacaids.org> [Accessed 12 August 2012]

TACAIDS, Zanzibar AIDS Commission (ZAC), National Bureau of Statistics (NBS), Office of the Chief Government Statistician (OCGS), and Macro International Inc. (2008). Tanzania HIV/AIDS and Malaria Indicator Survey 2007-08. Dar es Salaam, Tanzania: TACAIDS, ZAC, NBS, OCGS, and Macro International Inc.[Online] from <http://www.tacaids.go.tz/hiv-and-aids-information/about-hiv-and-aids.html>. [Accessed 12 August 2012]

NBS. (2011) Tanzania Demographic health survey. <http://www.nbs.go.tz/takwimu/references/2010TDHS.pdf>. [Accessed 12 August 2012]

THMIS. (2011) Tanzania HIV/AIDS and malaria indicator survey [Online] Available from <http://www.nbs.go.tz/takwimu/references/2010TDHS.pdf>. [Accessed 12 August 2012]

UMATI, (2011) Family planning association in Tanzania, Annual program budget. [Online] <http://www.umati.or.tz/> [Accessed 13 August 2012]

UNAIDS. (2009a) Tanzania country situation. UNAIDS (2011b) Report on the Global AIDS Epidemic [Online] Available from: http://www.unaids.org/documents/20101123_globalreport_em.pdf [Accessed 12 August 2012]

UNAIDS. (2012c) Women need access to dual protection-effective contraceptive and HIV prevention options.[Online] Available from: <http://www.unaids.org/en/resources/presscentre/pressreleaseandstatementarchive/2012/february/20120216pshormonal/> [Accessed 12 August 2012]

UNAIDS. (2009) UNGASS reporting for 2010 Tanzania mainland and Zanzibar.[Online] Available from: http://www.unaids.org/en/dataanalysis/knowyourresponse/countryprogressreports/2010countries/tanzania_2010_country_progress_report_en.pdf [Accessed 12 August 2012]

UNICEF. (2011) United Republic of Tanzania: PMTCT fact sheet. [Online] from <http://www.unicef.org/> [Accessed 7 July 2012]

UNFPA. (2011) The state of the worlds' midwifery. [Online] available from <http://www.stateoftheworldsmidwifery.com>

UNGASS and TACAIDS (2010) UNGASS reporting for 2011: Tanzania mainland and Zanzibar Report. [Accessed 12 August 2012]

UN. (2009) World Contraceptive Use.[Online] from http://www.un.org/esa/population/publications/contraceptive2009/contracept2009_wallchart_front.pdf [Accessed 13 August 2012]

Ukwuani, F., A., Tsui, A.,O., Suchindran C.,M. (2003) Condom use for preventing HIV analysis of Uganda and Tanzania.[Accessed 12 August 2012]

USAID. (2012) Increasing access to contraceptive for clients with HIV. A tool Kit [Online] Available from: http://www.fhi360.org/training/en/modules/FPHIV_toolkit/interface.pdf [Accessed 14 August 2012]

TACAIDS and ZAC (2012) Country progressive report Mainland. [Accessed 14th August 2012]

Wilcher, R. (2009) Family planning for people living with HIV/AIDS Reducing inequities-ensuring universal access to family planning. [Accessed 12 August 2012]

WHO, WHO, UNAIDS, UNICEF. (2011) Interventions in the health sector towards universal access: scaling up priority HIV/AIDS. [Online] from http://www.who.int/hiv/pub/2010progressreport/summary_en.pdf [Accessed 12 August 2012]

WHO. (2012b) Preventing mother to child transmission of HIV (PMTCT) and family planning (FP). [Online] from <http://www.who.int/reproductivehealth/PMTCT/FP> [Accessed 12 August 2012]

ANNEXES

Annex1: Map of Tanzania

TANZANIA



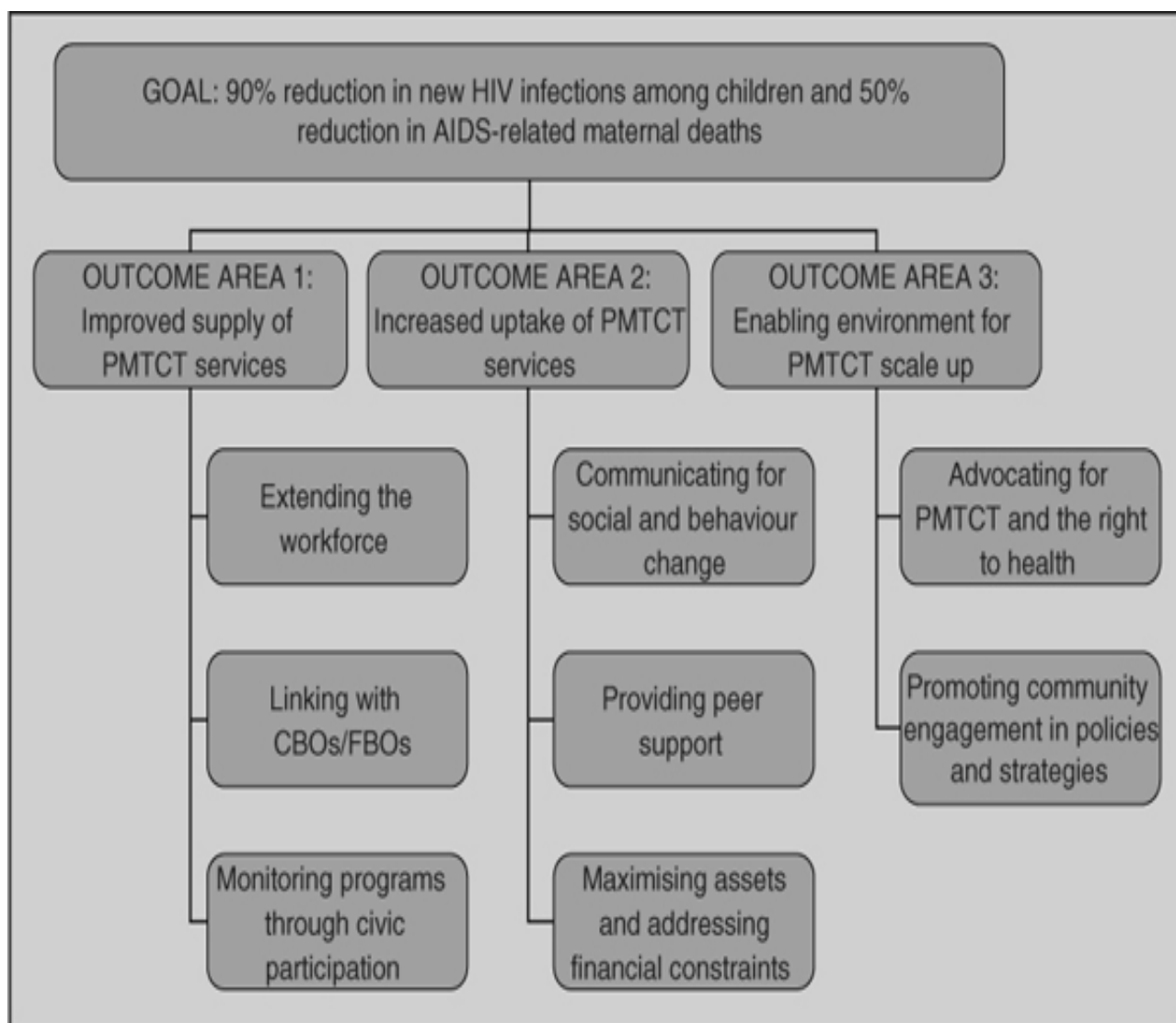
Annex 2: The current contraceptive use by age

Age	Any method	Any modern method	Female sterilisation	Modern method						Any traditional method	Traditional method			Not currently using	Total	Number of women
				Pill	IUD	Injectables	Implants	Male condom	LAM		Rhythm	Withdrawal	Folk method			
ALL WOMEN																
15-19	10.7	9.4	0.0	1.0	0.0	2.1	0.2	6.1	0.1	1.2	0.7	0.3	0.2	89.3	100.0	2,172
20-24	29.2	24.0	0.1	5.5	0.2	9.3	2.1	6.0	0.9	5.2	2.5	2.1	0.7	70.8	100.0	1,909
25-29	35.9	29.8	0.1	6.7	0.5	14.0	2.6	4.3	1.6	6.1	2.9	2.5	0.6	64.1	100.0	1,668
30-34	38.8	30.6	1.2	7.9	1.0	12.8	3.2	3.0	1.2	8.2	4.3	2.9	1.0	61.2	100.0	1,422
35-39	35.5	29.5	5.0	7.5	0.4	9.4	2.0	3.0	2.0	6.0	2.6	2.8	0.5	64.5	100.0	1,290
40-44	36.7	29.0	8.6	6.6	0.9	7.5	2.3	2.4	0.7	7.7	3.7	2.4	1.6	63.3	100.0	938
45-49	23.7	19.6	11.7	1.7	0.4	4.2	0.4	0.9	0.3	4.2	2.8	0.9	0.5	76.3	100.0	740
Total	28.8	23.6	2.5	5.1	0.4	8.5	1.8	4.2	1.0	5.2	2.6	1.9	0.7	71.2	100.0	10,139
CURRENTLY MARRIED WOMEN																
15-19	14.9	12.0	0.0	1.5	0.0	5.0	0.9	4.4	0.1	2.9	1.3	1.2	0.4	85.1	100.0	399
20-24	29.6	23.9	0.1	6.6	0.3	10.6	1.8	3.1	1.4	5.7	1.7	2.9	1.1	70.4	100.0	1,210
25-29	36.9	29.7	0.2	7.3	0.6	14.6	2.9	2.5	1.6	7.3	3.5	3.1	0.7	63.1	100.0	1,338
30-34	40.7	32.0	1.2	9.0	1.3	13.3	3.2	2.3	1.4	8.7	4.2	3.6	0.9	59.3	100.0	1,137
35-39	37.0	30.0	5.9	8.0	0.5	9.9	2.0	1.6	2.1	7.0	2.9	3.5	0.6	63.0	100.0	1,036
40-44	39.7	30.6	9.8	7.1	0.4	8.0	2.5	2.1	0.6	9.1	4.3	3.0	1.8	60.3	100.0	741
45-49	27.3	21.8	13.8	2.0	0.4	4.2	0.6	0.4	0.4	5.5	3.6	1.2	0.7	72.7	100.0	550
Total	34.4	27.4	3.5	6.7	0.6	10.6	2.3	2.3	1.3	7.0	3.1	2.9	0.9	65.6	100.0	6,412
SEXUALLY ACTIVE UNMARRIED WOMEN¹																
15-19	39.7	34.5	0.0	7.0	0.0	8.0	0.0	19.5	0.0	5.2	2.8	0.6	1.8	60.3	100.0	170
20-24	57.6	47.9	0.0	9.3	0.0	17.0	4.6	17.1	0.0	9.7	9.0	0.7	0.0	42.4	100.0	186
25-49	52.0	47.6	4.2	8.2	0.7	16.5	3.2	13.5	1.4	4.4	2.7	0.0	1.7	48.0	100.0	387
Total	50.6	44.7	2.2	8.2	0.4	14.7	2.8	15.8	0.7	5.9	4.3	0.3	1.3	49.4	100.0	742

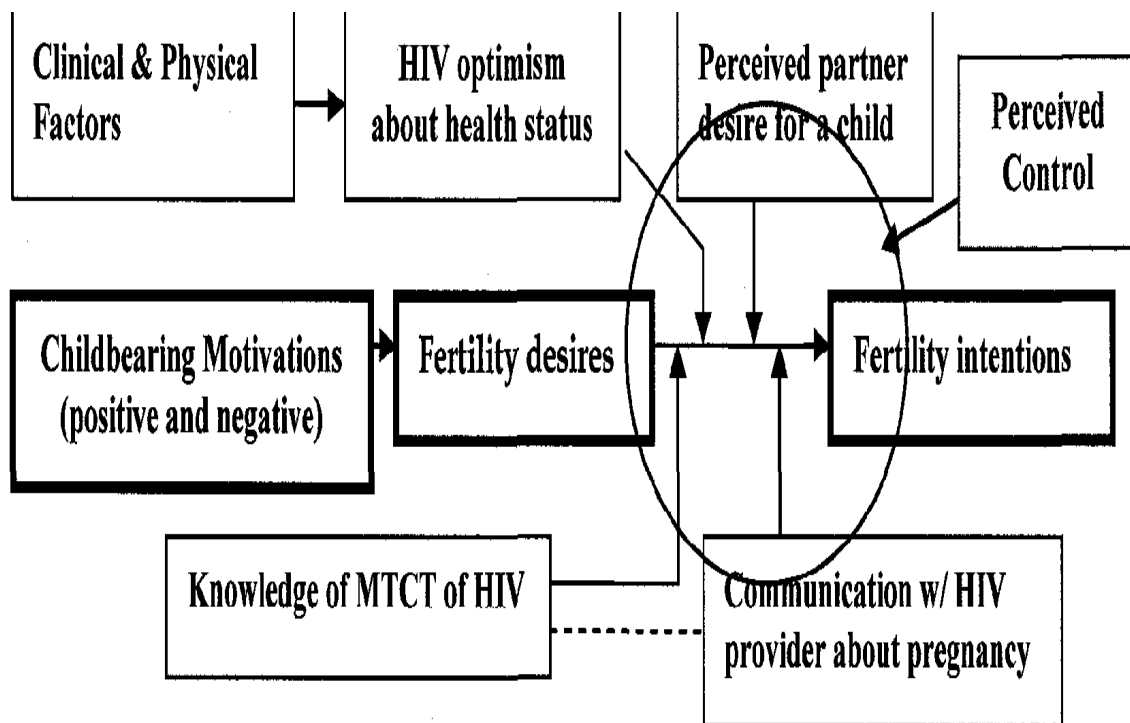
Note: If more than one method is used, only the most effective method is considered in this tabulation.
LAM = Lactational amenorrhoea method
¹ Women who have had sexual intercourse within 30 days preceding the survey

TDHS, 2010

ANNEX 3: Conceptual framework for HIV prevention

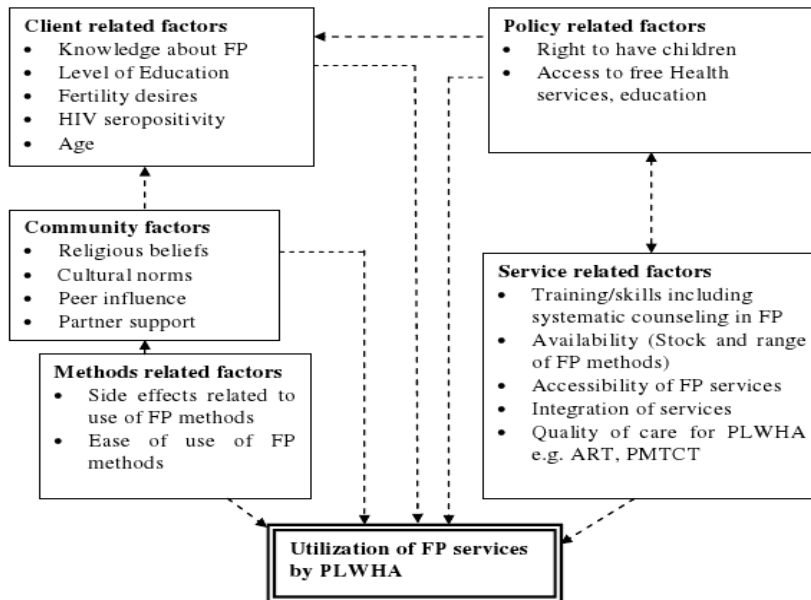


ANNEX 4: Conceptual Framework for Fertility Desire



Controlling for: age, parity, race, relationship status, insurance status, time since HIV diagnosis, disclosure of HIV status to partner, HIV status of partner if known, condom use, care of non-biological children

Annex 5: Conceptual framework on the utilization of family planning among sexually active HIV people



9

Egessa, 2010