INFLUENCERS OF UPTAKE OF DUAL FAMILY PLANNING METHOD AMONG HIV POSITIVE COUPLES IN AWACH HEALTH CENTRE IV, GULU DISTRICT.

BY

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RESEARCH REPORT SUBMITTED TO THE INSTITUTE OF HEALTH POLICY AND MANAGEMENT IN PARTIAL FULFILLMENT FOR THE REQUIREMENT OF A BACHELOR DEGREE IN PUBLIC HEALTH OF INTERNATIONAL HEALTH SCIENCES UNIVERSITY

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DECLARATION

I, Omony Samuel Okumu, hereby do declare that this research report entitled 'Influencers of uptake of dual Family Planning methods among HIV positive couples in Awach ART Clinic is solely my original work and has been prepared and submitted in fulfilment of the requirements of the award of Bachelor degree of public health and this work has never been submitted for the award to any diploma or degree from any university or Institution.

Signed …….

Omony Samuel Okumu

Date ……

APPROVAL

I affirm that I have supervised this student on the research topic entitled "Influencers of uptake of dual Family Planning method among HIV positive couples in Awach ART Clinic and therefore approve the submission of this report.

Sign……

Name of Supervisor **Dr Peter Kirabira**

Date ……...

DEDICATION

This work is dedicated to my beloved late Dad Mr Otto George William and late mother Adong Elveria who did not live to see my career ambition and died untimely before enjoying the work of my hands despite their tireless struggle in support of my ambitions. May their souls rest in eternal peace

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LIST OF ABBREVIATIONS AND ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
ARVs	Anti-Retroviral Drugs
ART	Anti-Retroviral Therapy
AFP	Artificial Family Planning
EMTCT	Elimination of Mother To Child Transmission of HIV
EDHS	Ethiopia Demographic Health Survey
FP	Family Planning
HSSIP	Health Sector Strategic Investment Plan
HSD	Health Sub District
HIV	Human Immunodeficiency Virus
ISS	Immuno Suppressed Syndrome
IHPM	Institute of Health Policy and Management
IDPs	Internally Displaced Persons
ICDP	International Conference on Population and Development
IHSU	International Health Sciences University
MCH	Maternal and Child Health
MoH	Ministry of Health

PLWHA	People living With HIV/AIDS
RHU	Reproductive Health Uganda
RCC	Roman Catholic Church
STIs	Sexually Transmitted Infections
SPSS	Statistical Package for Social Sciences
UBOS	Uganda Bureau of Statistics
UDHS	Uganda Demographic Health Survey
UMU	Uganda Martyrs University
VCT	Voluntary Counselling and Testing
WHO	World Health Organisation

ABSTRACT

Introduction and Background: Dual Family Planning is the correct and consistent use of two or more contraceptive methods that is condoms in conjunction with another method(s) by the HIV positive people to prevent transmission of infections and re-infections of HIV/STI and unwanted pregnancy. Northern Uganda has the highest HIV infection rate of 8.2% compared to a national average of 7.3% in 2011 (UDHS) and with very low utilization of family planning methods among the married people with no evidence regarding HIV positive couples utilizing dual FP.

Objective- This study was conducted to assess factors influencing uptake of dual family planning methods among HIV positive couples in Awach health centre IV, Gulu district.

Methods: A descriptive cross-sectional study was carried out using both qualitative and quantitative techniques to assess the client factors, community factors and institutional factors influencing the uptake of dual family planning methods. The investigator used structured questionnaires which were administered to 264 respondents attending ART clinic at Awach health centre IV. We carried out 7 key informant interviews to collect information from the ART Clinic staff and expert Clients using key informant guides. Quantitative data was analysed using SPSS soft ware version 16.0 and presented in form of tables, pie charts, graphs at univariate and bivariate levels. Qualitative data was analysed manually presented in verbatim quotations.

The results: This study showed 70.45% of the respondents had heard about dual family planning while 27.55% have not heard, of the 70.45% clients, only 38.6% were practicing dual FP method while the rest of the clients were not using dual method and the most used Family Planning methods was condoms, followed by injectables 24.24% and the least being permanent method 3.79%. At bivariate analysis, the clients' related factors that were

significant are, age (P-value<0.000), sex (P-value<0.025), religion (P-value<0.030), duration with partner (P-value<0.000), number of children (P-value<0.044) and the desire to have children (P-value<0.000). Among the community factors the following significantly influenced the use of dual FP; those who had heard about dual FP (P-value<0.000), partners' acceptance (P-value<0.000), method of FP used (P-value<0.000), duration of usage (P-value<0.000) and sources of information (P-value<0.000). The following institutional factors also influence the use of dual FP; distance to the facility (P-value<0.035), getting FP services from same place (P-value<0.006) and getting FP on return date (P-value<0.006).

Conclusions: The low uptake of dual FP method by HIV positive couples was significantly influence by their age, sex, religion, the duration they spent with their partners, number of children they desired, the duration of FP usage, sources of information, method of FP used, distance from the facility, accessibility and the availability of the dual FP services.

Recommendations: The health facility staff, the local leaders and the government should join hands to ensure that emphasis is put on the age of client, sex of client, religion, duration spent with partner, number of children desired, partners' acceptance, duration of FP usage, sources of information, methods of FP used, distance to health facility, accessibility and availability of dual FP services in order to increase the uptake of dual FP services among the HIV positive couples in Awach ART Clinic.

OPERATIONAL DEFINITIONS

Family planning: In our study, this is referred to as the use of the various methods of contraception that help individuals or couples regardless of their HIV status to have the number of children they want, when to have them and the duration between them (ICPD, 1994)

Discordant couples- This is a situation where one of the partner either the man or the woman is HIV negative while the other partner is HIV positive despite the couple having unprotected sex for a longer period of time. (Kiyomi et al.; 2013)

Dual protection- This is the correct and consistent use of condom in conjunction with another method of contraception and this should be practice by HIV positive couples to prevent transmission of infections and re-infection of HIV/STI and unwanted pregnancy. (Kiyomi et al.; 2013)

HIV Positive couple These are two persons in an ongoing sexual relationship and both are living with HIV, and each of these persons is referred to as a partner in the relationship (WHO, 2012).

Unmet FP need: The number of women whom are in reproductive age group and do not want any more children or need to delay or space the next birth but not using any contraceptive methods (WHO, 2011)

CHAPTER ONE:

1.1 Introduction

This chapter consists of the background information on the study, problem statement, research objectives, and research questions, justification of the study, conceptual framework, and area where the study will be conducted.

Undertaking dual family planning among HIV married couples is a sure way of preventing HIV transmission and unwanted pregnancies among HIV- infected women and this helps in the fight against the effects of HIV and AIDS in Uganda. The strategy of increasing the uptake of dual family planning enables HIV- infected women prevent unwanted pregnancy hence reducing on the rate of vertical transmission if they use condoms consistently and correctly along with other FP methods.

This dual family planning uptake has been a challenge in many settings both government and private health facilities, where records for HIV positive people and taking family planning are separated from the list of those who are HIV negative and not much information is known about the use of dual family planning and yet the WHO recommends its use among positive couples. A study done in Mulago ISS clinic in 2013, about the use of contraceptive among HIV-infected women shows that uptake of dual FP is at 12 %,(Irene Nayiga et al, 2013). Such information is not there for Awach health centre IV in Gulu district, northern Uganda.

It is on this note that the researcher set out to investigate factors influencing the uptake of dual family planning methods among HIV positive couples in Awach health centre, Gulu district, Uganda.

1.2 Background of the study

Family planning (FP) is the use of the various methods of contraception that help individuals or couples plan their family regardless of the HIV status. It helps them have the number of children they want, when to have them and how to space them through making informed decision. A woman's capacity to have a limited number of pregnancies has direct effects on her health and well being and on the outcome of each pregnancy (WHO, 2007)

According to reports from the Alma-Ata conference (1978), provision of family planning services was one of the basic and important strategies highlighted for reducing the high risk of pregnancies which often occurred too frequent, too early and too late and also was looked at as one of the ways to improve child health. The use of dual family planning methods helps HIV positive people prevent unintended pregnancies and re-infections among themselves and transmission of new infections and it's the recommended strategy worldwide.

As reported by the United Nations, to prevent unintended pregnancies and re-infections among HIV positive couples required provision of quality FP services. Good FP services together with primary prevention of HIV infection in women and their spouses have been reported to significantly reduce the rate of infants infected with HIV by 35%-45%. To prevent the infants from getting infection starts with preventing the mother from getting unintended pregnancy. There is need to emphasise the public health significance of providing effective FP services especially the dual method to PLWHA (WHO, 2006).

In Africa, women who are infected with HIV like those not infected faced unmet needs for contraceptive for both birth control and protection from other sexually transmitted infections. These people required protection against STIs using barrier methods which according to International and National recommendations, women infected with HIV should use dual FP methods. The barrier methods like condom for protection against sexually transmitted infections should be used together with another effective family planning method for couples who desire family planning post partum in order to ensure that all future pregnancies are

planned. Several studies carried out have shown that, HIV infected couples both sero-discordant and sero-concordant who continue engaging in unprotected sex will lead to development of mutant or multiple strains of HIV (Lawani et al 2014)

In Sub-Saharan Africa, women who are HIV infected are at greater risk of unintended pregnancy and sexually transmitted infections. This greatest risk of HIV/AIDS in the Sub-Saharan Africa is due to its large population, the high fertility rate and unmet need for contraceptives couple with the low uptake of dual FP methods which provides protection against STIs/HIV and unintended pregnancy (Lawani et at 2014).

Sub-Saharan Africa being developing countries, services like counselling and provision of modern contraceptives to HIV infected couples including those already on ART is a major strategy to help prevent sexually transmitted infections and unwanted pregnancies among HIV positive couples. Despite this, little is yet known on the existing practices and utilization of dual method of Family Planning methods among HIV positive couples attending ART units (Yemane et al 2013).

Uganda is among the top ten countries in sub–Saharan Africa with the highest HIV infected pregnant women with currently 7.3% people living with HIV/AIDS. According to the reports (MOH, 2006), Uganda has made significant progress in reducing the HIV prevalence rate from over 18% in 1992 to 6.4% in 2005. Despite all this progress the country has not made a similar progress in the utilization of family planning services among the HIV positive couples. Delivery of dual Family planning services for HIV-infected people in Uganda is still insufficient largely due to the parallel nature of FP and HIV services. The National plans and Guidelines promote the integration of sexual and reproductive health, including Family planning with HIV/AIDS services, as a major intervention to reduce HIV transmission.

Northern Uganda was affected by civil conflict for over 20 years which lead to displacement of over 1.5 million people from their homes into overcrowded internally displaced persons (IDP) camps and has the highest HIV infection rate. In 2004, the region had 8.2% HIV

prevalence rate, one of the highest in Uganda, compared to a national average of 7.3% and other rural areas such as the west Nile region which is only 2.3% in that year but it now stands at 4.3% (UAIS, 2011). These civil conflicts lead to disruption of social infrastructure, and migration of skilled health workers to more stable parts of the country which limits the availability of, and access to quality FP services among the people including PLWHA.

During that period, Northern Uganda also had the lowest use of contraceptives by the married couples only at 10.9% in 2006. The unmet need for family planning in the northern region was 46% among the married couples compared to 41% nationally. Overall, the total demand for family planning which was being met in northern Uganda stood at 19.1% the lowest in the whole country with no evidence regarding HIV positive couples. Many quantitative studies have been done and information documented about factors associated with contraceptive use among PLWHA in Uganda but the situation in northern Uganda not clear which requires a detailed exploration.

The WHO and MoH recommends the use of dual family planning among HIV positive women and their spouses including those taking ARVs (WHO, 2012). Implementation of these policies and guidelines help to coordinate FP/HIV integration and foster government commitment, involves the target audiences, develop an advocacy strategy to mobilize engagement and support for integrating services among the program managers, service providers, policy makers, and PLWHA.

This study therefore aims to assess factors influencing uptake of dual family planning among HIV positive married couples in Awach ART clinic in Gulu district, Northern Uganda.

1.3 Background of the study area

Gulu District is located in Northern Uganda and its headquarter is situated 332km by road from Kampala the capital city of Uganda. The district is bordered by Lamwo district in the north east, Amuru and Nwoya district in the west and southwest respectively, Oyam district in the south, Lira district in the south east and Pader district in the east. The total area is 3,449km^2 with a population of 396,500 people; male 196,300 and female 200,200. The district has 16 sub-counties, 70 parishes and 294 villages.

Gulu district is the regional headquarter of the Acholi sub-region, housing the regional referral hospital and the district has two health sub–districts, that is Omoro and Aswa HSD. Gulu district has two major referral hospitals, St. Mary's hospital, Lacor and Gulu regional referral hospital which serves for major and emergency reproductive health issues. The district also has two hospitals which also help in reproductive health issues in addition to the two major referral hospitals, that is Independent hospital and 4th Division Military hospital.

The HSDs have two health centre IVs which serve as the referral health centres for the HSD and it's headed by a senior medical officer. Aswa HSD has its headquarter at Awach heath centre IV located in Awach sub-county. The HSD has six sub-counties which it serves, that is Palaro sub-county, Patiko sub-county, Bungatira sub-county, Unyama sub-county, Paicho sub-county an Awach sub-county.

Family planning has been a challenge in the district despite several bodies working closely to ensure services are provided to the people. MoH, reproductive health Uganda, Marie stopes and Gulu youth centre are the major providers of reproductive health services including provision of quality FP services and treatment of STIs. According to UDHS 2011, it found that more women about 43% are discontinuing using family planning methods within 12 months of starting use because of fear of side effects as the major reason. It was also found

that most of these women are uneducated, mostly dropout school ladies who stopped in p.5 and p.6 respectively.

In 2007, a study done in Kitgum and Pader districts by women's refugee commission and united nation population fund with a two years follow up of the study, found that, there was lack of access to family planning and the greatest challenge was lack of integration of family planning into HIV programmes.

Awach health centre IV provides both ART and family planning services and where the majority of HIV clients get services in the health sub-district, but there is no data that are disaggregated for HIV positive people undertaking dual family planning methods. Not much has been done to find why HIV positive people are not taking dual family planning methods and yet its recommended by the WHO to help prevent positive couples from re-infecting themselves and transferring infections to those who are discordant and other STIs which their treatment are always complicated in the present of HIV. It's on this notes, that the investigator want to assess factors influencing uptake of dual family planning among HIV positive couples in Awach health centre IV, in Aswa HSD, Gulu District.

1.4 Problem statement

Globally, there have been several attempts to integrate family planning with sexually transmitted infections (STIs) including HIV/AIDS services, but policies and programmes continue to treat the two as unrelated areas of intervention. The global attention to HIV/AIDS pandemic has overshadowed attention given to family planning especially in Africa where the burden of HIV/AIDS is more serious, WHO recommends the use of dual methods that is the use of condoms in conjunction to another contraceptive method by HIV positive couples as these will reduce transmission of HIV/STIs, re-infection and unwanted pregnancy with a Family Planning uptake in Uganda standing at 26% (UDHS 2011).

Despite the efforts being made by MoH, Reproductive Health Uganda (RHU) and Marie-Stopes in providing comprehensive family planning services, the number of HIV positive couples utilizing dual method of family planning remains low and with little documented information on the uptake of dual family planning in other areas. . A study conducted by Makerere University on uptake of dual family planning in Mulago ART clinic, puts the percentage at 12% which is very low (Irene N et al, 2013). A survey carried out found that, the percentage of men age 15-49 who know that the risk of HIV transmission can be reduced by using condoms and limiting sex to one faithful, uninfected partner was at 78% for rural areas (UAIS 2011).

The consequence that is going to rise as a result of this low uptake of dual family planning among the HIV positive couples is that, there will be increase in sexually transmitted infections among the partners like hepatitis B, syphilis, gonorrhoea which complicate treatment when combined with HIV, there is going to be increase government expenditure on budgeting for care and treatment of these people with STIs and the new HIV infections and increase morbidity and mortality as the prognosis of HIV and STIs are always very poor in the course of treatment

Client factors like religion, duration of marriage, community factors like stigma, cultural beliefs and institutional factors like distance to health facility, availability of FP can have significant influence on the uptake of dual family planning methods in the area. It's against this notes that the researcher is going to investigate factors influencing the uptake of dual family planning methods among HIV positive couples in Awach health centre IV, Gulu District.

1.5.1 General Objective

To assess the factors influencing uptake of dual family planning method among HIV positive couples in Awach health centre IV in Gulu district in Northern Uganda.

1.5.2 Specific objectives

1.To assess the client factors influencing the uptake of dual family planning method among HIV positive couples in Awach health centre IV in Gulu district.

2. To identify community factors influencing the uptake of dual family planning method among HIV positive couples in Awach health centre IV in Gulu district.

3. To establish institutional factors influencing the uptake of dual family planning method among HIV positive couples in Awach health centre IV in Gulu district.

1.6 Research questions

1. What are the clients' factors influencing the uptake of dual family planning method among HIV positive couples in Awach health centre IV in Gulu district?

2. What are the community factors influencing the uptake of dual family planning method among HIV positive couples in Awach health centre IV in Gulu district?

3. What are the institutional factors influencing the uptake of dual family planning method among HIV positive couples in Awach health centre IV in Gulu district?

1.7 Significance/Justification of the study

Currently, MoH policies emphasize integration of family planning services in HIV/AIDS prevention, care and treatment services. This will help to provide a wide range of services to meet the demand of PLWHA and for effective service delivery. With scale up program of effective FP alongside such care and treatment there is excellent opportunities for encouraging dual methods of family planning among PLWHA.

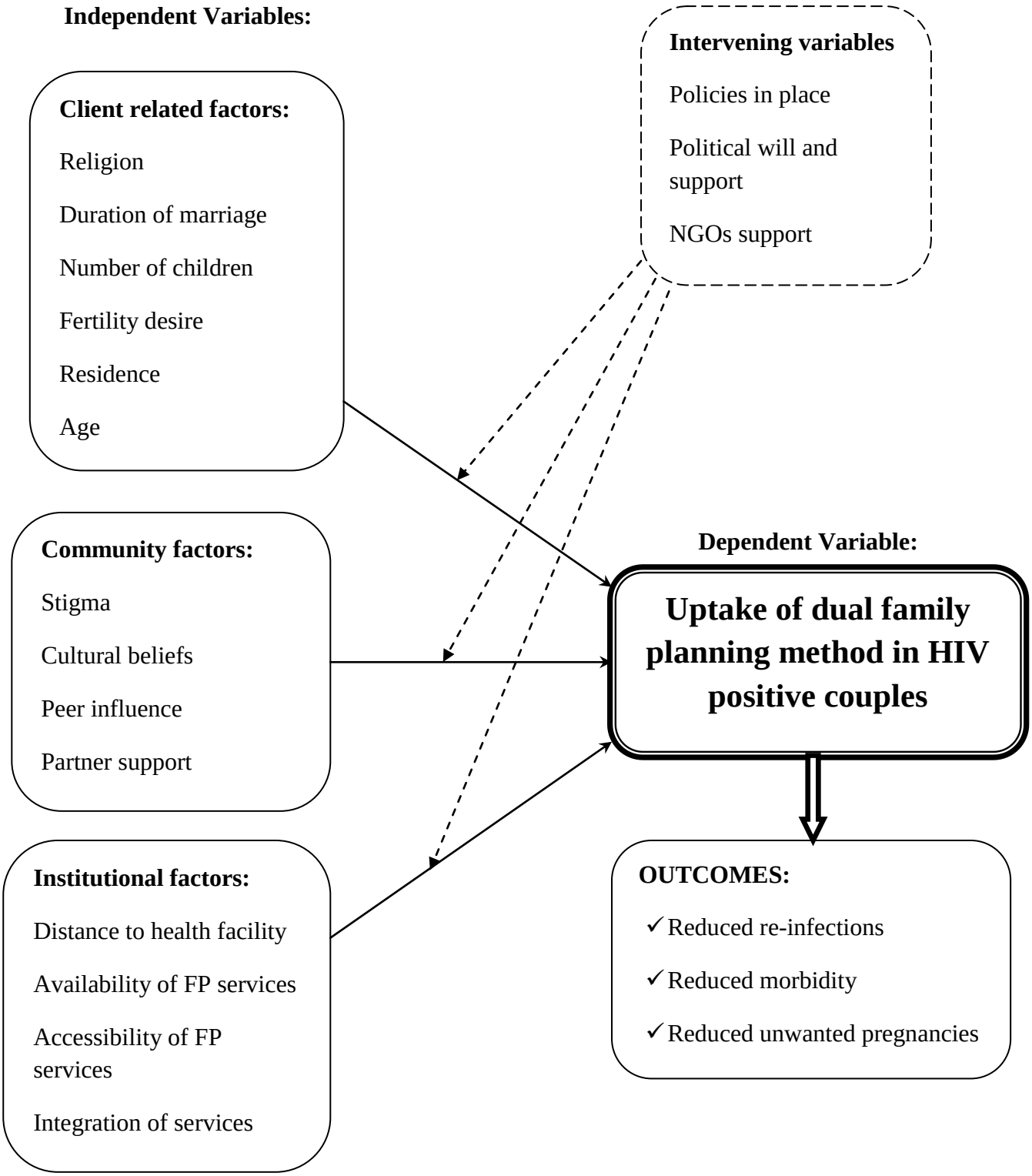
This study therefore is going to provide baseline information on future research on dual family planning methods since such a study has never been conducted in Gulu district and it help a similar study in another area within the country and in any part of the world.

This study is also to provide policy makers, authority and implementers of family planning services in Gulu district with knowledge about the important of ensuring that people who are HIV-infected received dual family planning as this will protect them from re-infecting themselves and in allowing transfer of infection to the other partner especially among the discordant couples and the community will also benefits as they are going to have a healthy and productive people. It will also help them in preventing unwanted pregnancy which put the life of HIV positive people at risks. In a similar way, the information from this study will help the district and the country to strategically plan for services needed for HIV positive couples

1.8 Conceptual framework

The conceptual framework shows the relationship between the independent variables and the dependent variable. The clients' related factors, community factors, service related factors are the independent variables and uptake of dual family planning method is the dependent variable meaning if all the independent variables are ensure then uptake of dual family planning method among PLWHA will be scaled up in Awach health centre IV.

1.9 Diagrammatic illustration of the conceptual framework



CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter deals with related studies that have been conducted before on dual family planning among HIV positive couples. It is arranged logically following the variables in the study: client related factors, community factors and institutional factors and the uptake of dual family planning services by the HIV-infected married couples.

2.2 client factors influencing uptake of dual family planning

2.2.1 Age of client influencing uptake of dual family planning

The age of the client can have a significant influence on the uptake of dual family planning. The perception people have that when you are already old there is no need to use contraception since they are facing menopause and yet HIV infection affect all categories of people and this can debarred them from accessing the services despite it availability in the facility. A study conducted in six countries in the sub Saharan Africa that is Kenya, Malawi, Tanzania, Ivory Coast Burkina Faso and Ghana showed that younger age especially age group between 20-29 are more likely to use family planning than those who are already age Rob et al, (2007).

2.2.2 Sex of the clients influencing uptake of dual family planning

The sex of the clients can have a significant influence on the uptake of dual family planning among HIV positive couples in Awach health centre IV. The belief people have that being a man mean you are only person to decide at home can affect the uptake of dual family planning methods which can hinder women utilizing the services available for them despite it present at the facility. A review by the WHO, 2007, on engaging men in family planning which was conducted in Bangladesh, India, and Nepal found that, changed in behaviour of

men made a successful achievement in family planning and this will also apply to the dual methods among HIV positive couples (Barker G et al 2007)

2.2.3 Religion of client influencing uptake of dual family planning

The clients' religion can have a significant influence on the uptake of family planning including dual methods. The beliefs people have that God sent them to multiply and fill the earth always debarred them from utilising family planning services as people look at that as it's again their faith. A study conducted by UMU in 2008 on the uptake of natural family Planning by clients of catholic health units in Masaka diocese, Uganda (Catherine et al 2008) showed that the Roman Catholic Church (RCC) opposes AFP methods on basic grounds such as the definition of the onset of life and the reason of sexual union. Further reasons cited by the church include the potential misuse of AFP methods and the false sense of security they impart to the users. A study conducted in Uganda 2011, found it that, the religion of an individual has significant effect on family planning utilization regardless of the HIV status of the couples. The study showed that Muslim women were using family planning methods more than the Catholic women (Wanyenze et al 2011).

2.2.4 Duration of marriage influencing uptake of dual family planning

The time one has taken in the marital affair also has a great influence on the uptake of family planning regardless of the HIV status of the married couples. People want to have children irrespective of being HIV positive and this is a reproductive health right of every individual human being which should not be violated. So women who are newly married would not wish to use contraceptive as they still desire to have children while those who are married long time and had good number of children will wish to take up contraceptives. A study conducted in south Wollo Zone, Northeast Ethiopia on factors affecting fertility decisions of married men and women living with HIV found that the duration of stay in the relationship have a significant influence on uptake of family planning among married couples in the area

with higher percent for couples who have been in relationship for more than five years (73.7% among contraceptive users) including dual family planning (Menberu et al., 2010).

2.2.5 Number of children influencing uptake of dual family planning

A demographic and socio-cultural study on factors influencing contraceptive use among currently married women regardless of their HIV status in Uganda showed that higher contraceptive use was linked with a higher number of existing children in the family. In a study done in Nigeria, plateau state in 2013, about factors related to the uptake of contraception in a rural community found that, the majority of women (the greatest percentage) on family planning were multiparous (42.2%) and grand multiparous (44.6%) in which among them were HIV positive women (Hadiza et al 2013).

According to Feldman and Maposhere (2003), in their study to investigate the impact of HIV/AIDS on sexual and reproductive lives of women living with HIV in Zimbabwe established that women with quite a lot of children wanted to avoid more pregnancies. A similar study in Uganda on factors affecting use and non use of contraception showed that the number of existing children was one of the major independent factors affecting the use and non-use of contraception according to Utomo et al 1983.

2.2.6 Fertility decision/desire influencing uptake of dual family planning

The fertility decision for people varies differently as some people have the feeling of producing many children and others may want few depending on their individual interest and likes and at time it's based on individual resources own as one may think of having no problem of taking care of the children he/she have. The decision to have children also occurred among the HIV-infected couples which significantly affected the uptake of dual family planning methods. In a study that was conducted in Ethiopia on assessing factors associated with fertility decision of PLWHA in south Wollo zone, Northeast Ethiopia showed

18.3% of the currently married PLWHA have decided that they should have children. (Menberu et al 2010)

A similar study conducted on utilization of Modern Contraceptives among HIV Positive Reproductive Age Women in Tigray, Ethiopia, 2013, found that, women had the desire to have children despite their HIV status (Yemane et al 2013). In Uganda 2011, a study carried out on Uptake of family planning methods and unplanned pregnancies among HIV-infected individuals which was in various HIV clinics, showed that, the desire to have children is a major factors affecting uptake of family planning including dual methods (Wanyenze et al; 2011).

2.2.7 Residence of the client influencing uptake of dual family planning

The residence of a client can have a significant influence on the uptake of dual family planning. This could probably be that some clients reside very far from Awach health facility which requires them to get transport in order to reach the facility and this may be difficult to some client as this require money to transport them to the clinic for instance clients from other sub-counties like Palaro which is very far. A study conducted in the Ethiopia demographic and health survey, (EDHS, 2011) found that residence of client affected their uptake of family planning. In that study it was found that women who reside in urban centres had unmet need for family planning of 18.4% as compared to 32.7% for those who reside in rural areas. (Getiye D et al 2011).

2.3 Community factors influencing uptake of dual family planning

2.3.1 Stigma and fear influencing uptake of dual family planning

Many people do not use family planning including the HIV positive women because of the stigma and fear that is brought by family planning methods. Women fear that FP altered their menstrual cycles and it increase the amount of blood flows during their periods which may start when one is in public and this really stigmatise the women and some have the fear that

people who see them not having children will suspect other things. A study conducted in Tanzania, 2011 on promoting family planning among the nomadic communities regardless of their HIV status revealed that although the nomadic people knew about family planning, they did not use them because of stigma and fear (Ernest et al; 2011).

2.3.2 Cultural beliefs influencing uptake of dual family planning

Cultural beliefs are major obstacle to uptake of family planning in general including dual methods. The cultural practices which prevent people from making informed discussion about sexual and reproductive health issues at home and in the community impede the willingness of people taking family planning services which are free of charge. A study conducted in South Africa 2013, on factors influencing the uptake of contraception services by the adolescent in rural community put in the discussion section that, culture is the major impediment to uptake of family planning particularly to young married couples (Cobb 2013). A study conducted to identify and describe perceptions of HIV-infected Swazi women of childbearing showed that, cultural opportunity overrule individual factors such as knowledge about ones HIV status for example force from in-laws forces HIV positive women to have children despite their status, this being due to the fact that culture allowed inheritance of women (Sukati and Shabangu 2006).

2.3.3 Peer influence affecting uptake of dual family planning

Peer can have a significance influence on individual uptake of family planning as a whole and as well as among the HIV positive couple on the use of dual methods. When peers have enough information regarding family planning methods, there is high possibility that an individual will utilize family planning services. A study conducted in Malawi in 2013, on encouraging contraceptive uptake in Malawi by motivating men to communicate about family planning: the project which targeted men found that having peer-delivered educational intervention increased the uptake of family planning (Dominick et al 2013). When men are given knowledge and involved in family planning, partners' uptake is possible.

2.3.4 Partner support influencing uptake of dual family planning

Involvement of men in getting on board on matter to do with family planning practices is very important as this will reduce the violence which come always as a result of women deciding to take up family planning of their choice without informing their spouses because their spouses will not accept them to use family planning methods. This has been happening because men were not informed of the benefits when their women use FP and this applies to HIV positive couples. A review by the WHO, 2007, on engaging men in family planning which was conducted in Bangladesh, India, and Nepal found that, changed in behaviour of men and gender-related attitudes made a successful achievement in family planning and this will also apply to the dual methods among HIV positive couples (Barker G et al 2007)

In a similar study on attitudes toward family planning among HIV-positive pregnant women enrolled in a Prevention of Mother-To-Child Transmission of HIV in Kisumu, Kenya Akello et al, (2013) showed that 50% of women who are supported by their spouses are likely to use contraceptive methods while 23% are not able to use because their spouses does not need contraceptives.

2.4 Institutional factors influencing uptake of dual family planning

2.4.1 Distance to health facility influencing uptake of dual family planning

The distance one takes to reach a health facility can impact badly on the use of family planning in general as well as dual methods. The Health Sector Strategic Plan (HSSIP) III, and the National Health Policy Guidelines and Standards for Sexual and Reproductive Health and Rights (2006), made it clear that all levels of formal health care right from health centre IIs to Hospital levels should offer an appropriate range of family planning services. This was to reduce the missed opportunities encountered due to distances clients met on searching for family planning services. A study done in Ethiopia 2013, on geographical disparity and factors influencing modern contraceptive use among married women including those who are HIV-positive noted that, the location of an individual influence the utilization of family

planning **(**Lakew et al). Koblinsky, et al., (1993), noted that long distances to facilities affect the uptake of services.

2.4.2 Availability of family planning services influencing uptake of dual family planning

The availability of family planning methods in the health facility greatly affects the uptake of the services including dual methods. The presence of the FP methods enable the clients receive the services that they desire at one visit other than coming the following day/week or referral to other facility for the services simply because the services are not available in the facility. In a study conducted in Zambia in 2011, on Modern Contraceptive and Dual Method Use among HIV positive Women in Lusaka, found that women who were not previously using modern contraception desired family planning referrals and those referred successfully received services within 90 days which is 3 months. There is also high unmet need for contraception among HIV positive women particularly dual FP methods use (Carla J. Chibwesha et al 2011).

2.4.3 Accessibility of family planning services influencing uptake of dual family planning

Accessibility to Family planning services can significantly affect use of dual family planning by the HIV positive couples. When clients come to health facility to get family planning services and they don't find the services being looked for when they have already decided to take the methods will definitely prevent them from coming back for the services as this is seen as a waste of time. A study documented by Mbonye 2003, on delivering family planning messages showed that the poor attitudes of staff, poor accessibility to services limit the clients from accessing family planning services and this applies to HIV-infected clients (mbonye et al 2003). Others also put it that, the long waiting hours clients spend when they have come for family planning services also prevent them access to services as many will leaves before they have received the services and the little quantity of information given during care (Jitta, 2008).

2.4.4 Integration of services influencing uptake of dual family planning

Integration of family planning services into other programmes of the health facility will have a significance influence on uptake of family planning in general and among HIV-infected people as a whole. A study carried out by Askew and Berer (2003), shows that, the integration of services is very crucial. Family planning can be integrated into VCT, EMTCT (Askew I et al 2003). Studies conducted by Beyeza 2011; Nattabi 2011; Wanyenze 2011; Chakrapani 2011; Chi 2012 showed that there was low uptake of dual family planning use among HIV-positive people due to lack of integrating family planning services in to HIV/AIDS programme. The studies also showed that Integration of Family Planning services for female positive HIV clients as they frequently used Maternal and Child Health (MCH) and reproductive health services would lower costs to clients by receiving all the services at a single site. Some of these studies also highlighted that FP can be integrated into services such as antenatal services, STI/RTI services, HIV/AIDS services, Maternal Newborn health services, and postpartum and post abortion services.

CHAPTER THREE: METHODOLOGY

3.1 Introduction

In research, methodology refers to a systematic way of collecting data from a population to understands a given phenomena and to generalized the findings to a larger population. This chapter basically consisted of; the study area, the study design, the study population, sample size calculation, study variables, sampling procedures, quality control measure, data collection technique, ethical consideration, data analysis, data management, selection criteria and limitation of the study.

3.2 The study design

This was a cross-sectional study in which quantitative data was collected by the researcher to determine factors influencing uptake of dual family planning methods among HIV positive couples in Awach health centre IV. This is because it's in accordance to Amin (2005) in which design the researcher records the information about respondents without manipulating their study environment at a single point in time from a sample of a large population from which we collected the data.

3.3 Study area (sources of data)

The study was conducted in Awach health centre IV, which is the health sub district headquarter. The health centre provides services to PLWHA with about 800 married people enrolled for the service mainly from the six sub counties in the health sub district (Palaro, Bungatira, Unyama, Paicho, Awach, Patiko), the health centre is also the major referral centre for PLWHA in the health sub district.

3.4 The study population

The study population was PLWHA who are married and getting services from Awach health centre IV and residing in Aswa health sub district who met the inclusion criteria to participate in the study.

3.5 Sample size calculation

Kish Leslie method (1965) was employed to determine to sample size

$n=z^2.p.q/e^2$

Where n = was the sample size

Z = was the normal distribution taking a value of 1.96

P = 78% (The percentage of men aged 15-49 who knew that the risk of HIV transmission can be reduced by using condoms and limiting sex to one faithful uninfected partner, Uganda AIDS Indicator Survey 2011, page 16)

q = was the probability of failure (1-0.78 = 0.22)

e = was the sampling error at 5% (0.05)

$n = (1.96)^2 \times 0.78 \times 0.22 / (0.05)^2 = 264$.

Therefore, we interviewed a total of 264 respondents from PLWHAs attending services at Awach ART clinic

3.6 Sampling procedures

In this study, the researcher used simple random sampling methods for the respondents targeted in the health centre to ensure that every member had an equal chance of being chosen in the study. The questionnaires were administered to respondents on different clinic days to ensure quality data and to lessen works.

3.7 Study variables

The study variables consisted of dependent and independent variables.

3.7.1 Dependent variables

The dependent variable was uptake of dual family planning methods in HIV-positive couples

3.7.2 Independent variables

(i) Client related factors which included religion, fertility decision/desire, duration of marriage, number of children residence.

(ii) Community factors which included religious beliefs, cultural beliefs, peer influence and partner support.

(iii) Health facility factors which included availability of family planning methods, accessibility of FP services, integration of services and distance to facility

3.8 Selection criteria

3.8.1 Inclusion criteria

Both men and women who were married and on ART in Awach ART clinic

Active clients (couples) who were on ART for three months and above

Clients who consented for the study

3.8.2 Exclusion criteria

- PLWHA who were very sick (physically and mentally)
- PLWHA who were registered and receiving services from Awach ART clinic and had not yet taken three months
- Sexually active women living with HIV/AIDS past the reproductive age of 49 as they were less likely to use FP methods
- Clients who refused to consent.

3.9 Instruments and measures of the study

3.9.1 Quantitative data collection tools

The study used researcher-administered questionnaire as tool/instrument of data collection, the questionnaires were administered by the research assistants to the respondents and collected by the researcher after they are filled by the respondents. The research assistants were selected and only those who knew English and the local language spoken in the area and with some knowledge in data collection were chosen. They were trained in order to be equipped with the basic information, knowledge and skills for data collection. Pre-testing was

done in Lalogi H/C IV which improved the tool and helped the research assistants during data collection as the challenges were discussed before actual data collection.

3.9.2 Qualitative data collection tools

Key Informants (KI) interview was conducted after indentifying the people who were interviewed: A total of seven key informants were identified. These included the three (3) staff working in the ART clinic that was the clinical officers, the enrolled nurse and the nursing assistant who was helping in dispensing the drugs, the district HIV/AIDS/TB focal person (1) and the three expert clients (3) who were assisting in ART clinic during the study.

3.10 Data collection

The researcher developed questionnaires which were used for collecting data. Together with the trained research assistants, whom the researcher trained them specifically for data collection procedures distributed the questionnaires to the respondents. The researcher explained the purpose of the study to the respondents during the process of distributing the questionnaires. The researcher and research assistants interpreted the questionnaires to some respondents. The researcher immediately collected the completed questionnaires and appreciated the participants after receiving the completed questionnaires.

3.11 Data management

The researcher counted the questionnaires properly and then gave them to the respondents; the respondents were given time to filled the questionnaires and after they were collected back and counted again and taken. The questionnaires was thoroughly checked for completeness, accuracy and stored for entry into the database according to the codes of the questionnaires.

3.12 Data analysis

The data which were collected was entered in to a designed soft ware (excel spread sheet) and analyzed following the objectives: client related factors, residence of the client, community

factors and institutional related factors were analyzed using statistical package for social sciences (SPSS)version 16 software. Descriptive statistics was presented by mean of frequencies, percentages, pie charts and bar graphs which were used specifically for specific objectives and categorical variables examined the association between the independent and dependent variables.

3.13 Quality control measure and minimising errors

Quality control measures were addressed through employing the following measures in order to ensure that the data produced was complete, reliable and accurate.

Pre-testing of the instruments which were used to collect data before actual data collection was done outside the study area

Quality was also ensured by having the research assistants' trained on data collection protection procedures which ensure safety of data, all the three research assistants were trained on how to collect quantitative and qualitative data and the skills to handle participants such as interviewing skill and the meaning of the research contents. Coding was done to avoid repetition of data in entry process in the database.

Checking to find out the completeness and accuracy of data collection forms was done at the end of each day that the data was collected and gaps that were identified in the questionnaires such as missing age or parish of the respondents had been addressed with the respective research assistants

3.14 Ethical considerations

Here, the researcher considered the research ethical standards and got permission from IHSU, institute of health policy and management and the letter was taken to the health sub district authorities for permission to be granted so that data collection kicks off. Questionnaires were answered by informed consent from the respondents and the information obtained was kept confidential since names of the respondents were not taken.

3.15 The limitation of the study

This study was limited only to HIV positive married couples who were enrolled on ARVs in Awach health centre IV and coming from the six sub-counties in Aswa health sub-district (palaro, Bungatira, Unyama, Patiko, Awach, Paicho), the purpose of the study was strictly for academic reason unless the IHPM of IHSU is consulted for other purpose the results of the study will not be generated.

3.16 Dissemination plan

When this study was completed, the report documented was signed by the researcher and supervisor and submitted to IHSU research department in three hard copies. Of these copies, one was put in the library for use in future by the university students and lecturers and any other users.

CHAPTER FOUR: RESULTS

(DATA PRESENTATION, ANALYSIS AND INTERPRETATION)

4.1 Introduction

This chapter takes into account the presentation of the collected data that has been statistically analyzed and interpreted. In this study, 264 respondents were interviewed. The respondents considered were couples who are HIV positive and attending ART Clinic in Awach Health Centre IV. The data was analyzed using SPSS (Special package for Social Sciences) a computer soft ware for statistical analysis-cross tabulation of the variables, Stata 10 and Microsoft Excel 2007. The responses obtained are representative of the views of HIV positive couples in the study area.

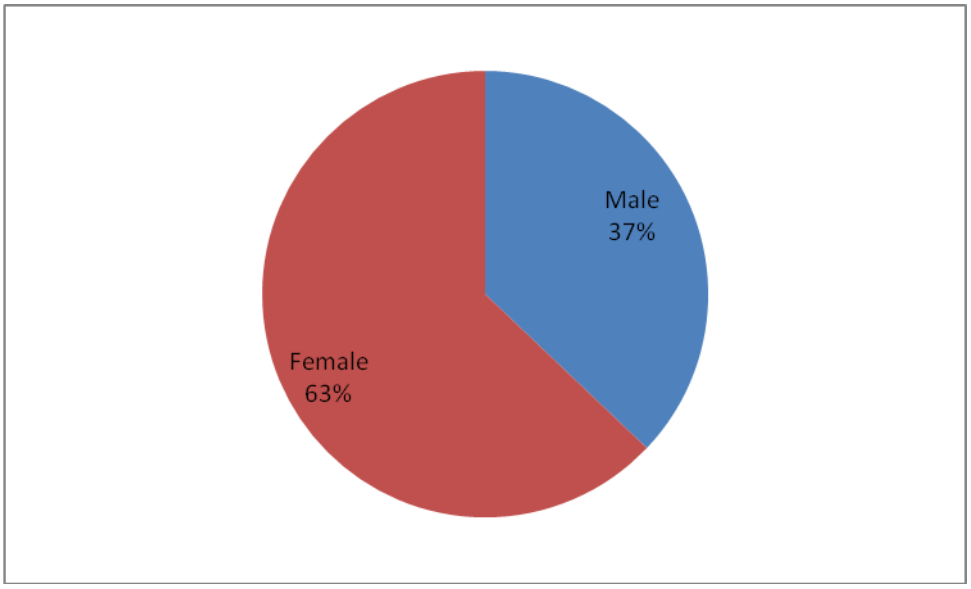
The results specifically look at;

1. The client factors influencing the uptake of dual family planning method.
2. The community factors influencing the uptake of dual family planning method.
3. The institutional factors influencing the uptake of dual family planning method.

The percentage response in the study: out of the 264 targeted sample sizes, all responded to the study with a 100% response rate

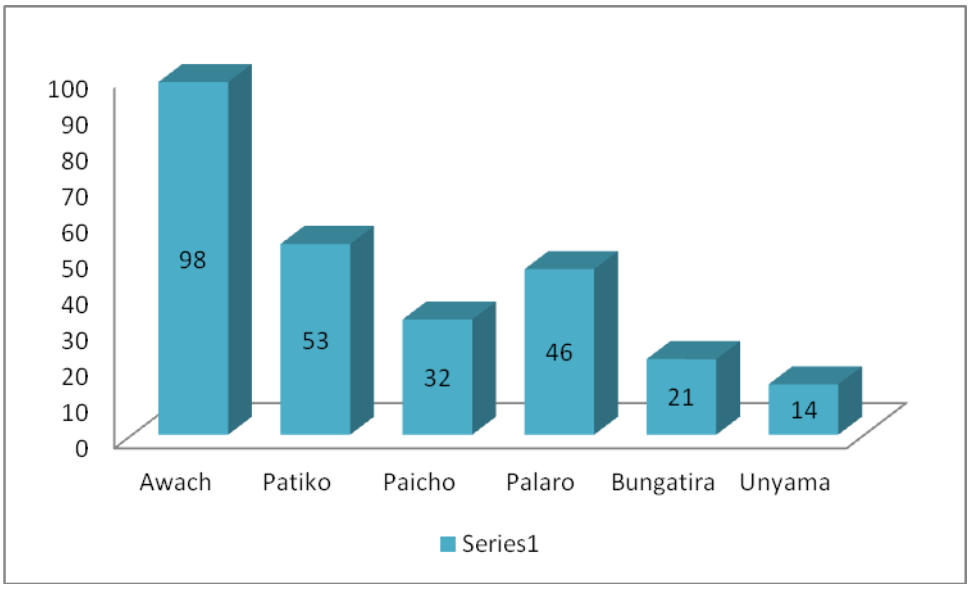
4.2 Clients related factors

Figure 4.2.1: Showing the distribution of respondents by sex



Majority of the respondents (63%) who were receiving ART services during the time of study were Females compared to Thirty seven percent (37%) of their Male counter parts.

Figure 4.2.2: A histogram showing respondents' residence



The majority of the respondents who were receiving ART services and participated in the study came from Awach sub county 98(37.12%), followed by Patiko sub county 53(20.09%) and the least being those from Unyama sub county 14(5.30%).

Table 4.2.1: Univariate analysis of Client factors for HIV positive couples

Variable	Frequency (N=264)	Percentage (%)
Age category		
15-24 years	41	15.53
25-34 years	97	36.74
35-44 years	102	38.64
45 and above years	24	9.09
Total	264	100
Religion of respondent		
Catholic	117	44.31
Protestant	72	27.27
Muslim	13	4.93
Pentecostal	24	9.09
Others (specify)	38	14.39
Total	264	100
Duration with partner		
Less than 1 year	17	6.44
1-2 years	35	13.26
3-5 years	49	18.56
6-9 years	77	29.17
10 years and above	86	32.58
Total	264	100
Number of children a respondent has		
None	25	9.47
1 child	47	17.80
2 children	44	16.67
3 children	42	15.91
4 children	41	15.53
5 and above children	65	24.62
Total	264	100
Desire for more children		
Yes	164	62.12
No	100	37.88
Total	264	100

The majority of the respondents were those in the age group 35-44 years (38.6%) followed by those in the age bracket 25-34 years (36.7%) and the least being those in the age group 45 years and above (9.1%).

The most dominant religion among the clients in Awach ART Clinic was Catholic faith with forty four point three percent (44.3%), followed by Protestant with twenty seven point three percent (27.3%), Muslem being the least with four point nine percent (4.9%).

The majority of clients have stayed with their partners for ten years and above (32.6%), followed by those who have stayed in the relationship for a period of 6-9 years (29.2%) and the least percent being those who have stayed in the relationship for less than one year (6.4%)

Most clients (respondents) sixty two point one percent (62.1%) desired to have children compared to those who do not desired to have (37.9%).

Table 4.2.2: Bivariate analysis showing the association between client related factors and the uptake of dual family planning among HIV positive couples

		Practice of dual family planning					
Variable		**Yes**	**No**	**Total**	**df**	**χ^2**	**P-value**
Age							
	15-24 years	3(3.1%)	38(22.9%)	41(15.5%)			
	25-34 years	36(36.7%)	61(36.8%)	97(36.7%)			
	35-44 years	51(52.0%)	51(30.7%)	102(38.6%)	**3**	**22.999**	**0.000***
	45 and above years	8(8.2%)	16(9.6%)	24(9.1%)			
	Total	**98**	**166**	**264**			
Sex	Male	30(30.6%)	68(41.0%)	98(37.1%)	**1**	**7.391**	**0.025***
	Female	68(69.4%)	98(59.0%)	166(62.9%)			
	Total	**98**	**166**	**264**			
Religion	Catholic	50(51.0%)	67(40.4%)	117(44.3%)			
	Protestant	29(29.6%)	43(25.9%)	72(27.3%)	**4**	**10.712**	**0.030***
	Muslim	0	13(7.8%)	13(4.9%)			
	Pentecost	7(7.1%)	17(10.2%)	24(9.1%)			
	Others	12(12.3%)	26(15.7%)	38(14.4%)			
	Total	**98**	**166**				
Duration with partner	Less than 1 year	0	1710.2%)	17(6.4%)	**4**	**44.814**	**0.000***
	1-2 years	2(2.0%)	33(19.9%)	35(13.3%)			
	3-5 years	21(21.4%)	28(16.9%)	49(18.6%)			
	6-9 years	24(24.6%)	53(31.9%)	77(29.2%)			
	10 years and above	51(52.0%)	35(21.1%)	86(32.5%)			
	Total	**98**	**166**	**264**			
Number of children	None	10(12.1%)	15(8.3%)	25	**5**	**11.427**	**0.044***
	1 child	8(9.6%)	39(21.6%)	47(17.8%)			
	2 children	13(15.7%)	31(17.1%)	44(16.7%)			
	3 children	16(19.3%)	26(14.4%)	42(15.9%)			
	4 children	9(10.8%)	32(17.7%)	41(15.5%)			
	5 and above children	27(32.5%)	38(21.0%)	65(24.6%)			
	Total	**83**	**181**	**264**			
Desire to have children	Yes	70(64.8%)	94(60.3%)	164(62.1%)			
	No	38(35.2%)	62(39.7%)	10037.9%)	**1**	**12.168**	**0.000***
	Total	**108**	**156**	**264**			

Of all the clients who participated in the study, the majority were in the age bracket of 35-44 years (38.6%) and the least being those in the age group of 45 years and above (9.1%). The analysed data showed a significant evidence of the relationship between age of the client and uptake of dual FP methods (x2 = 22.999, df =3 and p-value = 0.000). This therefore means that at 95% confidence interval, there is a close relationship between age and uptake of dual FP methods among the clients. At bi-variate analysis of sex it was found to be an influencer of uptake of dual family planning among the HIV positive couples, with a significant relationship between sex of the person and uptake of dual FP methods (x^2 = 7.391, df = 1, p = 0.025). This therefore implies that at 95% confidence, it's safe to conclude that, there is a relationship between sex and uptake of dual FP methods among the clients.

Among the clients who responded in the study the dominant religion was catholic (44.3%) (X^2 = 10.712, df = 4, P = 0.03). This implies that, at 95% confidence level, the data showed significance evident to accept the claim that there is a close association between religions and uptake of dual family planning methods among the HIV positive couples. In the result, most clients (32.5%) responded that they have stayed in the relationship for ten years and above (X2=44.814, df=4 and p-value=0.000). this implies that at 95% confidence interval, there is a significance relationship between the duration with partner and uptake of dual family planning among the HIV positive couples. The majority of the respondents (24.6%) had five children and above (X^2 = 11.427, df = 5, p = 0.044). therefore at 95% confidence, it is safe to conclude that there is a close association between number of children one has and uptake of dual family planning methods among the HIV positive couples. Most clients who responded in the study reported they had desire to have more children (62.1%). The data analysed showed significant relationship between the desire to have children and uptake of dual FP (x2 =12.168, df = 1 and p-value = 0.000). This means that there is a enough evidence to accept the claim that there is a relationship between desire to have children and uptake of dual FP among HIV positive couples.

4.3. Community Related Factors

Table 4.3.1: Uni-variate analysis of community factors

Variable	Frequency (N)	Percentage (%)
Whether a client heard of dual family planning method		
Yes	186	70.45
No	78	29.55
Total	**264**	**100**
Practice dual FP		
Yes	102	38.6
No	162	61.4
Total	**264**	**100**
Partner's acceptance of dual FP		
Yes	118	44.69
No	146	55.31
Total	**264**	**100**
FP method used		
Oral pills	25	9.47
Injections	64	24.24
IUD	20	7.58
Permanent	10	3.79
Condoms	128	48.48
Implants/Norplant	17	6.44
Total	**264**	**100**
Duration of usage		
Not at all	105	39.77
1-2 years	48	18.18
3-5 years	68	25.76
6-9 years	37	14.02
10 and above years	6	2.27
Total	**264**	**100**
Source of information		
From radio	57	21.59
From friends	63	23.86
From health facility	103	39.02
Others (specify)	41	15.53
Total	264	**100**
Whether there are cultural beliefs		
Yes	87	32.95
No	177	67.15
Total	264	**100**
Recommendation		
Yes	166	58.8
No	98	41.2
Total	**264**	**100**

The majority of the respondents seventy point five (70.5%) have heard about dual family planning methods compared to those who did not hear of dual FP methods which stood at twenty nine point five percent (29.5%).

Most of the clients who participated in the study did not practice dual family planning method (61.4%) compared to those who were practicing dual FP (38.6%).

Of these respondents who reported to have heard about dual family planning methods, most of them reports non acceptance by their partners to utilize dual FP methods (55.3%) as compared to partners who accept uptake of dual family planning (44.7%)

The most used dual family planning methods as reported by the clients was Condoms (48.48%), followed by injections (24.2%) and the least being permanent method (3.8%).

Thirty nine point eight percent (39.8%) of the respondents had not used family planning at all followed by twenty five point eight percent (25.8%) who have used family planning for a period of three to five years and the least being those who used family planning for ten years and above at two point three percent (2.3%).

Most of the clients who reports knowledge about dual family planning method heard it from the health facility (39.02%), followed by those who heard from friends (23.9%) and the least from those who heard from others sources (posters, flyers) (15.5%)

Majority of the respondents reported that, there were no cultural beliefs that prevent people from utilizing dual family planning method among the HIV positive couples (67.15%) compared to those who mentioned there were cultural beliefs (32.85%).

Table 4.3.2: Bi-variate analysis showing the association between community factors and uptake of dual family planning methods

Practice of dual family planning

Variable		Yes	No	Total	DF	χ^2	P-value
Whether a respondent heard of dual FP	Yes	55(62.5%)	31(74.4%)	186(70.5%)	**1**	**21.06**	**0.000***
	No	33(37.5%)	45 (25.6%)	78 (29.5%)			
	Total	**88**	**176**	**264**			
Partner's acceptance	Yes	98(90.7%)	20(12.8%)	118(44.7%)	**1**	**1.656**	**0.000***
	No	10(9.3%)	136(87.2%)	146(55.3%)			
	Total	**108**	**156**	**264**			
Method of FP used	Oral pills	5(3.4%)	20(17.1%)	25(9.5%)	**5**	**58.39**	**0.000***
	Injections	30(20.4%)	34(29.1%)	64(24.2%)			
	IUD	1(0.7%)	19 (16.2%)	20(7.6%)			
	Permanent	3(2.0%)	7(6.0%)	10(3.8%)			
	Condoms	98(66.7%)	30(25.6%)	128(48.5%)			
	Implants/Norplant	10(6.8%)	7(6.0%)	17(6.4%)			
	Total	**147**	**117**	**264**			
Duration of usage	Not at all	3(2.9%)	102(63%)	105(39.8%)	**4**	**1.838**	**0.000***
	1-2 years	18(17.7%)	30(18.5%)	48(18.2%)			
	3-5 years	47(46.1%)	21(13.0%)	68(25.8%)			
	6-9 years	28(27.5%)	9(5.6%)	37(14.0%)			
	10yrs & above	6(5.9%)	0	6(2.3%)			
	Total	**102**	**162**	**264**			
Source of information on dual FP method	Radio	40(31.3%)	17(12.5%)	57(21.6%)	**3**	**26.89**	**0.000***
	Friends	19(14.8%)	44(32.4%)	63(23.9%)			
	Health facility	52(40.6%)	51(37.5%)	103(39.0%)			
	Others (specify)	17(13.3%)	24(17.7%)	41(15.5%)			
	Total	**128**	**136**	**264**			
Cultural beliefs	Yes	30(30.6%)	38(22.9%)	68(25.8%)	**1**	**2.374**	**0.098**
	No	68(69.4%)	128(77.1%)	196(74.2%)			
	Total	**98**	**166**	**264**			
Recommendation	Yes	98(100%)	60(36.2%)	158(59.9%)	**1**	**1.015**	**0.000***
	No	0	106(63.8%)	106(40.1%)			
	Total	**98**	**166**	**264**			

Most of the clients admitted they had heard of dual family planning (70.45%) while 29.55% had not heard about it. The analysed data showed enough evidence of the relationship between hearing of dual FP and uptake ($X^2 = 21.064$, df = 1, P-value = 0.000). This therefore implies that, at 95% confidence, it's safe to conclude that there is significance relationship that hearing about dual FP method is associated with it uptake.

Majority of the respondents reported their partners had negative attitude towards uptake of dual family planning methods (55.3%) compared to the few who accept their partner to use FP (44.7%). The data analysed showed significant evidence between partners' acceptance of dual method and uptake (X^2=1.656, df=1 and p-value=0.000). this mean that at 95% confidence, the data showed sufficient evidence to accept the claim that there is a relationship between partner's support and uptake of dual family planning among the HIV positive couples.

Majority of the respondents reported that the most used FP method was condoms (48.5%) and the least being permanent method (3.8%). Analysed data showed significant relationship between the methods of FP used and its uptake ($X^2 = 58.39$, df = 5 and P-value = 0.000). This implies that, at 95% confident interval, there is enough evidence to accept the claim that there is a relationship between method of FP and its uptake among the clients.

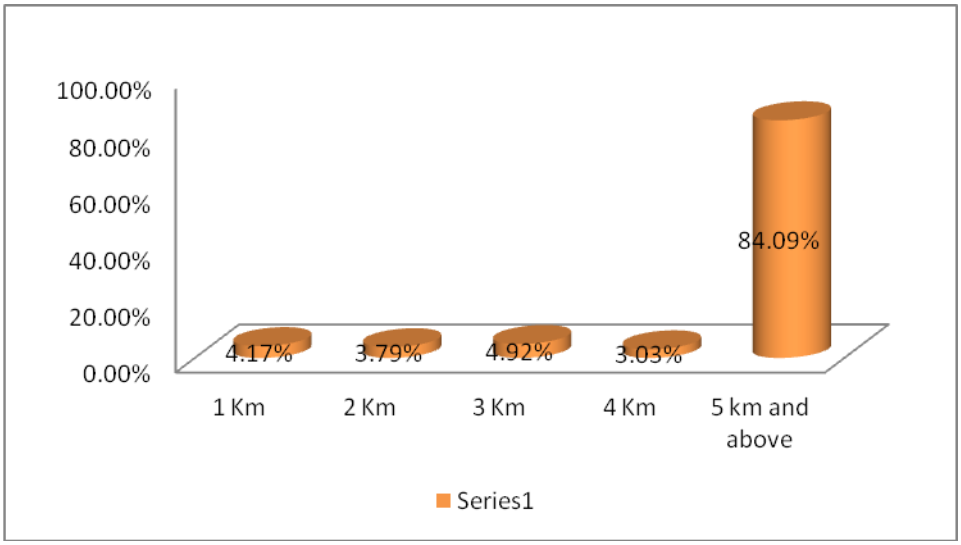
At the bivariate analysis, most clients reported they had never used FP methods and the least being those who had used it for 10 years and above. The analysed data showed significant relationship between duration of usage and uptake of dual FP (X2 = 1.838, df =4 and P-value = 0.000). This implies that, at 95% confident interval, it's safe to conclude that there is a close association between duration of usage and uptake of dual FP among the HIV positive clients.

Majority of the respondents during the study said that, they got information on dual family planning methods from the health facility (39.0%) and the least being from other sources (15.53%). The data analysed showed significant relationship between information on dual FP and uptake (X^2=26.89, df = 3 and P-value = 0.000). This means that, at 95% confidence interval, the data provide significant evidence to accept the claim that, there is a relationship between sources of information and uptake of dual family planning among the HIV positive couples.

In our study, 25.8% of the respondents reported that there were cultural beliefs that affect uptake of dual family planning method compared to 74.2% of those who reported that there were no cultural beliefs. This implies that at 95% confidence interval, there is no enough evidence to accept the claim that there is relationship between cultural beliefs and uptake of dual family planning among the HIV positive couples (X^2 = 2.374, df = 1, p-value = 0.098).

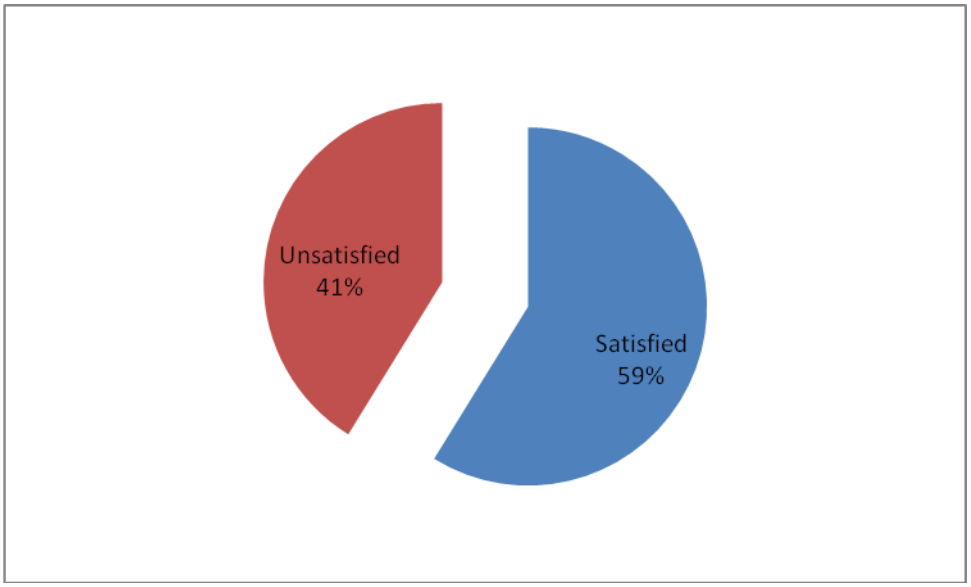
4.4 Institutional Factors

Figure 4.4.1: Showing the distance of a respondent from a health facility



Eighty four point one (84.1%) of the respondents come from a distance of about 5 km and above followed by those who come from a distance of 3 km (4.92%) and the least being those who come from a distance of 4 km (3.03%)

Figure 4.3.2: Clients' satisfaction with dual family planning method



Majority of the respondents (59%) who participated in the study were satisfied with the services provided at the health facilities whereas forty one percent (41%) expressed dissatisfaction with the services being provided to them. The reasons givenby the respondents who feel dissatisficed with the services among others include lack of sensitization by health workers, unavailability of the various dual family planning methods

Table 4.3.1: Univariate analysis of institutional factors influencing the uptake of dual planning method family

Variable	Frequency (N=264)	Percentage (%)
Whether FP services are obtained from the same clinic		
Yes	84	31.82
No	180	68.18
Total	**264**	**100**
Where FP services are received		
OPD	128	48.48
Immunization sites	40	15.15
Private clinics	12	4.55
During outreaches	25	9.47
NGOs in community	36	13.64
Others	23	8.71
Total	264	**100**
Whether FP services are obtained on return dates		

Yes	164	62.12
No	100	37.88
Total	**264**	**100**
Duration of when FP services will be available		
Within a month	40	15.15
Within 2 months	25	9.47
Within 3 months	86	32.58
Within 4 months	51	19.32
≥ 5 months	62	23.48
Total	264	**100**
Whether FP services are free of charge		
Yes	203	76.89
No	61	23.11
Total	264	**100**

The majority of the respondents (68.18%) reported not obtaining family planning services from the same clinic where they are receiving their antiretroviral drugs compared to (31.82%) who reported getting services from the same clinic.

Most respondents (48.48%) reported getting family planning services from OPD followed by those who said they are getting services from immuization sites (15.15%) and the least being those getting from private clinic (4.55%).

Most (32.58%) respondents reports the availability of Family Planning services when its out of stock within three months followed by those who reports getting the services after five months (23.48%) while a few of them (9.47%) reports receiving the services when its out of stock within two months.

76.89% of the respondents mentioned getting the services free of charge compared to those who said they get services at some cost 23.11%.

Table 4.4.2: Bivariate analysis showing the association between institutional factors and uptake of dual family planning method

		Practice of dual family planning					
Variable		**Yes**	**No**	**Total**	**DF**	χ^2	**P-value**
Distance	1 Km	4(4%)	7(4.3%)	11(4.2%)			
	2 km	8(8%)	2(1.2%)	10(3.8%)			
	3 km	7(7%)	6(3.7%)	13(4.9%)	**4**	**10.324**	0.0358*
	4 Km	2(2%)	6(3.7%)	8(3.0%)			
	≥5 km	79(79%)	143(87.4%)	222(84.1%)			
	Total	**100**	**164**	**264**			
FP services from this same clinic	Yes	48(45.7%)	36(22.6%)	84(31.8%)	**1**	**11.082**	**0.0018**
	No	57(54.3%)	123(77.4%)	180(68.2%)			
	Total	**105**	**159**	**264**			
Where respondent gets FP services	OPD	83(55.7%)	45(39.1%)	128(48.5%)			
	Immunisation site	0	40(34.8%)	40(15.2%)			
	Private clinics	10(6.7%)	2(1.7%)	12(4.6%)	**5**	**33.251**	**0.000***
	During outreaches	20(13.4%)	5(4.4%)	25(9.5%)			
	NGOs	16(10.7%)	20(17.4%)	36(13.6%)			
	Others	20(13.4%)	3(2.6%)	23(8.7%)			
	Total	**149**	**115**	**264**			
Respondent getting FP on return dates	Yes	116(73.9%)	48(44.9%)	164(62.1%)			
	No	41(26.1%)	59(55.1%)	100(37.9%)	**1**	**7.41**	**0.006***
	Total	**157**	**107**	**264**			
Duration of FP services to be available	Within a mth	10(15.6%)	30(15.0%)	40(15.2%)			
	Within 2 mths	5(7.8%)	20(10.0%)	25(9.5%)			
	Within 3 mths	27(42.2%)	59(29.5%)	86(32.6%)	**4**	**7.507**	**0.111**
	Within 4 mths	9(14.1%)	42(21.0%)	51(19.3%)			
	≥5 mths	13(20.3%)	49(24.5%)	62(23.5%)			
	Total	**64**	**200**	**264**			
Whether FP services are for free	Yes	128(76.2%)	75(78.1%)	203(76.9%)			
	No	40(23.8%)	21(21.9%)	61(23.1%)	**1**	**0.094**	**0.759**
	Total	**168**	**96**	**264**			
Clients' satisfaction	Yes	90(69.8%)	83(61.5%)	173(65.5%)	**1**	**0.009**	**0.922**
	No	39(30.2%)	52(38.5%)	91(34.5%)			
	Total	**129**	**135**	**264**			

***Statistically significant variable*

Most HIV positive couples reside at a distance of 5 Km and above from the health care facilities (84.1%) and the least being those who reside at a distance of 4 km (3.0%). This means that, at 95% confidence, the data analysed provide significant evidence to accept the claim that, there is a relationship between Distance from the health care facility and uptake of dual family planning

(X^2 =10.324, df=4 and P-value of 0.035) this is because the P-value is less than 0.05. The majority of the respondents (68.2%) reported not obtaining family planning services from the same clinic where they were receiving their antiretroviral drugs compared to those who reported getting FP from the same place (31.8%). This implies that, at 95% confidence, there is sufficients evidence to accept the claim that there is a relationship between integration of services for HIV positive couples and its uptake (X^2 = 11.082, df = 1, p-value = 0.001) reason being the P-value is less than 0.05.

Majority of the respondents said that they were getting FP methods from OPD (48.5%) and the least being those one getting services from other sources like VHTs (8.7%). This implies that at 95% confident interval there is a significance evidence to accept the claim that, there is a relationship between where the services is got and its uptake (X^2 = 33.251, df = 5 and P-value = 0.000) because the p-value is much less than 0.05.

Though 62.1% of the respondents stated they were obtaining FP services on return dates compared to thirty seven point nine percent (37.9%) who reported getting services on the first day. But at 95% confidence interval, the data provide significance evidence to accept the claim that there is a positive relationship between access to FP methods and uptake of the services (X^2 = 7.410, df=1, p-value=0.006) the reason being that the p-value is less than 0.05.

Most (32.58%) of the respondents reported that some Family Planning methods were available when its out of stock within three months compared to few who said that its available within two months (9.5%) but at 95% confidence interval, the data analysed showed no statistical evidence to accept the claim that the availability of family planning methods interferes with uptake of dual FP services among the HIV positive couples (χ^2 = 7.507, df = 4, p-value = 0.111) this is because the p-value is greater than 0.05. Majority (76.9%) of the respondents reported that the FP services they were getting were being provided free of charge compared to those who said they were obtaining at a cost (23.1%). This therefore means that at 95% confident interval, the data analysed provide no evidence to accept the claim that there is significant relationship between cost of FP method and its uptake (X2 = 0.094, df =1 and P-value=0.759) the reason being the p-value is not less than 0.05

CHAPTER FIVE: DISCUSSION OF RESULTS

5.1 Introduction

This chapter consists of detailed discussion of the findings in the results. All items of the findings are discussed in line with statement of the problem, study specific objectives to answers the research questions. Then the answers to the research questions are compared to other research findings that are done earlier on by other people as reviewed in the relevant literatures.

5.2 Clients' related factors

5.2.1: Sex and uptake of dual family planning methods among HIV positive couples

In this study, findings revealed that the majority of the respondents (63%) who were receiving ART services from Awach ART Clinic were Females compared to 37% of their Male counter parts. Analysed data showed significant statistical evidence (P-value=0.025), this means sex had a significant influence on the uptake of dual FP. This finding was in line with a review by the WHO, 2007, on engaging men in family planning which was conducted in Bangladesh, India and Nepal and found that male involvement had a successful achievement in family planning which also applied to dual methods among HIV positive couples (Barker et al 2007)

This similar finding was emphasised by one of the Key Informers who said that;

> *"Men do not use most of these modern family planning methods, we always give them condoms that can take them for about a month whenever they comes to the Clinic for their ARVs, they also asked us to continues bringing them condoms because when they have them in their houses/home, it is convenient for them". **[KI, Expert client]***

This means that the sex of HIV positive couples in Gulu has a significant role in their uptake of dual family planning.

5.2.2: Age and uptake of dual family planning among HIV positive couples

In this study, the research revealed that, majority of the respondents were aged 35-44 years (38.6%), followed by those in the age bracket 25-34 years (36.7%) and the least being those in the age group 45 years and above (9.1%). Analysed results of clients' age revealed that there was a relationship between age and uptake of dual FP method and this was statistically significant (P- value = 0.000). This finding is in line with another study conducted in Kenya, Malawi, Tanzania, Ivory Coast Burkina Faso and Ghana which showed that people of younger age are more likely to use family planning than those who are already aged Rob et al, (2007).

This was also emphasised by one of the client who said that;

> *"It's very painful at a tender age like this, because for me I got infection (HIV)when am still very young before giving birth to any child, I must tell the truth, am not using dual FP methods because I want also to have a child of my own".[**Female respondent Awach ART Clinic]***

This result therefore means that the age of HIV positive couples in Gulu has a significant role in their uptake of dual family planning.

5.2.3: Religion and uptake of dual family planning method

Our study findings revealed that the most dominant religion among the clients was the Catholic religion with 44.3% compared to other religions; Protestants (27.3%), Muslims (4.9%), Pentecostal (9.09%) and others (14.39%) including Jehovah witness, Seventh Days Adventists and Born Again. Further analysis of client's religion revealed that there was a relationship between religion and uptake of dual family planning and this was statistically significant (P = 0.030). This implies that at 95% confidence level, the data showed significant evidence to accept the claim that there is a close association between religions and uptake of

dual family planning methods among the clients. This was in line with another study conducted in Uganda 2011, found it that, the religion of an individual had significant effect on family planning utilization regardless of the HIV status of the couples (Wanyenze et al 2011). This means that the age of HIV positive couples in Gulu has a significant role in their uptake of dual family planning.

5.2.4: Duration with partner and uptake of dual family planning among HIV positive couples

The study also revealed that majority of clients have stayed with their partners for ten years and above (32.6%), followed by those who have stayed for 6-9 years (29.2%) and the least being those who have stayed for less than 1 year (6.4%). Further analysis of client's duration with partner revealed that there was a relationship between duration with partner and uptake of dual family planning and this was statistically significant (p-value = 0.000). This implies that at 95% confidence level, the data showed significance evidence to accept the claim that there is a close association between duration with partner and uptake of dual family planning methods among the clients. This finding was similar to another study conducted in Ethiopia which found out that duration in marriage affect uptake of dual family planning among HIV positive couples (Memberu *et al*; 2010). This therefore means that the duration with partner among HIV positive couples in Gulu has a significant role in their uptake of dual family planning.

5.2.5: Number of children and uptake of dual family planning among HIV positive couples

In the study conducted, most respondents have five children and above (24.6%), followed by those with one child (17.8%) and the least being those without a child (9.5%). Further analysis of client's number of children revealed that there was a relationship between the number of children and uptake of dual family planning and this was statistically significant

(P-value = 0.044). This means that at 95% confidence interval, the data analysed showed significance evidence to accept the claim that there is a relationship between number of children and uptake of dual family planning methods among the clients. This finding was in line with another study carried out by Hadiza et al 2013, Feldman and Maposhere (2008). This implies that the number of children among HIV positive couples in Gulu play a great role in the uptake of dual family planning.

5.2.6: Desire to have children and uptake of dual family planning among HIV positive couples

Our study revealed that most clients want to have more children (62.1%) compared to those who does not need more children (37.9%). The analysis of client's desire for children revealed that there was a relationship between the desire for children and uptake of dual family planning and this was statistically significant (P-value = 0.000). This implies that at 95% confidence interval, the data showed significance evidence to accept the claim that there was a relationship between the desire for children and uptake of dual family planning among HIV positive couples. This finding was in line with a study conducted in Uganda 2011, on Uptake of family planning methods and unplanned pregnancies among HIV-infected individuals which found that, the desire to have children was a major factors affecting uptake of family planning including dual methods (Wanyenze et al; 2011). This means that the desire for children by HIV positive couples in Gulu has a significant role in their uptake of dual family planning.

5.3: Community related factors

5.3.1: methods of FP and uptake of dual family planning among HIV positive couples

In our study, the finding revealed that the majority of the respondents (48.5%) used condoms, followed by those who were using injections (24.24%) and the least being those who used permanent methods (3.79%). The analysed data revealed that there was a relationship between the methods of FP and uptake of dual FP by the HIV positive couples and this was statistically significant (P-value = 0.000). This implies that at 95% confidence interval, the data showed significance evidence to conclude that there is a close association between methods of family planning and uptake of dual family planning methods among the clients

This finding was also emphasized by key informers as they said;

> *"The most frequently used FP methods by HIV-positive couples are Condoms, followed by depo-provera (injections) and oral pills. A few participants mentioned use of Norplant and permanent methods"[**All KIs - males and females Awach ART Clinic]***

This means that the methods of FP used by HIV positive couples in Gulu have a significant role in their uptake of dual family planning.

5.3.2: cultural beliefs and uptake of dual family planning among HIV positive couples

The result of the study showed that 32.9% of the respondents were affected by cultural beliefs compared to 67.15% of the respondents who were not affected by cultural beliefs. Further analysis of client's culture revealed that there was no relationship between culture and uptake of dual family planning as this was not statistically significant (P-value = 0.098). This means that at 95% confidence interval, there is no evidence to accept the claim that there is relationship between cultural beliefs and uptake of dual family planning among HIV positive couples. This finding therefore was not in line with a study done by Cobb 2013 in South

Africa which stated that cultural factors were a major impediment to uptake of family planning. This was also emphasised by one of the female client who said that;

> *"Like for us who are now sick, culture cannot help us in any way at all, we have to take care of our lives so that we are able to look after our children because when one passed on culture cannot take care of someone children so better on ARVs than following culture." [**A female client Awach ART clinic]***

This means that cultural beliefs of HIV positive couples in Gulu has no significant role in their uptake of dual family planning

5.3.3: partner support and uptake of dual family planning among HIV positive couples

Majority of the respondents reported their partners have negative attitude towards the use of dual family planning methods (55.3%) compared to those partners who accept the used of dual family planning (44.7%). Further analysis of partner's support revealed that there was a relationship between partner support and uptake of dual family planning and this was statistically significant (P-value = 0.000), this is because our P-value is much less than 0.05. This was in line with another study conducted in 2007 by WHO on men engagement in family planning where it was found out that a significance effect on family planning uptake were realised when men were involved. This means that partner support among the HIV positive couples in Gulu had a significant role in their uptake of dual family planning.

5.3.4: Source of information and uptake of dual family planning among HIV positive couples

The majority of the clients heard about dual FP from the health facilities (39.0%), followed by those who heard it from friends (23.9%) and a few heard from other sources (15.5%) including Posters and TVs. Analysis of sources of information revealed that there was a relationship between source of information and uptake of dual family planning and this was

statistically significant (P-value=0.000). The finding was similar to another study conducted in Malawi in 2013, on encouraging contraceptive uptake in Malawi by motivating men to communicate about family planning: the project which targeted men found that having peer-delivered educational intervention increased the uptake of family planning (Dominick et al 2013).

This was also further emphasised by one of the Key Informers who said that;

> *"A client was not having her periods and she decided to leave FP injection after 2 years of using the method because she was told by a friend that, the menstrual flows assist in reducing the amount of HIV in the body and your condition get worst if this doesn't happen, but after counselling she resumed getting her injection of depo-provera. She explained, she did that after receiving wrong information from a friend". [**KI, Health worker Awach ART Clinic]***

This means that the source of information by HIV positive couples in Gulu has a significant role in their uptake of dual family planning

5.4: Institutional Related factors

5.4.1: Distance to health facility and uptake of dual FP in HIV positive couples

In our finding, most clients reside at a distance of more than 5 km from the facility (84.07%) compared to those who reside near the facility at a distance of 1 Km (4.17%). Further analysis of distance to facility revealed that there was a relationship between distance and uptake of dual family planning and this was statistically significant (P-value of 0.035). This implies that distance had a significant effect on the uptake of dual family planning methods among the clients. This finding was in line with another study conducted by Lakwe et al 2013, who noted that long distances affect the uptake of dual family planning. This means that the distance travelled by HIV positive couples in Gulu has a significant role in their uptake of dual family planning

5.4.2: Accessibility and uptake of dual family planning among HIV positive couples

The study showed that majority of the respondents (68.2%) reported they were not obtaining family planning services from the same clinic where they were receiving their antiretroviral drugs compared to those who reported getting services from the same clinic (31.8%). The analysed data of institutional accessibility revealed that there was a relationship between accessibility and uptake of dual family planning and this was statistically significant (P-value = 0.001). This therefore means that accessibility had significant role in uptake of dual family planning methods among the positive couples. This finding was in line with another study conducted by Mbonye 2003, on delivering family planning messages showed that poor accessibility to services limit the clients from accessing family planning services and this applies to HIV-infected clients (mbonye et al 2003). This means that accessibility of services by HIV positive couples in Gulu has a significant role in their uptake of dual family planning

5.4.3: Availability of FP methods and uptake of dual family planning among the HIV positive couples

The study also revealed that, most Clients (62.12%) responded that they were obtaining FP services on another days compared to those who reported getting services on the same day when they come to the clinic to refilled their ARVs (37.9%). Further analysis of availability of FP methods revealed that there was a relationship between availability and uptake of dual family planning and this was statistically significant (P-value = 0.006). this therefore means that availability of FP services to HIV positive couples had a significant role on the uptake of the methods. This finding was in line with another study conducted in Zambia by Chibwesha et al (2011) who found that, women who were referred for FP services were getting them within 90 days. This means that the availability of services to HIV positive couples in Gulu has a significant role in their uptake of dual family planning

5.4.4: Integration of Family planning and uptake of dual FP among HIV positive couples

The results of the study showed that majority of the respondents (68.2%) reported they were not obtaining family planning services from the same clinic where they were getting their antiretroviral drugs compared to those who reported getting services from the same clinic (31.8%). The analysed data revealed that there was a relationship between integration and uptake of dual family planning and this was statistically significant (P-value = 0.001). This therefore means that integrating the services had influence on uptake of dual family planning methods among the positive couples. This finding was in line with another study conducted by Askew and Berer (2003) which showed that integration of services is very crucial. Family planning can be integrated into VCT, PMTCT (Askew I et al 2003).

This has been emphasized by one of the key informers who said that;

> *"The fact is that some health workers have been trained in provision of FP services, they are very few and overworked because several activities are often integrated that has led to the unmet need for FP services. Also many times we do not have the medical officers to conduct permanent procedures at the time it's needed, and we normally refer them to the district for the services".[* ***KI, District HIV focal person]***

This means that the integration of services to HIV positive couples in Gulu has a significant role in their uptake of dual family planning.

5.4.5: The cost of services and uptake of dual family planning among HIV positive couples

Majority of the respondents stated were receiving free FP services (76.89%) compared to those who stated getting the services at a cost (23.11%). Further analysis of cost of FP methods revealed that there was no relationship between cost and uptake of dual family planning and this was not statistically significant (P-value = 0.759). This implies that cost had no influence on uptake of dual family planning methods among the HIV positive couples and this means that the cost of FP services to HIV positive couples in Gulu has no significant role in their uptake of dual family planning.

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 Introduction

This chapter presents conclusions that are based on the findings of the study and appropriate recommendation made.

6.2. Conclusions

The majority (70.45%) of Couples living with HIV and seeking services from Awach ART Clinic reported they had heard about dual FP of which only 38.6% were practicing the dual method. The major factors which were influencing uptake of dual FP among HIV positive couples attending ART Clinic in Awach health centre IV includes;

6.2.1 Client related factors

- The client related factors that were found to influence uptake of dual family planning among HIV positive couples getting services from Awach ART clinic, specifically these included the age of HIV clients, the sex of the clients, the religion, duration spent with partner, number of children and the desire to have children.

6.2.2 Community factors

- The key significant community factors that influenced dual FP uptake among the HIV positive couples receiving services from Awach ART Clinic were partners' acceptance of dual FP method, the duration of FP usage, sources of information and method of FP used.

6.3.4 Institutional factors

- The institutional factors that had played great role in uptake of dual family planning methods among the HIV positive couples getting services from Awach ART clinic specifically included the distance from the facility, accessibility of the services and the availability of the services.

6.3 Recommendations

From the above study results and conclusions, we recommend the following to be of benefit;

- Awach Health centre IV should put more emphasis on the age of clients who are getting their ARVs from their clinic in order to increase the uptake of dual FP method among the HIV positive couples.

- The Health unit should emphasise on sex of the clients so that they improve on the uptake of dual FP since sex was one of the factor influencing the uptake of dual FP

- The health unit in collaboration with the local leaders should put emphasis on the religion, the number of children and desire to have more children by the HIV positive couples in order to improve on the uptake of dual FP methods.

- Community leaders should also emphasis on partners' support so that partners of HIV positive clients accept the use of dual FP methods in order to increase dual FP uptake.

- The local leaders should ensure that information about dual FP reaches the community members in their areas so that community are made aware of dual FP services being provided to them at the facility.

- The government should introduce ART clinic to all health centre IIIs in order to take dual FP services near the clients who have to move long distances to get the services.

- The government should also make sure that dual FP services are available and accessible to HIV positive clients in order to increase the uptake of dual FP method.

6.4 Recommendation for further study:

The researcher recommends a similar study in another area so that the data are compared if these factors hold the same in the two areas so that appropriate steps/actions taken.

LIST OF REFERENCES

1)Kiyomi Tsuyuki, Regina Maria Barbosa, and Adriana de Araujo Pinho, *Dual protection and Dual methods in women living with HIV: the Brazilian context.* Journal of Sexually Transmitted Diseases, Volume 2013, Article ID 540789, 8 pages. http://dx.doi.org/10.1155/2013/540789

2) Iqbal H. Shah, Chandra-Mouli*: Inequality and unwanted fertility in developing countries*: Bull WHO, 2007 February, 85 (5): 86 http://www.avert.org/hiv-aids-uganda.htm

3) Getiye Dejenu, Mekonnen Ayichiluhm, Amanuel Alemu: *Prevalence and associated factors of unmet need for family planning among married women in Enemay District, Northwest Ethiopia:* a comparative cross-sectional study A bajobir. Publisher. Global Journal Inc. (USA); 2013

4) Irene Nayiga, Fred C. Semitala1, Nicholas Matsiko1, Roland Mutumba, Cecilia Nawavvu, Jennifer Namusobya, Simon Muhumuza and Moses R. Kamya, *Low uptake of dual contraception methods and high prevalence of unwanted pregnancies Among HIV-infected women in Uganda,* 2013. Poster No: MOPE117

5) Menberu Getachew, Fessehaye Alemseged, Mulumebet Abera, Amare Deribew. *Factors affecting fertility decisions of married men and women living with HIV in south wollo zone, northeast Ethiopia*.[Ethiop. J. Health Dev. 2010; 24(3) 214-220]

6) Utomo B, Alimoeso S, Park C.B, 1983. *Factors affecting the use and non use of contraception. PubMed article - indexed for MEDLINE* [online].**10**(20): 19-48. Available from: http://www.ncbi.nlm.nih.gov/sites/entrez [cited 12 May 2008]

7) Feldman R. and Maposphere C. 2003. *Safer Sex and Reproductive Choice: Findings from "Positive Women:* Voices and Choices" in Zimbabwe. *Reproductive Health Matters 2009.*

8) Agyei WK, and Migadde M.1995. *Demographic and sociocultural factors influencing contraceptive use in Uganda. PubMed article - indexed for MEDLINE 2009.*

9) Yemane Berhane, Haftu Berhe, Gerezgiher Buruh Abera, and Hailemariam Berhe.

Utilization of Modern Contraceptives among HIV Positive Reproductive Age Women in Tigray, Ethiopia 2013.

10) Catherine Nakiboneka and Everd Maniple; *Factors related to the uptake of natural family Planning by clients of catholic health units in masaka diocese, Uganda, on PNFP Health Training Institutions*, Uganda Catholic Medical Bureau, Kampala. UMU Press 2008

11) World Health Organization (WHO). 2004. International Human rights http//www.unhchr.ch/html. (Viewed 17th April 2006).

12) Cobb, T.G., 2010, *strategies for providing cultural competent health –care amongst Americans;* Journal of Cultural Diversity 17(3), 79-86.

13) Agbo HA, Ogbonna C, Okeahialam BN. *Factors relate to the uptake of contraceptive in a rural community in Plateau State:* A cross-sectional community study. J Med 2013; 15:107-12

14) Barker G, Ricardo C, Nascimento M. *Engaging men and Boys in changing gender-based inequity in health: evidence from programme interventions. Geneva*: World Health Organisation; 2007.

15) Sukati NA, and Shabangu P. 2006. *Perceptions of HIV positive Swazi women of childbearing.* Oral abstract session: *AIDS 2006 - XVI International AIDS Conference* 2009.

16) Rob S., Baschieri A., Steve C., Monique H., and Nyovani M., 2007., Contextual Influences on Modern Contraceptive Use in Sub-Saharan Africa *American Journal of Public Health, 2009.*

17) Henerico Ernest, George Saiteu, and Godson Maro. *Promoting modern family planning among Tanzania's nomadic communities, 2011.*

18) Jitta, J., J. Arube-Wani and H. Muyiinda (2008). "*Study of client satisfaction with health services in Uganda*. Ministry of Health, Uganda."

19)Mbonye, A. K. (2003). "*Delivering Family Planning Messages through Prenatal Care Clinics in Kumi District, Uganda."* The International Electronic Journal of Health Education 6: 34-40

20) Dominick Shattuck, PhD, Brad Kerner, MS, Kate Gilles, MPH, Miriam Hartmann, MPH, Thokozani Ng'ombe, MS, and Greg Guest, PhD. *Encouraging Contraceptive Uptake by Motivating Men to Communicate About Family Planning:* The Malawi Male Motivator Project (2013)

21) Askew, I. and M. Berer. 2003. "The Contribution of Sexual and Reproductive Health Services to the Fight against HIV/AIDS: A Review." *Reproductive Health Matters.*

22) Katherine W, C. W., Ian Askew (2010). *Planning and Implementing an Essential Package of Sexual and Reproductive Health Services. Guidance for Integrating Family Planning and STI/RTI with other Reproductive Health and Primary Health Services.,* Population Council. Mbonye,

23) Carla J. Chibwesha, Michelle S. Li, Christine K.Matoba, Reuben K.Mbewe, Benjamin H. Chi, Jeffrey S. A. Stringer, and Elizabeth M. Stringer. *Modern Contraceptive and Dual Method Use among HIV-Infected Women in Lusaka, Zambia*. Received 15 April 2011; Revised 14 June 2011; Accepted 6 July 2011

24) Yihunie Lakew, Ayalu A Reda, Habtamu Tamene, Susan Benedict, and Kebede Deribe. *Geographical variation and factors influencing modern contraceptive use among married women in Ethiopia: evidence from a national population based survey*. Received:11 August 2013, Accepted:24 September 2013, Published:26 September 2013.

25) Rhoda K Wanyenze, Nazarius M Tumwesigye, Rosemary Kindyomunda, Jolly Beyeza-Kashesya, Lynn Atuyambe, Apolo Kansiime, Stella Neema, Francis Ssali, Zainab Akol and Florence Mirembe. *Uptake of family planning methods and unplanned pregnancies among*

HIV-infected individuals among clients at HIV clinics in Uganda. Journal of the International AIDS Society 2011 14:35.

26) World Health Organization, (2006): *Sexual and reproductive health of women living with HIV/AIDS.*

27) Uganda Bureau of Statistics (UBOS) and ICF International Inc. 2012. *Uganda Demographic and Health Survey 2011*. Kampala, Uganda: UBOS and Calverton, Maryland: ICF International Inc.

28) Uganda Ministry of Health and ICF International. 2012. *2011 Uganda AIDS Indicator Survey (UAIS): Key Findings*. Calverton, Maryland, USA: MOH and ICF International.

29) Barbara Nattabi, Jianghong Li, Sandra C Thompson, Christopher G Orach and Jaya Earnest. *Family Planning among people living with HIV in post-conflict northern Uganda: a mixed methods study*. Corresponding author: Barbara Nattabi barbara.nattabi@cucrh.uwa.edu.au

30) Lucky O Lawani, Azubuike K Onyebuchi, and Chukwuemeka A Iyoke, Dual method use for protection of pregnancy and disease prevention among HIV-infected women in South East Nigeria, BMC Women's Health 2014, 14:39 http://www.biomedcentral.com/1472-6874/14/39

APPENDIX A: INTRODUCTORY LETTER

IHSU INTERNATIONAL HEALTH SCIENCES UNIVERSITY

PART OF INTERNATIONAL MEDICAL GROUP

Office of the Dean, Institute of Health Policy & Management

Kampala, 18th June 2014

TO INCHARGE AWACH H/C IV
ASWA HSD, GULU.

Request noted and allowed.

Dr Cana Kenneth
MEDICAL OFFICER INCHARGE
25/ 29 JUN 2014
ASWA HEALTH SUB-DISTRICT
P.O.BOX 999, GULU

Dear Sir/ Madam,

Re: Assistance for Research

Greetings from International Health Sciences University.

This is to introduce to you **Omony Samuel Okumu, Reg. No. 2009-BSCPH-FT-007** who is a student of our University. As part of the requirements for the award of a Bachelors Degree of Public Health of our University, the student is required to carry out field research for the submission of a Research Project

Omony would like to carry out research on issues related to: **Influencers of Uptake of Dual Family Planning Methods among HIV-Positive Couples in Awach Health Centre IV, Gulu District**

I therefore request you to render the student such assistance as may be necessary for his research

I, and indeed the entire University are thanking you in anticipation for the assistance you will render to the student

Sincerely Yours,

INSTITUTE OF HEALTH POLICY AND MANAGEMENT IHSU

Prof. David Ndungutse Majwejwe
Dean, Institute of Health Policy & Management

MAKING A DIFFERENCE IN HEALTH CARE

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APPENDIX B:

WORK PLAN FOR THE RESEARCH

S/No		TIMEFRAME								
	Activities performed	**Mar**	**Apr**	**May**	**June**	**July**	**Aug**	**Sept**	**Oct**	**Person Responsible**
1	Topic Approval									IHPM faculty Office
2	Literature search and Proposal writing									Researcher
3	Approval of Proposal by Supervisor and IHPM faculty Office									Supervisor and IHPM Faculty Office
4	Approval by District Health Office									Office of the Local Authority
5	Mobilize research assistants									Researcher
6	Training of research assistants									Researcher
7	Pre-testing questionnaires									Researcher and research Assistant
8	Data collection									Researcher and Assistant
9	Data entry									Researcher
10	Data management and analysis									Researcher
11	Report writing									Researcher
12	Dissemination of results									Researcher

APPENDIX C:

BUDGET FOR THE RESEARCH

S/No	ITEM	DESCRIPTION	UNIT COST(SHS)	QUANTITY (P'CES)	TOTAL
1	**Stationary**	Ream of Ruled Paper	15,000	1	15,000
		Rubbers	1,000	4	4,000
		Pens	500	12	6,000
		Pencils	200	12	2,400
		Clip boards	4,000	4	16,000
2	**Secretarial services**	Printing and photocopying questionnaires	100 X7 pages (700)	162	113,400
		Printing, photocopying and binding drafts	25,000	3	75,000
3	**Transport**	To and fro Gulu by investigator	60,000	3	180,000
		From Gulu town to Awach H/C IV for data collection	10,000x5 days	4	200,000
4	**Lunch and snacks**	Investigator and research assistants	5,000x5 days	4	100,000
5	**Incentives**	For the research assistants	10,000x5 days	3	150,000
6	**communication**	Airtime for communication during data collection	5,000x5 days	1	25,000
7	**Statistician**	Statistical analysis			200,000
8	**contingency**				100,000
	Grand total				**1,261,800**

APPENDIX D:

RESEARCHER- ADMINISTERED QUESTIONNAIRE

Questionnaire's number..... Date.....

Introduction and consent to the study

I am Omony Samuel Okumu, an undergraduate student of Bachelor's of Science in Public Health of International health sciences university- Kampala. This course requires me to write a research report on a relevant public health topic. Topic for my study: influencers of uptake of dual family planning among HIV positive couples in Awach health centre IV, Gulu district.

The purpose of the study is to help the HIV-positive people prevent themselves from re-infections, getting unintended pregnancies and infections from other sexually transmitted diseases. This questionnaire therefore seeks to assess factors influencing uptake of dual family planning methods among HIV positive couples in Awach ART clinic which deals with all the referrals from other health facilities within the health sub-district. This questionnaire is composed of closed and open ended questions and to provide you with easy answering/responses, you will be helped and areas which you find difficulties will be simplified.

The benefits of the study are, it's going to help the HIV-positive clients use dual FP methods, help the health unit planners to include dual FP in the list of items needed and it's going to improve the health of HIV-positive clients.

Risks of the study are; there is possibility that it will conflict with cultural beliefs of the community and family policies where one of the partners does not agree with it.

The information you are going to provide will be confidential and will only be used for the purpose of this research. To ensure this, I am not taking your names.

So do you agree to participate in this research?

Yes ……

No……..

Signature/thumb prints.....

Your response to this study is highly appreciated.

Thanks

PART A: CLIENT FACTORS

Please tick in the box where appropriate and where applicable write the required responses in the space provided

1) Age

   a) 15-24 years ☐ b) 25-34 years ☐

   b) 35-44 years ☐ 45 years and above ☐

2) Sex

   a) Male ☐ b) female ☐

3) Which sub county do you reside? .....

4) What is your religion?

   a) Catholic ☐ c) protestant ☐

   c) Muslim ☐ d) Pentecostal ☐

   e) Other specify.....

5) Does your religion accept family planning use?

a) Yes ☐ b) No ☐

6) If no, what does it say about family planning use?

.....

.....

7) For how long have you been with your current partner?

a) Less than 1 year ☐ b) 1-2 year ☐

c) 3-5 year ☐ d) 6-9 years ☐

e) 10 years and above ☐

8) How many children do you have?

a) None ☐ b) 1 child ☐

c) 2 children ☐ d) 3 children ☐

e) 4 children ☐ f) 5 and above ☐

9) Do you desire to have more children?

a) Yes ☐ b) No ☐

10) How many children do you intend to have?

a) 1 child ☐ b) 2 children ☐

c) 3 children ☐ d) 4 children ☐

d) 5 children and above ☐

PART B: COMMUNITY FACTORS

11) Have you ever heard about dual family planning methods?

a) Yes ☐ b) No ☐

12) Do you practice dual FP methods?

a) Yes ☐ b) No ☐

13) Does your partner accept dual family planning use?

a) Yes ☐ b) No ☐

14) If yes to the above question, which family planning methods have you ever used? (Tick all appropriate)

a) Oral pills ☐ b) Injectables ☐ c) IUD ☐

d) Permanent ☐ e) Condoms ☐ f) Implant/Norplant ☐

e) Others specify.....

15) If no to question 12, what does he say about the use of dual family planning?

.....

.....

16) For how long have you been using the family planning method above?

a) Not used at all ☐ b) 1-2 years ☐ c) 3-5 years ☐

d) 6-9 years ☐ e) 10 years and above ☐

17) From where did you get the information about dual family planning methods?

a) From radio ☐ b) From friends ☐

c) From health facility ☐ d) others specify.....

18) Are there cultural beliefs that affect use of recommended dual family planning methods?

a) Yes ☐ b) No ☐

19) If yes, which ones are they?

.....

20) Are there myths and misconception about dual family planning methods?

a) Yes ☐ b) No ☐

21) If yes, which ones are they?

.....

22) Would you recommend the use of dual family planning methods among HIV positive people?

a) Yes ☐ b) No ☐

23) If yes, give reason why you recommend it use (for your answer)

.....

PART C: INSTITUTIONAL FACTORS

24) How far is your home from the health facility?

a) 1 km ☐ b) 2 km ☐ c) 3 km ☐

c) 4 km ☐ d) 5 km and above ☐

25) Do you always get family planning services from this same clinic?

a) Yes ☐ b) No ☐

26) If no, where do you normally get the FP services from?

a) From OPD ☐ b) from immunisation site ☐

c) From private clinics ☐ d) during outreaches ☐

e) From NGOs in Community ☐

27) If you come for your clinic visits/return dates, do you always get family planning services if you need it?

a) Yes ☐ b) No ☐

28) If no, how long will it take for services to be available for those who need it?

a) Within 1 month ☐ b) Within 3 months ☐ c) Within 3 months ☐

d) Within 4 months ☐ e) 5 months and above ☐

29) Are FP services provided free?

a) Yes ☐ b) No ☐

30) If no, how much does it cost one to get FP services?

a) UGX 1,000 ☐ b) UGX 2,000 ☐ c) UGX 3,000 ☐

d) UGX 4,000 ☐ e) UGX 5,000 and above ☐

31) Are you satisfied with dual family planning services given?

a) Yes ☐ b) No ☐

Thank you for answering the questionnaire

APPENDIX E:
KEY INFORMANT INTERVIEW GUIDE ON INFLUENCERS OF UPTAKE OF DUAL FAMILY PLANNING METHOD AMONG HIV POSITIVE COUPLES IN AWACH HEALTH CENTRE IV, GULU DISTRICT.

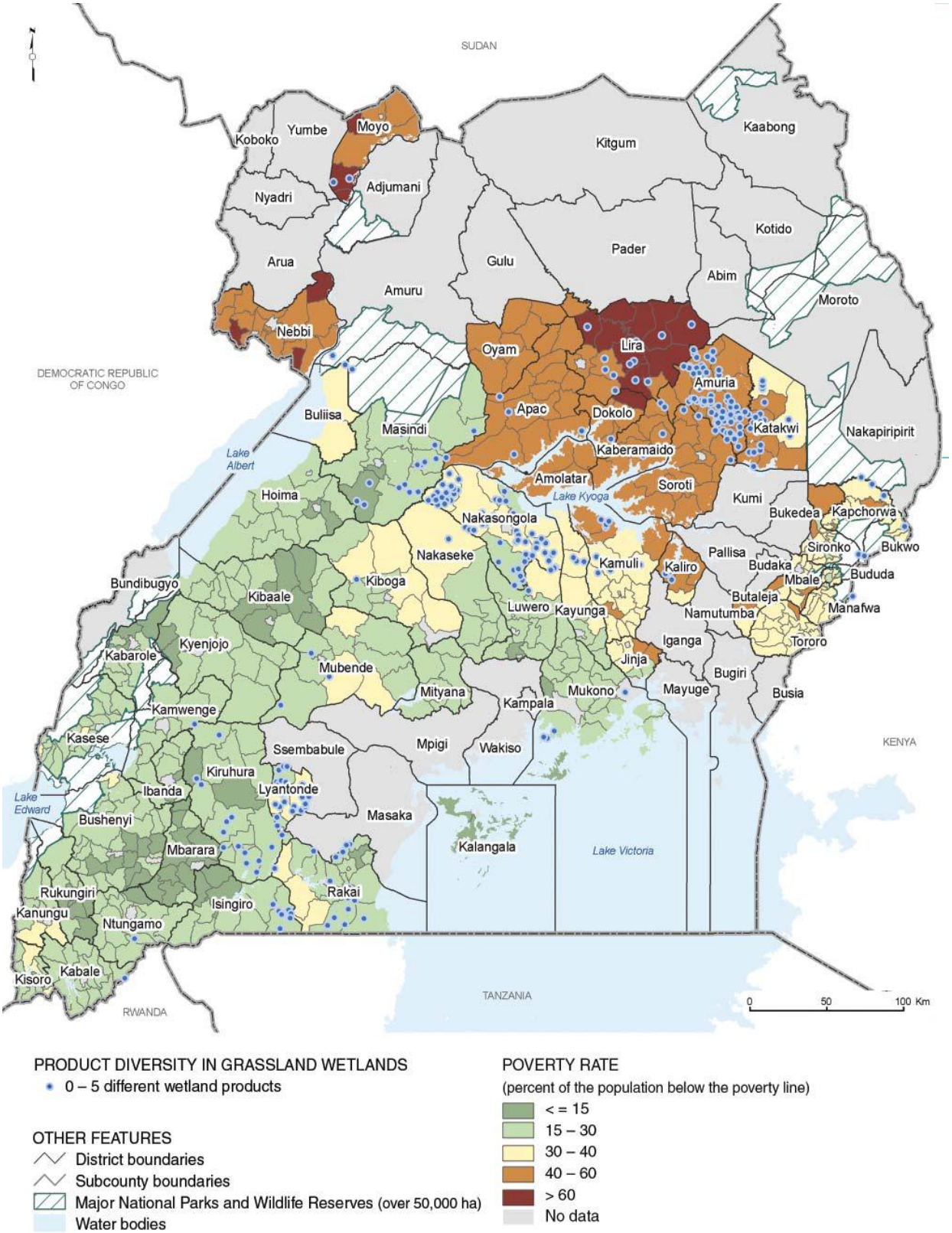
I am Omony Samuel Okumu a student at International Health Sciences University Institute of Health Policy and Management formerly working as a Nurse, am carrying out a research on influencers of uptake of dual FP method among HIV-positive couples. Your response as a person with expertise in this field/area will be of helped to me and others in future to develop better FP methods to help improve the quality of life of couples living with HIV/AIDS. If you agree to participate in my study I would like to ask you some few questions regarding uptake of dual FP. Be relax and feel free to ask any question which you need to understand in relation to this study. The KI Guide Questions include;

1) What FP services do HIV-positive couples get from you as a services provider in this area?
2) What is your view on the FP services in your service area in terms of availability and need?
3) Are there any dual FP services in this health facility? Which ones are they?
4) Are there some cultural beliefs that influence the uptake of dual FP services by HIV positive couples in this health facility?
5) What peer factors influence the uptake of dual FP services by HIV positive couples in this health facility?
6) What are the challenges faced by HIV-positive couples towards uptake of dual FP methods as an individual, due to community factors and at service delivery point.
7) What are the recommended solutions you would suggest to strengthen uptake of dual FP method among couples HIV-positive in your community?

Thank you for your participation.

APPENDIX F:

MAP OF UGANDA SHOWING THE LOCATION OF GULU DISTRICT



APPENDIX G:

MAP OF GULU DISTRICT SHOWING THE LOCATION OF AWACH SUB-COUNTY