DETERMINANTS OF SEXUAL AND REPRODUCTIVE HEALTH SERVICE UTILIZATION AMONG YOUTH IN AMUDAT TOWN COUNCIL, AMUDAT DISTRICT, UGANDA

BY

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DEDICATION

I dedicate this thesis to God for making this project possible. To my beloved husband and children for unconditional love and unwavering support. To Lucia for affording to smile. To Christine and Christine for touching my heart; and to all the little girls of Karamoja.

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APPROVAL

This dissertation has been submitted with the approval of my supervisor as evidenced by signature below:

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ABSTRACT

Introduction: Adolescence is a period of great changes that requires societal support as adolescents and youths often engage in risky sexual behavior that often results in adverse health, social and economic consequences. Such enhanced health risks require that they easily access SRH services to achieve a healthy transition to adulthood; yet despite such need, they do not to use the SRH services. Understanding reasons for non-use of the SRH services require contextual understanding, yet few studies have focused on hard-to-reach areas. This study sought to assess determinants of SRH utilization among youth in Amudat Town Council, Amudat District.

Methods: This was an analytical cross-sectional study employing quantitative and qualitative data collection and analysis approaches. Data was collected from both random and purposively selected participants in June 2018 using interviewer administered questionnaires, Key Informant Interviews and Focus Group Discussions.

Results: A total of 503 youth were interviewed. The mean age of the respondents was about 21 years with mean age at first marriage at 18 years. More than half of the respondents, 66.7% (336/503) had ever had a sexual and reproductive health problem among whom the majority 95.2% (320/336) had sought SRH services from a qualified health service provider. Respondents in the age group 20-24 years were 10 percent (APR=0.90, CI=0.83-0.97, p=0.01) more likely to utilize SRH services compared to their counterparts aged 15-19 years old. Students were less likely to utilize SRH services compared to other respondents (APR=1.12, CI=1.01-1.26, p=0.03) and respondents who were not in school had visited a health facility to utilize SRH services more than those in-school (APR=1.12, CI=0.91-1.37, p=0.03. Also, it was found that youth who did not agree that religion approves youth to seek SRH services had 5% less chances of having utilized SRH services (APR=0.95, CI=0.91-0.99, p=0.003) and respondents who did not agree that contraceptives encourages promiscuity were less likely to have visited the health facility to utilize SRH service (APR=0.95, CI=0.91-0.99, p-value=0.03).

Conclusions: Utilization of SRH services by the youth can be increased by offering integrated SRH outreach services, training health workers in youth friendly SRH services delivery, reaching youth gatekeepers with accurate SRH information, fostering family values that favor open discussions on SRH, promoting girl child education, preventing child marriage, providing accessible and affordable quality government SRH services that address drug stock outs, offer variety of services, and provide knowledge on where to access what services.

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ACRONYMS AND ABBREVATIONS

AMICAALL: Alliance of Mayors on Health and HIV and AIDS in Africa

ANC: Antenatal Care

ART: Antiretroviral Therapy

ARVs: Antiretroviral Drugs

CLT: Cognitive Learning Theory

FGD: Focus Group Discussion

HCT: HIV Counseling and Testing

HIV/AIDS: Human Immunodeficiency Virus/ Acquired Immunodeficiency Syndrome

IEC: Information, Education and Communication

KIIs: Key Informant Interviews

MOH: Ministry of Health

NGO: Non-Governmental Organizations

ORs: Odds Ratios

PEP: Post-Exposure Prophylaxis

PMTCT: Prevention of mother-to-child transmission

PNFP: Private not for profit

RHU: Reproductive Health Uganda

SEM: Social Ecological Model

SLT: Social Learning Theory

SRH: Sexual and Reproductive Health

SRH/FP: Sexual and Reproductive Health and Family Planning

STDs: Sexually Transmitted Diseases

STIs: Sexually Transmitted Infections

TRA: Theory of Reasoned Action

UBOS: Uganda Bureau of Statistics

UHMG: Uganda Health Marketing Group

UN: United Nations

UNFPA: United Nations Population Fund

VCT: Voluntary Counselling and Testing

OPERATIONAL DEFINITIONS

In this study the following terms were defined as follows:

Access	The extent to which services are available freely or at a cost and effort that is acceptable to those who need them.
Adolescent	Person between 10 and 19 years (WHO, 1989) .
Counselling	The process of providing professional guidance or advice to an individual or a group of individuals.
Health Facility	Established health institutions that offer health services
Peer	A person who is of equal standing to another, often of same age, economic background and education level.
Sexual and Reproductive Health Services	Services that aim at providing information, education and health services to adolescents to help them understand their sexuality and protect them from unintended pregnancy and/or sexually transmitted infections including HIV/AIDS (Godia et al., 2013).
Socio-cultural factors	Peer influence, religion, gender roles and family values
Standards	Minimum expected level of achievement on a rule or principle that is used as a basis for judgment in services delivery.
Substance abuse	A maladaptive pattern of use indicated by continued use despite knowledge of having a persistent or recurrent social, occupational, psychological or physical problem that is caused or exacerbated by the use or by recurrent use in situations in which it is physically hazardous.
Utilization	Utilization of sexual and reproductive health services is seeking care from health facility and or qualified health worker.
Young Person	Persons between 10 and 24 years (WHO, 1989)
Youth	Persons between 15 and 24 years (UNDESA, 2013)

CHAPTER ONE

1.0 INTRODUCTION

1.1 Background to Study

Young people are defined as those between 10 and 24 years of age, adolescents as between 10 and 19 years of age (WHO, 1989), and youth as those between 15 and 24 years (UNDESA 2013). This indicates that majority of the young people are still in adolescence while a small number is in the aftermath of adolescence.

Adolescence is a period of great emotional, physical and psychological changes (WHO, 2014b) that requires societal support (Olsson et al., 2016). Adolescents and youths often engage in risky sexual behavior (Ritchwood et al., 2015) that often results in adverse health, social and economic consequences like early and unintended pregnancy, HIV and sexually transmitted infections (STIs), gender-based violence (GBV) and child marriage, all of which can undermine education opportunities, especially for girls, and affect future health and opportunities. Conversely, economic shocks during adolescence may also lead to engagement in risky sexual behavior (Dinkelman et al., 2008, Kipping et al., 2015, Ssewamala et al., 2010).

It has also been noted that SRH problems like HIV and unintended pregnancies are prevalent among adolescents and youth in Uganda (UNICEF, 2015). Investing in the health of adolescents and youth at the right time ensures that they transition into healthy adults who can contribute productively to the national economy

Sexual reproductive health encompasses biological sex, gender roles and identity, sexual orientation, sexual behavior, and reproduction (Fathalla et al., 2006). To ensure people's SRH, access to accurate information related to sexuality and a choice of safe, effective, affordable contraception options are vital (Mbizvo and Zaidi, 2010, WHO, 2014a). However, youth face numerous problems in accessing SRH services (Renzaho et al., 2017).

Poor implementation of services and policies at local level has derailed the attainment of the desired SRH outcomes for both adolescents and youth in Uganda and other low developed countries (Renzaho et al., 2017). Supportive health services and legal environment are critical for adolescents and youth to attain their SRH needs. This study therefore seeks to identify determinants of SRH utilization among youth in Amudat Town Council, Amudat District.

Globally, the population of youth, aged 15 to 24 years, grew to around 1.2 billion in 2015 (Melorose et al., 2015). Together with the younger group of between 10-14 years, they compose over a quarter of the world population (UN, 2017). In Africa, the population aged 12 - 24 is rising at an annual rate of 1.9 per cent and will continue to grow rapidly well beyond 2040 (UN, 2012). In 2014, 15 countries in sub-Saharan Africa had half their population under 18 years with Chad, Niger and Uganda having half of their populations under 16 years while in six countries (five in sub-Saharan Africa and Israel) the population was noted to be "youthening" rather than ageing (Gupta et al., 2014). More than one-third of the population in sub-Saharan Africa is aged 10 to 24 years. Moreover, sub-Saharan Africa is the only region of the world in which the number of young people continues to grow substantially (Hervish and Clifton, 2012).

A healthy transition into adulthood is directly related to achieving the Agenda 2030 and its Sustainable Development Goals (SDGs), Africa's Agenda 2063 and the Eastern and Southern Africa Commitment on comprehensive sexuality education and sexual and reproductive health services (ESA Commitment), which was endorsed by ministers of health and education from 21 countries including Uganda in 2013.

In Uganda, 34.8% of the 34.6 million population are adolescents (UBOS, 2016). 22% of adolescents in Uganda have ever had sexual intercourse; 10% of the sexually active adolescents aged 15-19 years had their first sexual encounter before age 15 (UBOS, 2016).

Uganda has a national adolescent health policy that aims to streamline adolescent health concerns into the national development process to improve young people's quality of life and standard of living (Atuyambe et al., 2015) but improvement and quality of SRH services for young people continue to be insufficient (Renzaho et al., 2017). As a result, young people continue to suffer various SRH problems which affect their quality of life and productivity. Factors leading to non-use of SRH have been mentioned to include social stigma, ignorance, lack of confidentiality and privacy (Atuyambe et al., 2015, Renzaho et al., 2017), rumors and misconception about family planning (Benyat, 2002), and prohibitions related to religion and culture (Neema et al., 2004).

Youth compared to adults are usually less informed, lack experience and are usually not confident to seek and utilize SRH services (Murphy et al., 1999).

Ensuring access and utilization of SRH is one way to invest in youth. However, this requires contextual understanding for every community to understand key facilitators and barriers to SRH utilization among youth. This then forms the basis for this study to identify determinants of SRH utilization among youth in Amudat Town Council, Amudat District.

1.2 Problem Statement

Uganda has one of the highest youth populations in the world with 47.7% of its population aged under 15 while 20.6% fall in the age group of 15-24 (UBOS and ICF, 2017). Due to low uptake of SRH services, Uganda ranks among the countries with the highest fertility rates of 5.8 and contraceptive prevalence rate (mCPR) amongst youth is still low at 21.9% for those aged 15 -19 years, and 34% for those aged 20 -24 years (UBOS and ICF, 2017). The situation is even worse in the Karamoja region where Amudat District is located, where CPR is 7% compared with a national level of 39% (UBOS and ICF, 2017).

In addition, there is low utilization of SRH services among youth in Karamoja, for instance, a baseline study by AMICAALL indicates that only 68.8% had ever been provided with information on how to use a condom (AMICAALL, 2016) and ddissemination of information about HIV issues low among family members (35.5%). (AMICAALL, 2016). Also, most youth do not seek services from modern service providers as some who get health complications seek interventions of the traditional healers and traditional birth attendants (AMICAALL, 2016).

Low uptake of SRH services has consequences like school dropouts and large average family size that make it difficult for families to make requisite investments in education and health. It is estimated that one quarter to one third of all maternal deaths could be prevented only through reduction in the number of unintended pregnancies (MOH, 2014).

Though information on determinants of SRH services among youth in rural Uganda like Amudat District is essential for harnessing the demographic dividend and in SRH programing and service delivery, it remains limited. Majority of studies carried out focused on majorly all age groups irrespective of reproductive age, needs and constraints which constrains formulation of SRH programming that meets the specific needs of vulnerable youth like those in rural Uganda. In addition, the analysis in the only study about utilization of HIV services in Amudat (AMICAALL, 2016) was limited to univariate and bivariate relationship leaving out examination of the association between specific factors and SRH service utilization among youth. This study therefore sought to produce empirical data for effective interventions towards improvement in the utilization of SRH services by youth. This study assessed the determinants of SRH among the youth in Amudat Town Council, Amudat District.

1.3 Research Questions

1. What is the extent of sexual and reproductive health services seeking behavior among youth in Amudat town council?
2. What are the social-cultural determinants of sexual and reproductive health service utilization among youth in Amudat town council?
3. What are the health system related determinants of sexual and reproductive health service utilization among youth in Amudat town council?

1.4 The Conceptual Framework

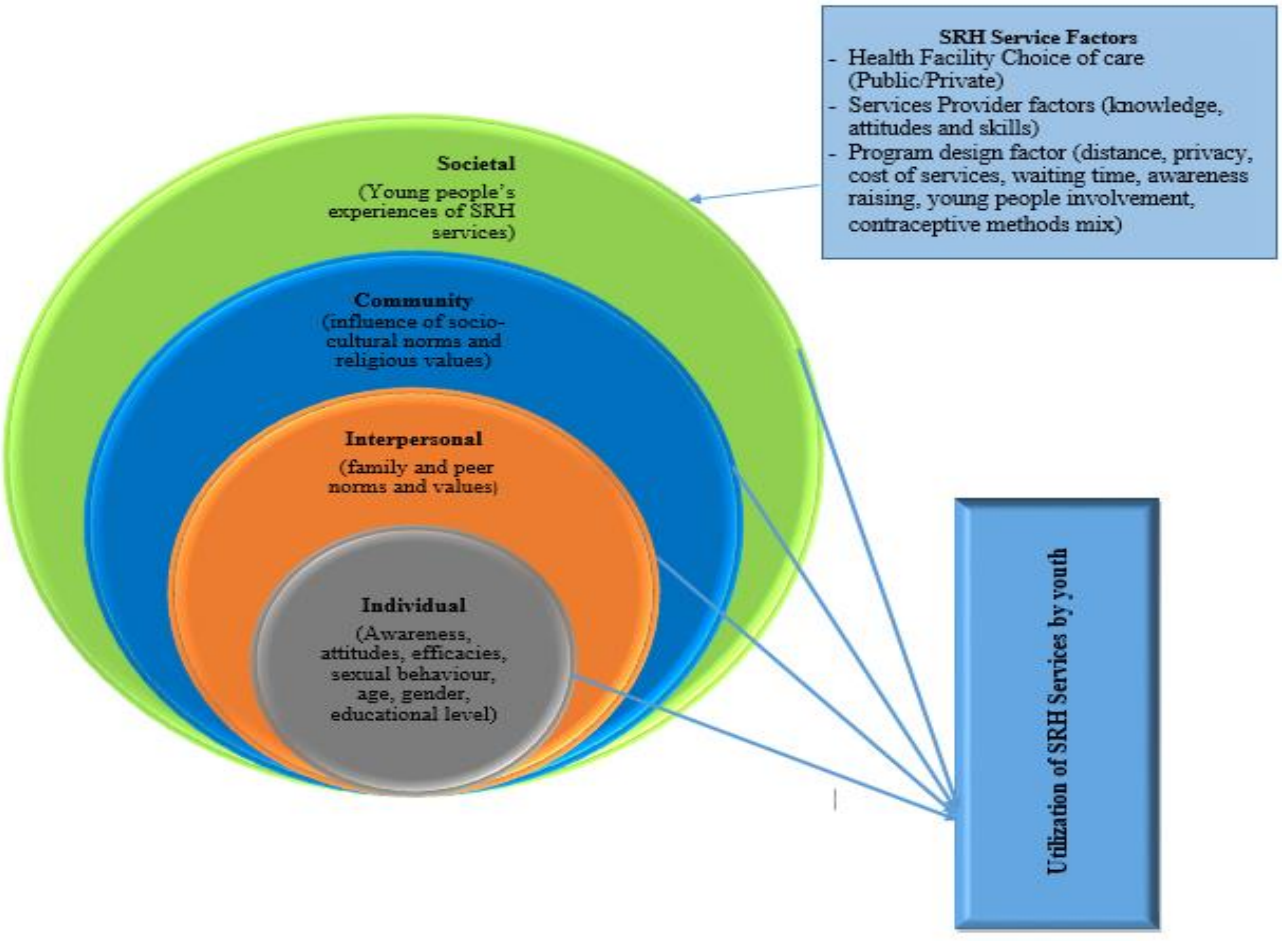

Figure 1: Conceptual framework for this study

1.5 Theoretical Framework

Factors that affect human behavior and practices are influenced by a multitude of factors (Hovell et al., 1994, Waterworth et al., 2015). The social ecological model (SEM) has therefore most often applied to study as a conceptual model to understand factors that influence youth behavior (Dlamini et al., 2017) especially in health and health service utilization. The SEM focuses on the environment in which youth live, the behavior and policy that make individuals make healthy choices despite the fact that people have the responsibility for establishing and sustaining healthy lifestyle (Dlamini et al., 2017). The SEM is underpinned by the belief that behavior does not occur within a vacuum and so individual behavior is influenced by factors at different levels and puts into account the physical environment and its relationship to people at individual, interpersonal, organizational and community levels.

The model focuses on the complexities and interdependencies between socio-economic, cultural, political, environmental, organizational and biological determinants of behavior. It is consistent with a number of other behavioral theories including Theory of Reasoned Action (TRA); Social Learning Theory (SLT) and Cognitive Learning Theory (CLT).

The model and the theories have been applied in adolescent prevention programs including adolescent teenage pregnancy, feeding and drug abuse. The model focuses on the fact that youth behavior is dependent on peers, family, and the community at large. Figure 1 shows the conceptual framework used in this study which is a modified SEM with the following components:

a) Individual factors like age, educational level, sex and marital status.
b) Interpersonal relationships including peers, partners and family members and how these influences health seeking behavior, risk taking that affects health, peer pressure, access to SRH information.

c) Community factors explore the social cultural influences and physical environment influence on utilization of health services.

d) Societal factors are those at organizations or social institutions with rules and regulate the operations that affect how or how well services including SRH are provided to an individual or group. Therefore, the model considers societal factors like health, economic, educational and social policies which may lead to inequalities between groups in society thus access and utilization of services. For this study, the major focus of societal factors is on the health system at provider, facility and program levels.

1.6 Research Objectives

Broad Objective

To assess the determinants of sexual and reproductive health service utilization among youth in Amudat town council, Amudat District.

Specific objectives

1. To explore the sexual and reproductive health service seeking behavior among youth in Amudat town council
2. To determine the social-cultural determinants of sexual and reproductive health service utilization among youth in Amudat town council
3. To explore the health system related determinants of sexual and reproductive health service utilization among youth in Amudat town council.

1.7 Justification

This study identified the facilitators and barriers to SRH service utilization among youth in Amudat town council to consequently inform improvement of SRH service delivery by helping different stakeholders to initiate approaches that will scale up utilization of SRH services.

The findings from this study may help health care providers to understand why youth do not utilize SRH services as expected despite their availability.

The study may also remind and guide health care workers to design information, education and communication material to educate youth on the available SRH services, how, when, where to get them and their importance.

The findings and recommendations of this study may also serve as a systematic body of knowledge that can inform the formulation or modification of plans, programs and policies for SRH services for youth in Amudat and Uganda at large.

CHAPTER TWO

2.0 LITERATURE REVIEW

2.1 Adolescents and youths' sexual and reproductive health services

The onset of adolescence comes along with not only changes to their bodies but also new sexual vulnerabilities (UNFPA, 2014). Globally, millions of girls are coerced into unwanted sex or marriages which puts them at greater risk of sexually transmitted infections including HIV, unwanted pregnancies, unsafe abortions and dangerous childbirth (UNFPA, 2014). Young boys are also at risk of contracting sexually transmitted infections. It's necessary that adolescents and youth are supported to acquire full access to reproductive health services and information to reduce their vulnerability index. This means providing them with access to comprehensive sexuality education, services to prevent, diagnose and treat STIs including modern contraception, sensitive and nonjudgmental counseling, pre and post-natal care and delivery, safe abortion and post-abortion care and post-violence care for survivors of gender-based violence (Denno et al., 2015; UNFPA, 2014). This is coupled with empowering young people to understand and exercise their rights including the right to delay marriage, the right to negotiate for safer sex and the right to refuse unwanted sexual benefits (UNFPA, 2014).

2.2 Sexual and Reproductive Health service seeking behaviors among youth

In Uganda, various health facilities offer SRH services to both adults, adolescents and youth across the country. These include; private clinics, private not for profit (PNFPs) and government facilities (MOH, 2018). International, National and local Civil Society Organizations such as Uganda Health Marketing Group (UHMG), Reproductive Health Uganda (RHU), Marie Stopes and many others have come up to support with programs and interventions aiming at behavior change, advocacy and service delivery for adolescents and youth. Despite the fact that most of these partners and facilities provide either free or subsidized sexual and reproductive health services, utilization

among youth remains lower than expected (MOH, 2018). The SRH services commonly offered are; HIV counseling and testing (HCT), HIV/AIDS treatment with anti-retroviral drugs, diagnosis and treatment of sexually transmitted infections, provision and referrals for contraceptives, prenatal care, male circumcision services, counseling and treatment for victims of rape or sexual assault, abortion or post abortion care and treatment for obstetric fistula (WHO, 2007).

Globally, STIs affects the reproductive health behaviors of both men and women and condoms are an important part of the available preventive strategies for HIV/AIDS and other STI control. Condom use, especially its correct and consistent use is a major determinant of the risk of both unwanted pregnancy and contraction of STIs (UNAIDS, 2016). In over 90% of the countries in sub-Saharan Africa, condom use at last sexual intercourse among men was lower than 50% while women were more likely to use condoms than their male counterparts (García-Moreno et al., 2015). Further, less than 60% of young men and women aged 15–24 with more than one partner had used a condom during their last sexual intercourse (Heise and Kotsadam, 2015). More than half of the adolescents and young people in sub-Saharan Africa are sexually active, some of whom experience sex debut at as young as 14 years (Mbeba et al., 2012; Ayehu et al., 2016; Helamo et al., 2017). In Uganda and particularly in Karamoja sub-region, 66% of young people reported having ever had sexual intercourse and 23% of them had had sexual intercourse with two or more sexual partners (AMICAALL, 2016).

In a study in Ghana, among sexually active young women living with HIV/AIDS, only 24% reported using contraceptives and 94% had ever received counselling on contraceptive use (Samba et al., 2018). Studies in Ethiopia show that, only 21% of school children (Binu et al., 2018) and 32% of the youth (Negash et al., 2016) were found to utilize youth reproductive health services. Another study revealed that, 41% of young people utilized SRH services but only nine percent had used any form of contraceptives at first sexual intercourse (Ayehu et al., 2016).

This implies that, young people in Ethiopia, like any other country in sub-Saharan Africa are at a great risk of contracting sexually transmitted infections or unintended pregnancy at their first sexual experience.

In Kenya, analysis of demographic and health survey data revealed that ANC utilization rates amongst Kenyan adolescent mothers was 93% and half of them have had their first birth by the age of 16 (Banke-Thomas et al., 2017). Another study conducted among adolescents and young people in Kampala found that, slightly over half (54%) of those who were sexually active had used a condom the last time they had sexual intercourse (Renzaho et al., 2017a). On average, 80% of adolescents and young people have sexual intercourse at their will and a considerable proportion reported being persuaded to have sex through gifts, money or other forms of favors (7.4%) (Renzaho et al., 2017).

2.3 Socio-cultural determinants of SRH service utilization among youth

The utilization of sexual and reproductive health services plays an important role in preventing youth from different sexually transmitted infections and unintended pregnancy (UNFPA, 2014). The knowledge of how HIV is transmitted is crucial to enabling people to avoid its transmission, and this is essential for young people at greater risk. Unfortunately efforts to improve youth knowledge of HIV/AIDS prevention and other SRH service utilization are always frustrated by a number of socio-cultural factors.

Communities in Karamoja sub-region in Uganda are said to be heavily traditionalists, some of these traditions have the potential to downplay HIV prevention and SRH promotion efforts (AMICAALL, 2016). Some of the practices commonly identified by young people include wife inheritance (42%), tattooing (32%), early marriage (30%), forced marriage and tooth removal (AMICAALL, 2016). Most of these practices expose youth to the risk of HIV, unplanned pregnancies and also reluctance in seeking HIV and SRH services.

Most young people (75 percent) are aware that HIV/AIDS services are available at health facilities and a few also know some private facilities (for profit and private for profit), pharmacies and other places providing HIV/AIDS related Services (AMICAALL, 2016). Further, studies show that, up to 95% of adolescents and young people have ever had information about SRH services including HIV and pregnancy prevention (Atuyambe et al., 2015; Negash et al., 2016). However, in Uganda, only up to 46% young women and 45% of young men had comprehensive knowledge about HIV (UDHS, 2016). It's reported that young people claim that, use of condoms during sexual intercourse is a sign of mistrust between partners, reduces sexual pleasures and that they are embarrassing to buy (Renzaho et al., 2017; Rukundo et al., 2016). This misconception about HIV and pregnancy prevention methods may promote inconsistency or avoidance of SRH services hence increasing vulnerability to unintended pregnancy and STIs.

In developed countries where the health systems are expected to be much stronger, most (52.1 %) of Thai women lacked good knowledge of where they should turn when they needed sexual and reproductive healthcare services. It was reported that, 56.7% had never visited a healthcare provider to get advice on contraception, and in Sweden, about 75 % had never been tested for HIV/STI (AAkerman et al., 2016).

A study among different sub-Saharan Africa countries revealed that, the health providers' religious affiliation was found to be a factor affecting SRH service utilization. Some healthcare workers reported that contraceptive use was against their religious faith and that young people should instead avoid engaging in sexual activities (Jonas et al., 2017). Other factors reported to significantly influence SRH service utilization among adolescents include; place of residence (rural vs. urban) and mass media exposure. Additionally, the education level of partners was found to be strongly associated with ANC utilization (Banke-Thomas et al., 2017).

The major concerns leading to young people's failure to access and utilize SRH services in Kenya were; inadequate information on reproductive health, lack of parental guidance on sexuality, unemployment/poverty, drug or substance use, media influence and peer pressure (Godia et al., 2014). In Ghana, pregnant women aged 18–40 years who routinely attended antenatal clinic revealed that, men who were educated were more likely to use any form of contraceptive method (Ali Abdulai et al., 2017).

2.4 Health system related determinants of SRH service utilization among youth

A systematic review of studies in sub-Saharan Africa revealed that, negative attitudes of healthcare workers, poor knowledge and skills of SRH services and lack of essential drugs & equipment are associated with provision of inadequate SRH services (Jonas et al., 2017). Some healthcare workers still have negative attitudes towards young people using contraceptives and are more likely to limit access to and utilization of SRH by adolescents (Jonas et al., 2017).

The health system barriers for not utilizing the SRH services among school going adolescents in Ethiopia were inconvenient hours for students (31%) and fear to be seen by parents and other people who knew them (29%) (Ayehu et al., 2016). Other reasons for failure to utilize SRH services among young people were; long waiting hours (28.4%), service providers being judgmental and unfriendly (Negash et al., 2016; Binu et al., 2018).

In Tanzania, study results indicate that most health facilities did not have skilled service providers on SRH rights (Mbeba et al., 2012). The reasons young people gave for shunning SRH services include; lack of privacy and confidentiality, and negative attitudes from service providers (Mbeba et al., 2012).

The availability of different SRH service options to choose from, presence of trained and friendly health care providers and older age (20-24 compared to 15-19) were reported to be associated with improved SRH service utilization in East Africa (Godia et al., 2014) (Ochako et al., 2015)

(Atuyambe et al., 2015)**.** In Karamoja region, about half of young people reported experiencing shortage of condoms whenever they visited health facilities, especially in Kaabong (59.5%) and Abim (42.1%) (AMICAALL, 2016). Shortage of SRH services at service points may discourage young people from seeking these services when they need them the most.

In Kenya, long distances to service centres, lack of confidentiality among healthcare workers, out of pocket costs incurred by service consumers and healthcare providers' lack of understanding of young people's SRH needs were some of the factors that hindered youth access to health services (Ayon et al., 2018).

Providing adolescents with accurate and reliable services and information and creating an environment that allows adolescents and young people to delay sexual debut or to negotiate for safer sex are said to be effective approaches for increasing adolescents and young people's SRH service utilization (UNFPA, 2014).

Basing on the current research, there was need for a study to assess the determinants of SRH utilization for specific profiles of youth for example those in rural underserved Uganda. There was also a need for a study that would provide a multivariable analysis of the association between SRH utilization and the determinants of SRH services utilization among youth. The study therefore sought to undertake a deep analysis of the barriers to and facilitators of SRH service utilization among youth in rural Uganda, Amudat Town Council.

CHAPTER THREE

3.0 METHODOLOGY

3.1 Study Design

This was an analytical cross-sectional study that employed both quantitative and qualitative data collection and analysis approaches. Data were collected from both random and purposively selected participants.

3.2 Study Setting

The study was conducted in Amudat Town Council, Amudat District in Uganda. Amudat is one of the seven districts in the Karamoja Sub region, located approximately 390 kilometers away from the Uganda's Capital City. It is bordered by Kenya in the East, Nakapiripirit District in the West, Moroto District in the North, and Bukwo and Kween in the South.

The District has an estimated population of 120,008 as projected from the 2014 national Census (UBOS, 2016). Amudat covers an estimated 1,640 square kilometers, is semiarid and experiences a rainy season from March through July and from September through November which is marked by torrential downpours that flood seasonal rivers making roads impassable and health services delivery difficult. The District has three sub counties and one Town Council.

The District has eight functional health facilities including one PNFP Hospital that serves as referral for the whole district. There is no government hospital or HCIV in the district. A team of 267 active trained Village Health Teams members support community health systems, though approximately 90% of the VHTs are illiterate The District health staffing stands at only 28.7% (DHO, 2018). All health facilities and VHTs are expected to offer SRH services and information to youth (MOH, 2012). It is worth noting that Amudat is a hard-to-reach and poor health performing district (MOH, 2017)

The population in Amudat is predominantly occupied by the Pokot tribe that are found on the Kenya side of the Border as well. The Community practices Female Genital Mutilation specifically Type III, which is more aggressive and often results in serious morbidities such as fistula. 82% of females in Amudat report knowing a female that was recently circumcised (UWONET, 2017).

3.3 Study Population

The study population was comprised of youth 15-24 years in Amudat Town Council.

Inclusion criteria: Youth aged 15-24 years, who were residing in Amudat Town council for at least 6 months and consented to the study.

Exclusion criteria: Youth aged 15-24 years who were unable to give informed consent or fully express their views in regard to the study questions (due to sickness) or any other form of disability. The study considered one youth per household and therefore sampled youth as the study unit. This was because of anticipated bias in individual responses if more than one youth from the same household answered the study questionnaire.

3.4 Sample Size

Used the WHO's formula for calculating sample size of households in a community survey

$$\mathbf{n = [4\ (r)\ (1\text{-}r)\ (f)\ (1.1)] / [(e^2)\ (p)\ (nh)]}$$

Where:

n= number of households

4 = the factor to achieve 95% level of confidence

r = estimated SRH service utilization prevalence of services by youth is 50%

1.1 = factor necessary to raise the sample size by 10% to allow for non-response

f = design effect of 1 since we shall consider all the villages and wards.

e = margin error to be tolerated 5%

p = the proportion of the total population that the smallest subgroup comprises, 0.175 (the proportion of youth population aged 15-24 years in Amudat Town Council is 17.5 of 11,617 people)

nh = average household size 5 (UBOS, 2016).

Thus:

n = [4 (0.5) (1-0.5) (1) (1.1)] / [(0.0025) (1) (5)]

n = 502.857 households

n= 503 households

3.5 Sampling Procedure

The town council has 14 villages in four wards, namely Jumbe, Kalas, Lochengenge and Tingas. The number of households was proportionally allocated to the number of households in each ward/strata using proportions as per mosquito net distribution lists obtained from the Town Council. The four wards with household population size (N) of 568 in Jumbe Ward; 596 in Kalas; 742 in Lochenngenge; and 356 in Tingas Ward, provided samples of sizes (n) of 126, 131, 166 and 80 households respectively. The allocation of the sample across the 4 wards was proportional to the ward's population with: $n_i = Ni/N$

Where i=1,2,…, 7 Ni was the sample size of the i^{th} ward n is the total sample size

N_i was the number of households in the i^{th} ward, N is the total number of households in the 4 wards. Systematic sampling was used to select the households where youth aged 15–24 years live in the town council. Ward mosquito net distribution registers was used to select the households to visit per ward. Systematic sampling was done by obtaining the total number of households in the ward from the respective administration from which the sampling interval, n^{th}, was calculated as below:

n^{th} = Total number of households in the village/ward

Sample size of households needed in that village/ward

The edge of the ward was identified by the help of the Ward chairperson where we stood and rolled a pen to determine which direction to take. The first house in that direction was the starting point after which a transect walk was done sampling every 'nth' house in that direction. In case the other edge of the ward was reached before completing the sample required, we took another 'random' direction determined by rolling the pen. If a selected household did not have a young person aged 15-24 years, the next household in the direction of the front door was used. The participants for 6 KIIs and 2 FGDs were selected purposively from the study area.

The KII respondents, specifically the District Health Officer and the District Health Officer in-charge of maternal child health were selected because of their pivotal role in planning, and management of SRH services in the District. The health service providers were selected as KII respondents given their firsthand experiences in offering SRH services in health facilities in Amudat Town Council. Parent or guardians of youth were selected as FGD respondents because they are the gatekeepers of youth who could affect youth sexual and reproductive health seeking and were also perceived to be well versed with the sociocultural aspects affecting SRH utilization.

3.6 Study Variables

3.6.1 Dependent variable

The dependent variable in this study was utilization of sexual and reproductive health services measured through the dichotomous response of yes or no. The sexual and reproductive health services including Sexual Transmitted Infection testing and treatment, contraceptive use, and HIV counseling, testing and treatment were considered basing on the defined sexual and reproductive health service package for youth in the Adolescent Health Policy Guidelines and Service Standards for Uganda. A person considered to have used SRH services was one that sought care from a health facility regarding the above services.

3.6.2 Independent variables

These are factors which the literature review revealed that they are associated with utilization of SRH services by the youth. They included; individual factors such as age, level of education and sex; interpersonal factors such as family and peer norms; community factors such as the socio-cultural factors like religion and ethnicity and the societal factors specifically health system related factors such as health facility organization and service delivery, health provider knowledge, attitudes and skills and availability of SRH services within the town council.

3.7 Data Collection Methods and Tools

3.7.1 Data Collection Methods

This study employed interviewer administered interviews, Key Informant Interviews (KIIs) and Focus Group Discussions (FGDs). Interviewer administered interviews were used to collect quantitative data from sample youth while FGDs were used to collect qualitative data from the parents/guardians and KIIs were used to collect qualitative data from SRH service providers. Specifically, two FGDs with parents/guardians (adults that had youth under their care) of youth were conducted and six KIIs were conducted, that is two with SRH service providers working at public health facilities, two with SRH provider at private health facilities and two with managers of health services delivery in Amudat District.

3.7.2 Data Collection Tools

Both quantitative and qualitative methods of data collection were used to collect data for this study. A structured questionnaire was used to collect quantitative data from youth (15-24 years). The structured questionnaire was administered by interviewers to capture data on socio-demographic characteristics, health seeking behavior, sociocultural, and health system related determinants of access and utilization of SHR services. Focus Group Discussion (FGD) guides and key informant

interview schedules were used to collect qualitative data from parents/guardians of youth, clan elders, and health service providers.

3.7.3 Data collection quality assurance

Six Research Assistants were recruited and trained for two days on research methodology to be followed when collecting data. During the training, the Research Team Leader explained the study objectives to the Research Assistants and oriented them on how to build rapport, interview respondents and fill the questionnaire and interview guides. Research assistants were also trained in correct recording of responses and data collection methods in line with the study background, objectives and methodology. Research assistants were recruited on grounds that they attained at least a A-Level education and are fluent in both English and either Swahili or Pokot.

The Research Team Leader actively oversaw and participated in the whole process of data collection while offering supervision and helping the research assistants. Debriefing meetings were held each day of data collection and data collected every day was checked by the principal investigator together with the research assistants before leaving the field on a particular day to ensure completeness, and accuracy of the data.

3.8 Data Management and Analysis

3.8.1 Data management

All the data collected was edited, checked for consistency, and then variables coded. Data entry and cleaning was performed using EPI Info™ software version 7.0 statistical package. Exploratory data analysis by generation of frequencies and cross tabulations was done to check for missed values and errors identified were corrected by revisiting the original questionnaires.

3.8.2 Data Analysis

In univariate analysis, the distribution of determinants and level of SRH service utilization were determined and summarized as proportions. In bivariate analysis, association between SRH service

utilization and each of the independent variables were assessed using STATA version 12 to generate crude Odds Ratios (ORs) and their 95% confidence intervals.

Multi-variable analysis was applied to variables that were significant after bivariate analysis on STATA version 12 after exporting the data set from EPI INFO. Since some of the independent variables are nominal such as gender, marital status and others numeric with a binary outcome, logistic regression models was used to identify independent variables that are significantly associated with SRH service utilization.

For all variables which showed association at bivariate level, adjusted prevalence ratios (APRs) and 95% confidence intervals were computed by logistic regression with modified poison to assess for any confounding or effect modification. All statistical tests were two-sided, 95% confidence interval was used and a p value of ≤ 0.05 was considered statistically significant. All the results from the analysis has been presented in tables, pie charts and graphs as deemed appropriate.

3.9 Quality Control

Research assistants were trained for two days by the Research Team Leader to ensure quality of data collection. Questionnaires were pretested before actual administration for data collection. Data editing was done at the end of each day to ensure completeness and consistency.

3.10 Ethical Considerations

Approval was sought from Uganda Martyrs University, and Amudat Town Council local administration. Written informed consent was obtained from all respondents before enrollment in the study. Confidentiality of the data was strictly maintained throughout the study period and respondent identity numbers were used instead of names to make responses anonymous.

3.11 Study Limitations

There was anticipated risk of recall bias in this study since there were questions requiring recall. This was mitigated by allowing time for respondents to think before giving a final answer.

3.12 Dissemination of Results

The results of this study have been presented to Uganda Martyrs University as partial fulfilment for the award of Master of Public Health in Population and Reproductive Health tenable from Uganda Martyrs University and a copy of the report will be submitted to Amudat Town Council. Abstracts will be presented in conferences and a manuscript paper will be written out of the report and published to maximize dissemination.

CHAPTER FOUR

4.0 PRESENTATION OF RESULTS

This chapter presents the findings of this study presented according to the main themes of the study objectives namely; the sexual and reproductive health services seeking behavior; social-cultural and health system related determinants of sexual and reproductive health service utilization among youth in Amudat town council. A total of 503 youth were interviewed from Amudat Town Council, in addition to 18 gatekeepers of youth that comprised parents/guardians and health workers.

4.1 Sociodemographic characteristics of respondents

A total of 503 youth were interviewed. As shown in Table 1, the age of respondents ranged from 15-24 years with a mean of 20.99 years (S.D=±2.74) and for those that had ever married, the mean age at first marriage was 17.97 (S.D=±2.64).

Variable	Observations	Mean	Std. Dev.	Min	Max
Age of the respondents	503	20.98	2.74	15	24
Age at first marriage	286	17.97	2.64	10	24

Table 1: Summary characteristics of the respondents

As shown in Table 2, most of the respondents 70.2% (353/503) were aged 20-24 years with over three quarters, 79.7% (401/503) not in school. More than half, 64.1% (323/503) were females and in comparison to other religions, majority were 39.8% (200/503) were protestant. More than half 55.5% (280/503) were married and over three quarters 75.4% (217/503) had got into first marriage in the age range of 15-20 years. 79.5% (400/503) were Pokot by tribe. This shows that the study population generally get married early.

Variable	Frequency	Percent (%)
Age Category		
15-19	150	29.8
20-24	353	70.2
Schooling Status		
Schooling	102	20.3
Not Schooling	401	79.7
Sex		
Male	180	35.8
Female	323	64.2
Religion		
Catholic	163	32.4
Protestant	200	39.8
Moslem	37	7.3
Pentecostal	97	19.3
Others*	6	1.2
Marital status		
Single	217	43.1
Married	280	55.7
Separated/Widowed	6	1.2
Age at first marriage (N=286)		
10-14	19	6.7
15-19	217	75.8
20-24	50	17.5
Tribe		
Pokot	400	79.5
Bagisu	49	9.7
Sabiny	10	2.0
Itsot	09	1.8
Others†	35	7.0

Table 2: Demographic Characteristics of the Respondents

***** *Jehovah Witness, Seventh Day Adventist; † Jie, Turkana, Acholi, Tapeth, Bokora, Matheniko, Langi, Pian. Sudanese, Kikuyu, Labwor, Munyankore, Baganda, Dodoth, Napore, Nyangia*

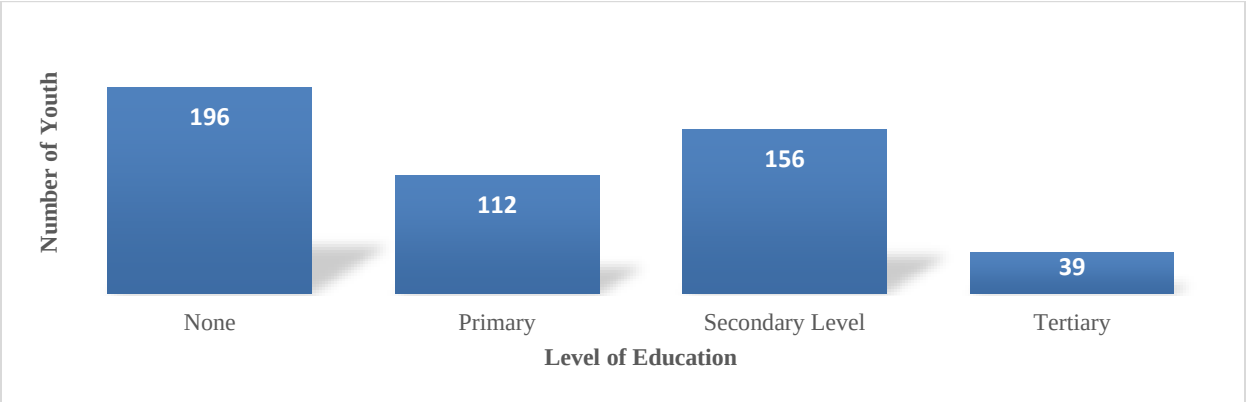

Figure 1: Distribution of Respondents by Highest Level of Education Attained

As Figure 1 above shows, most of the respondents, 36.2% (196/503) had never attained any form of formal education (Figure 1) while only about 7.7% (39/503) had attained above secondary education. This shows that the study population generally do not attain significant years of schooling.

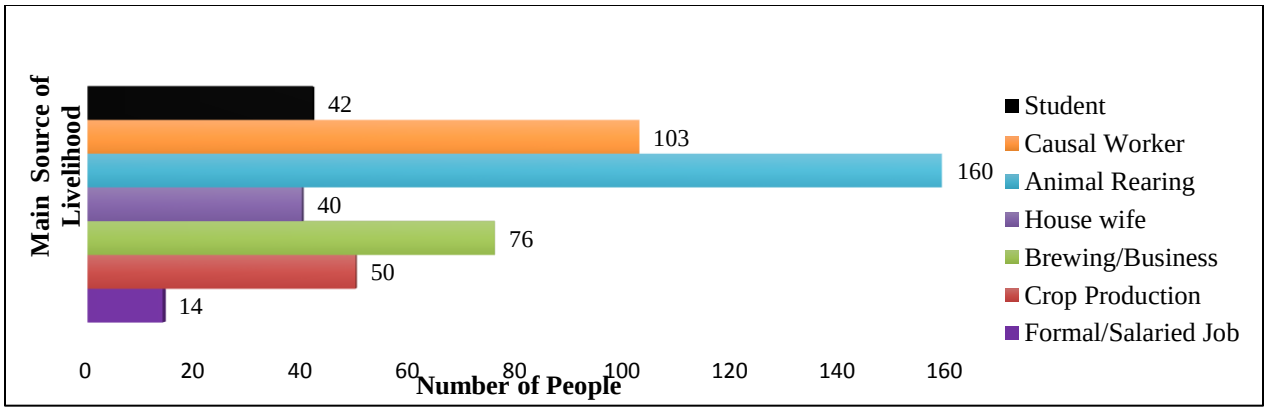

Figure 2: Major source of Livelihood

Further, the study showed that the major source of livelihood among the youth was animal rearing (160), 103 respondents were involved in casual work while only a few (14) had formal jobs earning salaries, as shown in Figure 2. This shows that very few youth have significant sustainable sources of income and very few are likely to get into gainful employment.

4.2. Sexual and reproductive healthcare seeking behavior

More than half of the respondents, 66.7% (336/503) had ever had SRH problem. Of those that had ever had SRH problem, majority 95.2% (320/336) had sought SRH services from a health facility. Only 1.8% (6/336) and 1.5% (5/336) sought SRH services from parents and spouses respectively and less than 1% (2/336) from traditional healers. This is detailed in Table 3 below.

Variables	Frequency	Percent (%)
Ever had any sexual or reproductive health problem?		
Yes	336	66.7
No	167	33.3
Where did you go for medical care in regard to SRH concern?[α]		
Health Facility	320	95.2
Qualified Doctor	9	2.7
Spouse	5	1.5
Parents	6	1.8
Traditional healer	2	0.6
Friends	2	0.6
Teachers	1	0.3

Table 3: Sexual Reproductive healthcare seeking behavior

4.2.1 SRH services sought by age, sex and schooling status

As indicated in Table 4, the majority of youth 72.8% (233/320) seeking SRH services at a health facility were in the 20-24 year category. Also majority 63.7% (204/320) of youth seeking health services from health facility were females. Among the school and non-school going youth, majority 81.2% (260/320) of respondents seeking SRH services from health facilities were non-schooling youth compared to their school going counterparts.

Variable	Sought care at the Health Facility	
	Yes	No
Age: 15-19 Years	87	8
20-24 Years	233	8
Sex: Male	116	7
Female	204	9
Schooling Status: Schooling	60	6
Not Schooling	260	10

Table 4: SRH services sought by age, sex and schooling status

4.2.2 Sexual and Reproductive Healthcare sought by service type

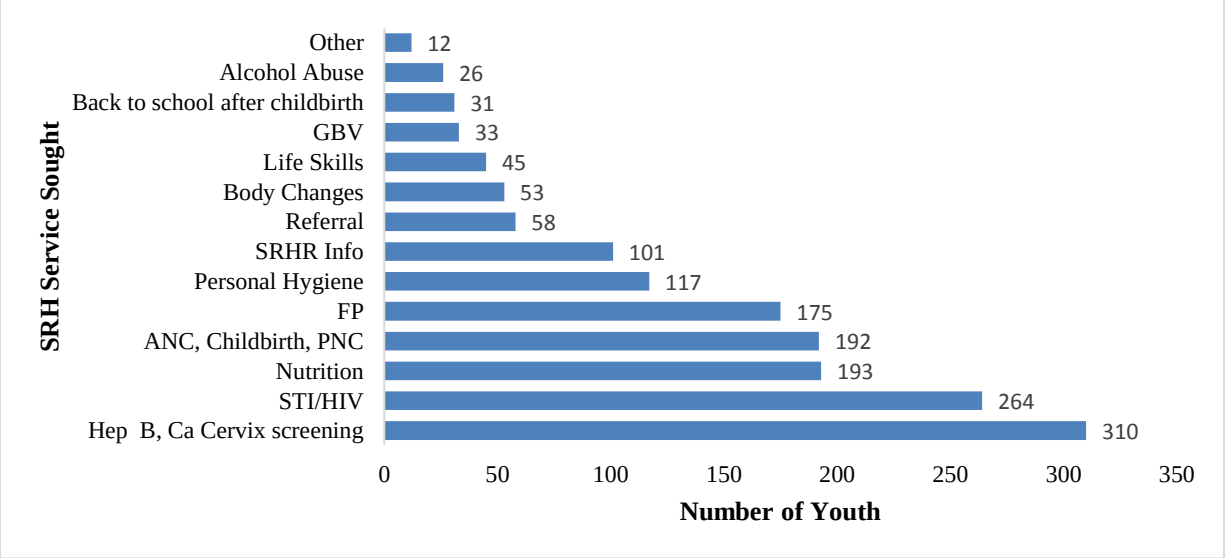

Figure 3: Youth Sexual and Reproductive Health seeking by Service Type

The commonest SRH services ever sought at health facilities were Hepatitis B vaccination/Cervical Cancer Screening mentioned by 96.8% (310/320) of respondents, followed by STI/HIV services mentioned by 82.5% (264/320) of respondents, nutrition services at 60.3% (193/320) and ANC/delivery/PNC services mentioned by 60% (192/320) of respondents and then followed by family planning, hygiene care, SRHR information services, and referral services, as shown in Figure 3. Others included services like fertility, fistula repair and mental health as the least common SRH services sought. It is worth noting that fistula repair services is not commonly sought yet Amudat District as one where the practice of female genital mutilation is common likely has fistula patients.

Hepatitis B vaccination, screening for Cervical Cancer and HIV counselling and testing services (classified under STI/HIV services) are offered in the Town Council through sponsored campaigns where communities are mobilized to seek those specific services during designated project periods. In addition, nutrition services are offered to pregnant women through to six months after childbirth. This motivates many mothers to access perinatal services and in the process access the supplementary food. The number of youth who reported ever seeking ANC/Childbirth/PNC services was found equal to those that have ever sought nutrition services.

'When we have resources for cervical screening, HIV testing and Hepatitis B vaccination, the youth come in big numbers because of the mobilization campaigns. These are one-off services. We do not do the same for all other services that are offered on a routine basis. For antenatal, delivery and postnatal services, clients receive nutrition supplementary feeds, so we get bigger numbers'

Health Manager, Amudat

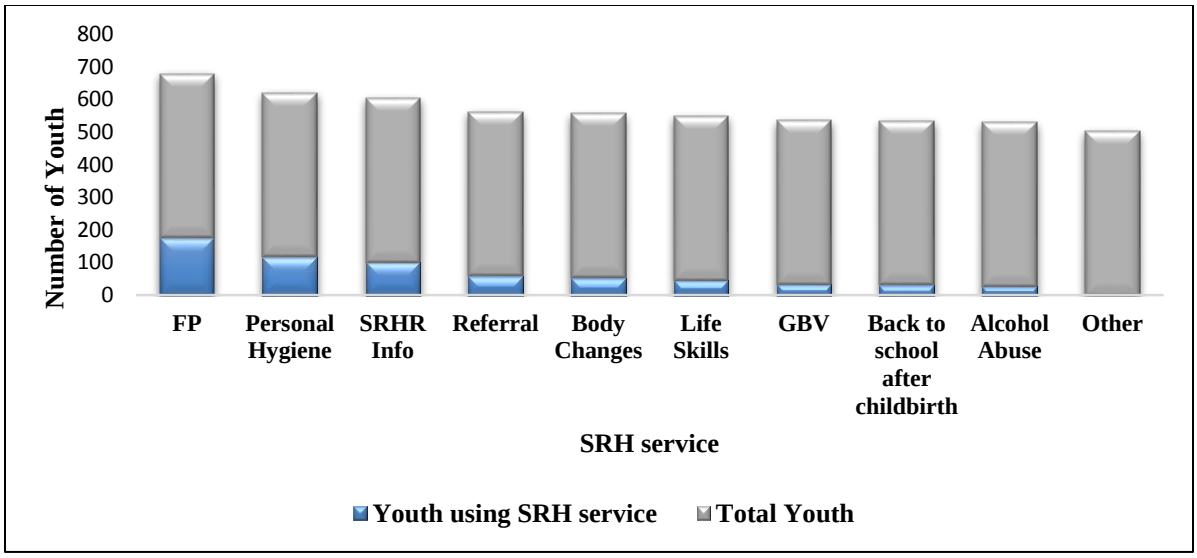

Figure 4: Youth Sexual and Reproductive Health seeking for routine services

Figure 4 shows the proportion of youth within the whole community that reported seeking SRH services that are offered on a routine basis in Amudat Town Council. Only 34.8% (175/503) reported ever use of contraceptive services, 20.1% (101/503) reported utilizing SRH information, life skills education 8.9% (45/503) and GBV 6.6% (33/503). This indicates overall underutilization of SRH services by youth in the Town Council.

4.3 Social cultural determinants of SRH services utilization

In relation to religious beliefs, most 87.3% (439/503) of the respondents agreed to a statement that contraceptive use is against the religious teaching, and that contraception encourages promiscuity 68.8% (346/503). Almost all youth 90.4% (455/503) disagreed with the statement that youth can access contraceptive services and that family planning does not accord to norms. The cultural stance related to contraception is further reflected in the FGD as below,

> *'The culture says that the poor should go for family planning while the rich should produce many children as they can. Secondly men don't test because they claim that they will test when their women are pregnant.'*
>
> *Male FGD Participant, Lochengenge Ward*

In addition, majority of respondents 82% (411/503) disagreed with the statement that youth can access safe abortion services. Religious beliefs favored youth accessing SRH services, abstaining from sex and going for HIV services. About 75% (376/503) of respondents agreed that youth get information about sex and learn about SRH issues from their peers. Almost all 98.8% (498/503) study respondents reported that discussions on SRH related information to the youth is a taboo, though it is evident that within families SRH issues are discussed as shown in Table 5

Variables		Freq.	Percent
RELIGION: What do you think about the information your religion gives on the following?			
My religion approves youth people to seek for SRH Services	Agree	476	94.6
	Disagree	27	5.4
Contraceptive use is against God's teaching	Agree	439	87.3
	Disagree	64	12.7
Contraception kills	Agree	227	45.1
	Disagree	276	54.9
Contraception encourages promiscuity	Agree	346	68.8
	Disagree	157	31.2
Youth can access contraception	Agree	48	9.6
	Disagree	455	90.4
Youth can access safe abortion	Agree	90	17.9
	Disagree	413	82.1
Single youth can have safe sex	Agree	91	18.1
	Disagree	412	81.9
Youth should go for HCT	Agree	500	99.4
	Disagree	3	0.6
Single youth must practice abstinence	Agree	501	99.6
	Disagree	2	0.4
PEER INFLUENCE: Please rate the following in relation to SRH information			
Youth learn about reproductive health from peers.	Agree	376	74.7
	Disagree	127	25.3
Peers are first to give information on sex	Agree	378	75.1
	Disagree	125	24.9
I learned about contraceptive from friends	Agree	257	51.0
	Disagree	246	48.9
I would first seek help from friends if realize I'm pregnant	Agree	143	44.2
	Disagree	180	55.8
I Would go for a HIV test if friends decided the same	Agree	185	36.8
	Disagree	318	63.2
FAMILY VALUES: My family readily gives information on the following SRH services			
Contraception	Agree	164	32.2
	Disagree	339	67.4
Safe/unsafe sex	Agree	177	35.2
	Disagree	326	64.8
Abortion	Agree	198	39.4
	Disagree	305	60.6
STIs /HIV/AIDS	Agree	399	79.3
	Disagree	104	20.7

Table 5: Distribution of Respondents by Socio-Cultural Views

4.4 Health system related determinants of youth SRH service utilization

As shown in Table 6, most 98.8% (498/503) had knowledge of the SRH services available in their communities. The SRH services that were known by most of the respondents to be available at selected health system levels in their communities include; family planning services 87.8% (442/503), STI/HIV services 86.7% (436/503) and ANC/child birth/PNC services 74.1% (369/503). Services least known by the respondents were; mental health and psychosocial support services 1.0% (5/503), services to prevent alcohol/substance abuse 13.6% (68/503) and clinical care for GBV survivors 27.7% (138/503). Almost all 95.4% (473/503) respondents mentioned government health facilities, while 12.3% (62/503) mentioned private facilities as the place where people can access SRH. It is worth noting that the only Hospital in Amudat is a private-not-for-profit facility. When asked the reasons that prevent them from accessing SRH services, main responses provided included; long distances to the health facilities 58.7% (296/503), lack of transport 20% (101/503), lack of knowledge on where specific services are provided 52.2% (263/503), unfriendly health care providers at health facilities 27.6% (139/503) and lack of drugs at health facilities 26.2% (132/503).

Additionally, respondents gave some of the reasons for the youth's failure to utilize the available sexual and reproductive health services. These included; negative attitude 77.9% (392/503), fear to be stigmatized or discriminated against 53.8% (271/503), traditional beliefs 51.8% (261/503) and others. Even from qualitative interviews, respondents mentioned absence of drugs; demand for a lot of money; unfriendly health workers and more trust in private health facilities; cost of delivery; referral to expensive private facilities; lack of transport and lack of privacy due to inadequate availability of space especially congestion in the maternity ward as reasons why youth do not utilize SRH services while claims that people are not told the diseases they are suffering from after testing also emerged.

Variables	Frequency	Percentage
Knowledge of SRH services availability		
Yes	498	98.8
No	6	1.2
Services known to be available		
Family Planning	442	87.8
Fertility	10	2
Fistula	6	1.2
Body changes	66	13.1
Body care and hygiene	221	44
Nutrition	388	77.1
Alcohol and substance abuse	68	13.5
STI /HIV Treatment and prevention	436	86.7
Life Skills	121	24
Clinical care for GBV	138	27.4
ANC/delivery/PNC	369	73.3
referral and follow up	132	26.2
Mental health and psychosocial services	5	1
Out of school and back	114	22.6
Information on SRHR	144	28.6
Hepatitis/cervical cancer vaccination	424	84.3
Others	10	2
Access to SRH services		
Yes	496	98.4
No	8	1.6
Places where people access SRH services		
Govt. Health facility	473	95.4
NGO. Health facility	21	4.2
Private for profit health facility	62	12.5
Pharmacy	11	2.2
Drug shop	86	17.3
Reasons that prevent people from accessing SRH services		
Long distance	296	58.8
Lack of transport	101	20
Poverty	133	26.4
Unfriendly health workers	139	27.6
Non-availability of services	69	13.7
Lack of knowledge on where they exist	263	52.2
Lack of drugs	132	26.2
Others	57	11.3
Knowledge of factors that which prevent people from utilizing SRH services		
Yes	487	96.6
No	17	3.4
Factors which prevent youth from utilizing SRH services		
Preference for traditional services	183	36.4
Lack of trust in modern services	153	30.4
Lack of knowledge of existing services	93	18.5
Fear to be stigmatized & discriminated	271	53.8
Traditional beliefs	261	51.8
Negative attitude	392	77.9
Others	2	0.4

Table 6: Health System related determinants of SRH service utilization

The findings displayed in Table 6 are further supported by the quotes from youth gate keepers and Health Manager Respondents as below.

'Pricing for delivery is high and they are always told to get motor cycles to the hospital so that they are paid from there but they are not paid hence most people wonder if they should deliver from home. They always pay twenty thousand shillings for delivery. Secondly there are unfriendly workers, thirdly there are low drugs.'

Female FGD Respondent, Lochengenge Ward

'The nurses should be sensitized to be friendly.'

Female FGD Respondent, Lochengenge Ward

'The Nurses should first test the patients' blood group before applying family planning. When people use family planning, they get a lot of side effects like weakness and bleeding.'

Female FGD Respondent, Lochengenge Ward

'The main hospital does not totally cure the STIs. Even Brucella and Typhoid. It comes back again. People do not trust the local hospital, they suspect the drugs are smuggled to the private hospital. Family planning is got from the local hospital. Delivery is done from the local hospital. But STIs are treated from the private hospitals'

Female FGD Respondent, Lochengenge Ward

Also respondents mentioned the human resource challenges in offering SRH services such as fertility services and fistula repair services.

'Other services like cervical cancer cannot be offered due to lack of capacity, supplies and human resource for fertility and mental health services. The current staffing level at 28.7% is detrimental because the few health workers are also overworked hence reducing on their performance.'

Health Manager, Amudat.

4.5 Association of socio demographic factors with utilization of SRH

Table 7 details the findings at bi-variate analysis.

An analysis of the association between respondent characteristics and utilization of SRH services showed that , respondents who belonged to Pentecostal faith were 3% more likely than protestants to have utilized SRH services at a hospital/clinic (CPR=1.03, CI=1.0-1.07, p-value=0.02).

The study further found that participants who had attained ordinary level education were less likely to have ever utilized SRH services when compared to those that had attained tertiary /Non-University education (CPR=0.92, CI=0.86-0.98, p-value =0.001).

Respondents 10-14 years old and those 15-19 years old at first marriage were more likely to have utilized SRH services compared to those 20-24 years at first marriage (CPR=1.07, CI=0.97-1.16, p-value =0.16 and CPR=1.05, CI=0.95-1.14, p-value =0.32 respectively). However, this was not statistically significant at 95% significance level.

Respondents who were involved in casual work were less likely than those with formal employment to have sought SRH services at a hospital/clinic (CPR=0.91, CI=0.83-0.98, p-value =0.001).

Variable	Health Facility/Provider$^{\mu}$ Yes	No	PR [95% CI]	P-value
Age Category : 20-24	87	08	1	
14-19	233	08	0.94 [0.88-1.01]	0.1
Schooling Status: Schooling		60 06	1	-
Not Schooling	260	10	1.06 [0.97-1.14]	0.15
Age at first marriage (N=288)				
21-24	30	02	1	-
10-14	03	00	1.07 [0.97-1.16]	0.16
15-20	163	03	1.05 [0.95-1.14]	0.32
Sex: Male	199	07	1	-
Female	201	09	1.01 [0.96-1.06]	0.61
Religion				
Protestant	126	05	1	-
Catholic	97	07	0.97 [0.91-1.03]	0.33
Moslem	20	03	0.07 [0.76-1.06]	0.22
Pentecostal	74	00	1.03[1.0-1.07]	0.02*
Others*	03	01	0.78[0.44-1.37]	0.39
Marital status				
Married	192	05	0.94 [0.89-0.99]	0.03*
Single	125	11	1.02 [1.00-1.04]	0.02*
Separated/Widowed	03	00	1.02 [1.00-1.04]	0.02*
Tribe				
Itsot	02	00	1	
Pokot				
Bagisu	278	11	0.96 [0.98-0.98]	0.001
Sabiny	18	02	1.00 [1.00-1.00]	0.89
Others	02	00	-	-
	04	00	0.83 [0.67-1.02]	0.08
Highest Education Level				
Tertiary (Non-University)		03 00	1	-
None				
Primary1-4				
Primary5-7	157	03	0.98 [0.96-1.00]	0.08
Secondary (O' level)	16	02	0.88 [0.75-1.04]	0.18
Secondary (A' level)	44	03	0.93 [0.86-1.00]	0.08
Tertiary (University)	73	06	0.92 [0.86-0.98]	0.01*
	18	01	0.90 [0.85-1.06]	0.31
	09	01	0.90 [0.73-1.10]	
Main Activity for Livelihood				
Formal/Salaried Job	11	00	1	-
Crop Production	29	01	0.97 [0.90-1.03]	0.32
Brewing/Business	49	06	0.89 [0.81-0.97]	0.01
Artisan/Technician		02 00	1.00 [1.00-1.00]	1
Animal Rearing	143	00	1.00 [1.00-1.00]	1
House wife	02	02	0.5 [1.87-1.33]	0.16
Causal Worker	59	06	0.91 [0.83-0.98]	0.01*
Student	25	01	0.96 [0.89-1.03]	0.32

Table 7: Association of demographic factors with utilization of SRH

***** Significant Association**, µ**sought services at health facility/health worker

4.6 Association of socio-cultural factors with utilization of SRH

Respondents who said that their religion does not approve youth to seek SRH services had 5% less chances of having utilized SRH services than those whose religions approve (CPR=1.05, CI= 1.02-1.08, p=0.001). When compared to those in agreement, participants who were not in agreement with the idea that youth should go for HIV testing services were less likely to have ever utilized the SRH services (CPR=1.05, CI=1.02-1.07, p=0.001).

It is shown that respondents who did not agree that youth must practice abstinence had 95% less chances of having ever utilized SRH services (CPR=0.95, CI=0.92-0.97, p=0.001). Furthermore, individuals who learnt about contraception from other sources, other than friends were more likely to utilize SRH services (CPR=1.07, CI=1.02-1.13, p=0.001).

Variables		Hospital/Clinic[µ] Yes	No	PR [95% CI]	P-value
RELIGION: The information religion gives on SRH issues?					
My religion approves youth to seek for SRH Services	Agree	301	16	1	
	Disagree	18	00	1.05 [1.02-1.08]	0.00*
Contraceptive use is against God's teaching	Disagree	02	14	1	
	Agree	264	55	0.98 [0.93-1.04]	0.58
Contraception kills	Disagree	08	08	1	
	Agree	153	166	1.00 [0.95-1.05]	0.84
Contraception encourages promiscuity	Disagree	107	02	1	
	Agree	212	14	0.95 [0.91-0.99]	0.03*
Youth can access contraception	Agree	39	02	1	
	Disagree	279	14	1.00 [0.92-1.07]	0.03*
Youth can access safe abortion	Agree	21	01	1	
	Disagree	296	15	0.96 [0.90-1.09]	0.84
Single youth can have safe sex	Agree	84	02	1	
	Disagree	235	14	0.99 [0.92-1.01]	0.13
Youth should go for HCT	Agree	316	00	1	
	Disagree	16	02	1.-05[1.02-1.07]	0.00*
Single youth must practice abstinence	Agree	01	16	1	
	Disagree	318	00	0.95[0.92-0.97]	0.00*
PEER INFLUENCE: Please rate the following in relation to SRH information					
Youth learn about reproductive health from peers.	Agree	14	02	1	
	Disagree	249	69	1.02[0.97-1.07]	0.2
Peers are first to give information on sex	Agree	269	14	1	
	Disagree	67	02	1.02[0.97-1.07]	0.33
I learned about contraceptive from friends	Agree	140	03	1	
	Disagree	179	13	1.07[1.02-1.13]	0.00*
I would first seek help from friends if realize I'm pregnant	Agree	103	04	1	
	Disagree	93	05	0.98[0.92-1.04]	0.63
I Would go for a HIV test if friends decided the same	Agree	191	08	1	
	Disagree	124	08	0.97[0.9-1.03]	0.41
FAMILY VALUES: My family readily gives information on the following reproductive health services					
Contraception	Agree	90	08	1	
	Disagree	103	08	1.05 [0.98-1.12]	0.12
Safe/unsafe sex	Agree	86	12	1	
	Disagree	232	04	1.12[1.04-1.21]	0.003*
Abortion	Agree	79	05	1	
	Disagree	212	04	1.04[0.98-1.04]	0.14
STIs /HIV/AIDS	Agree	306	16	1	
	Disagree	13	00	1.05[1.02-1.08]	0.00*
Pregnancy	Agree	260	11	1	
	Disagree	32	01	1.01[0.94-1.08]	0.75
CUSTOMS AND TABOOS: What do you think about the customs and taboos gives in relation to SRH information?					
Community norms and taboos determine individual reproductive behavior	Agree	131	09	1	
	Disagree	186	07	1.03[0.97-1.08]	0.26
Cultural taboos are obstacles to informed RHS information.	Agree	180	11	1	
	Disagree	137	01	1.02[0.97-1.07]	0.33
Premarital sex is forbidden.	Agree	312	15	1	
	Disagree	06	01	0.89[0.66-1.21]	0.49
Family planning does not accord to the norms	Agree	10	01	1	
	Disagree	308	15	1.05[0.86-1.26]	0.62
Discussions on RHS information is a taboo.	Agree	79	07	1	
	Disagree	134	191	1.00[0.95-1.05]	0.91

Table 8: Association of socio-cultural factors with utilization of SRH services

4.7 Association of health system related factors with SRH services utilization

Respondents who did not have knowledge about availability of SRH services had 5% less chances of having utilized SRH services at a hospital/clinic (CPR=0.95, CI=1.02-1.07, p-value<0.001). We found no difference in the level of utilization of SRH services among respondents who lack transport to seek the services and those who can afford transport (CPR=1.0, CI=0.95-1.06, p-value=0.73). Participants who said that they don't always find the drugs they need were 8% less likely to have ever utilized SRH services at a hospital/clinic (CPR=0.92, CI=0.82-1.04, p-value=0.2). Participant's preference for traditional medicine utilization was not associated with use of SRH services (CPR=1.0, CI=0.95-1.05, p-value=0.84).

Variables		Hospital/Clinic[µ] Yes	No	CPR [95% CI]
Knowledge of SRH services availability				
Yes		318	16	1.0
No		02	00	0.95[1.02-1.07]
Reasons that prevent people from accessing SRH services				
Long distance:	No	110	07	1.0
	Yes	210	09	1.02[0.96-1.07]
Lack of transport:	No	71	13	1.0
	Yes	249	03	1.00[0.95-1.06]
Poverty	No	259	12	1.0
	Yes	61	04	0.98[0.91-1.05]
Unfriendly health workers:	No	60	05	1.0
	Yes	260	60	0.96[0.89-1.03]
Non-availability of services:	No	305	14	1.0
	Yes	15	02	0.92[0.77-1.09]
Lack of drugs	No	288	12	1.0
	Yes	32	04	0.92[0.82-1.04]
Others	No	275	14	1.0
	Yes	45	02	1.00[0.94-1.07]
Factors which prevent people from utilizing SRH services				
Preference for traditional services:	No	208	11	1.0
	Yes	105	05	1.00[0.95-1.05]
Lack of trust in modern services:	No	250	10	1.0
	Yes	63	06	0.94[0.87-1.02]
Fear to be stigmatized & discriminated				
	No	115	08	1.0
	Yes	198	08	1.02[0.97-1.08]
Traditional beliefs:	No	167	06	1.0
	Yes	146	10	0.96[0.92-1.02]
Negative attitude:	No	76	07	1.0
	Yes	237	09	1.05[0.98-1.12]

Table 9: Association of health system related factors with SRH service utilization

4.8 Multivariable association of selected factors and SRH services utilization

After adjustment as shown in Table 10, teenage respondents (15-19 years old) were found to have 10 percent less chances of having utilized SRH services compared to 20-24 categories. (APR=0.90, CI=0.83-0.97, p-value=0.01). We found more students than formal employees had utilized SRH services through health facility/provider (APR=1.12, CI=1.01-1.26, p-value=0.03). Also, it was found that youth who did not agree that religion approves youth to seek SRH services had 5% less chances of having utilized SRH services (APR=0.95, CI=0.91-0.99, p-value=0.003). Results also show that participants who according to their religion did agree that contraception use encourages promiscuity were less likely to have visited the hospital/clinic to utilize SRH service (APR=0.95, CI=0.91-0.99, p-value=0.03).

Table 10: Multivariable association of selected factors and SRH service utilization

Variable	Hospital/Clinic[µ] Yes	No	CPR [95% CI]	P-value	APR [95% CI]	P-value
Age Category : 20-24	87	08	1.0		1.0	
15-19	233	08	0.94 [0.88-1.01]	0.10	0.90 [0.83-0.97]	0.01*
Schooling Status: Schooling	60	06	1.0		1.0	
Not Schooling	260	10	1.06 [0.97-1.14]	0.15	1.12 [0.91-1.37]	0.27
Marital status Married	192	05	1.0		1.0	
Single	125	11	0.94 [0.89-0.99]	0.03*	1.12[0.91-1.37]	1.08
Separated	01	00	1.02 [1.00-1.04]	0.02*	1.12 [0.91-1.37]	1.39
Widowed	02	00	1.02 [1.00-1.04]	0.02*	1.12 [0.91-1.37]	1.05
Highest Education Level						
Tertiary (Non-University)	03	00	1.0		1.0	
None	157	03	0.98 [0.96-1.00]	0.08	0.92 [0.79-0.28]	1.06
Primary1-4	16	02	0.88 [0.75-1.04]	0.18	1.02 [0.95-0.46]	1.10
Primary5-7	44	03	0.93 [0.86-1.00]	0.08	0.99 [0.90-0.85]	1.09
Secondary (O' level)	73	06	0.92 [0.86-0.98]	0.01*	0.97 [0.84-0.76]	1.13
Secondary (A' level)	18	01	0.90 [0.85-1.06]	-	0.95 [0.76-0.66]	1.18
Tertiary (University)	09	01	0.90 [0.73-1.10]	0.31	0.93 [0.84-0.22]	1.04
Main Activity for Livelihood						
Formal/Salaried Job	11	00	1.0		1.0	
Crop Production	29	01	0.97 [0.90-1.03]	0.32	0.99 [0.90-1.08]	0.79
Brewing/Business	49	06	0.89 [0.81-0.97]	0.01	0.99 [0.91-1.07]	0.81
Artisan/Technician	02	00	1.0 [1.00-1.00]	1.0	1.11 [0.91-1.34]	0.29
Animal Rearing	143	00	1.0 [1.00-1.00]	1.0	1.06 [0.98-1.15]	0.13
House wife	02	02	0.5 [1.87-1.33]	0.16	0.52 [0.20-1.38]	0.19
Causal Worker	59	06	0.91 [0.83-0.98]	0.01*	1.07 [0.89-1.29]	0.41
Student	25	01	0.96 [0.89-1.03]	0.32	1.12 [1.01-1.26]	0.03*
Agreement with social-cultural views: views information religion gives on SRH issues						
My religion approves youth to seek for SRH						
Services: Agree	301	16	1.0		1.0	
Disagree	18	00	1.05 [1.02-1.08]	0.00*	0.95 [0.91-0.99]	0.03*

Contraception encourages promiscuity:						
Agree	107	02	1.0		1.0	
Disagree	212	14	0.95 [0.91-0.99]	0.03*	0.96 [0.92-0.99]	0.03*
Youth can access contraception: Agree	39	02	1.0		1.0	
Disagree	279	14	1.00 [0.92-1.07]	0.03*	1.02 [0.94-1.11]	0.59
Youth learn about reproductive health from peers: Agree	14	02	1.0		1.0	
Disagree	249	69	1.02[0.97-1.07]	0.20	1.01 [0.97-1.05]	0.41
I learned about contraceptive from friends: Agree	140	03	1.0		1.0	
Disagree	179	13	1.07[1.02-1.13]	0.00*	1.01 [0.98-1.05]	0.36
My family readily gives information on Contraception: Agree	90	08	1.0	0.12	1.0	
Disagree	103	08	1.05 [0.98-1.12]		0.99 [0.93-1.04]	0.71
My family readily gives information on safe/unsafe sex: Agree	86	12	1.0		1.0	
Disagree	232	04	1.12[1.04-1.21]	0.003*	1.02 [0.95-1.09]	0.47
My family readily gives information on Abortion: Agree	79	05	1.0		1.0	-
Disagree	212	04	1.04[0.98-1.04]	0.14	1.00 [0.95-1.05]	0.85
My family readily gives information on STIs /HIV/AIDS: Agree	306	16	1.0		1.0	
Disagree	13	00	1.05[1.02-1.08]	0.00*	0.95 [0.90-1.00]	0.08
Health System Related Factors						
Lack of drugs: No	288	12	1.0		1.0	
Yes	32	04	0.92[0.82-1.04]	0.20	0.89 [0.80-1.00]	0.52

***Significant Association**

CHAPTER FIVE

5.0 DISCUSSION

5.1 Utilization of Sexual and Reproductive Health Services

This study assessed determinants of SRH service utilization among youth in Amudat Town Council of Amudat District. Utilization of SRH services among those youth who had ever faced any SRH problems was fairly high (95%), however utilization of SRH services was low for some services that were not offered through outreaches and associated community campaigns. The high utilization of SRH services among youth might be due to the fact that most respondents (79.7%) were not in school and more than half (55.5%) of them were married. However, the level of utilization of SRH services among youth in Amudat is much higher than the 41% reported in Ethiopia among young people of the same age category (Ayehu et al., 2016). In addition, studies show that individuals in marriage and young people out-of-school are more likely to be involved in sexual activities than those who are single and in school (Godia et al., 2014, Renzaho et al., 2017).

A study conducted in Uganda show that sexually active individuals have higher likelihoods of seeking SRH services compared those who embrace abstinence (Renzaho et al., 2017). This study findings are in line with findings of a study conducted in Karamoja which found that proportion of young people in-school who had sex within three months preceding the survey was lower compared to their counterparts out-of-school, and that many among young people out of school were in marital relationships (AMICAALL, 2016).

This study revealed that, some of the reasons for youth's failure to utilize the available SRH services were; long distance to health facilities (58.7%), unfriendly and judgmental healthcare providers (27.6%), drug stock outs at health units, negative attitude by youth towards use of SRH services fear to be stigmatized or discriminated against and traditional beliefs.

These findings are in agreement with other studies in sub-Saharan Africa which reported that services were inaccessible due to lack of privacy, confidentiality, equipment and negative attitudes from Service providers (Jonas et al., 2017, Mbeba et al., 2012). The study revealed that almost all (99%) respondents were knowledgeable about available SRH services in their communities.

Hepatitis B vaccination cervical cancer screening were the most known SRH services sought by respondents and these were delivered with associated intense mobilization campaigns, while in addition, clients attending ANC/delivery/PNC received nutrition supplements which motivated attendance. This is partly due to availability of specific projects targeting cervical cancer screening and hepatitis B vaccination and HIV testing, in which health workers undertake mobilization campaigns and community outreaches. Moreover cervical cancer screening is offered free of charge at the only Hospital, in the Town Council, a PNFP that charges for other services. This explains the low use for SRH services that did not have dedicated outreach and mobilization campaigns; and or motivation for attendance like provision of nutrition supplements to perinatal clients. It also could explain the low use of family planning services since those that are not pregnant do not get nutrition supplements in this semi-arid district.

Utilization of SRH services could be improved by conducting integrated outreaches for SRH services and innovating means of motivating family planning use. Further, unfriendly health workers could be minimized through training more health workers and youth gatekeepers on youth friendly SRH services.

High levels of knowledge about SRH services among youth in Amudat is clear evidence that health facilities and partners are providing SRH services or information about SRH regardless of the quality, friendliness of providers, cost of the service, accuracy and reliability of the services/information and other factors.

Therefore, this population presents an opportunity to improve the health of youth since the knowledge could enable easy promotion of utilization of the services as knowledge has been found to be associated with service utilization elsewhere (Abajobir and Seme, 2014).

5.2 Sexual and reproductive health service seeking behaviors among youth

Results of this study indicate that most youth (66.7%) had ever had some form of SRH problem and that majority of those had sought SRH services. This is an indication that youth are able to perceive health problem. Therefore, simplified strategies to ease access to reliable SRH services and information to reduce youth vulnerability to SRH challenges is essential.

It was found that up to three quarters of the youth agreed that youth get SRH information from peers; also 8.4% respondents have sought SRH services and advice from parents, friends and spouses. This is in line with a study in Pakistan which indicated parents/caregivers, siblings/cousins, friends, teachers, and religious leaders as the main sources of SRH information (Iqbal et al., 2017, Binu et al., 2018). Few youth are getting health services from teachers implying a missed opportunity to reach in-school youth with accurate and friendly SRH services and information.

5.3 Social-cultural factors affecting SRH health service utilization

This study found that about 40% of the respondents had never attained any formal education. The youth who have not attained any formal education are more likely to rely on incorrect information from peer groups and family, with consequent lack of accurate information and hence increasing on the proportion of youth experiencing SRH challenges and reducing the youth utilizing SRH services. Relying on peers' advice to choose SRH services to use for STI/HIV prevention, pregnancy prevention and delivery may lead to use of wrong drugs that may be detrimental to one's heath. Studies in Uganda and elsewhere in sub-Saharan Africa show that utilization of SRH services is higher among people who have attained primary

education and beyond than those who have not attained any formal education (Renzaho et al., 2017, Abajobir and Seme, 2014).

The majority (87.5%) of the respondents agreed to statements that that contraceptive use is against religious teaching, and that contraception encourages promiscuity (68.8%). In contrary, study results indicate that youth who said that religion discourages them from using contraceptives had utilized SRH services. This implies that either religious teaching against contraceptive use might not have a significant influence on contraceptive uptake or the majority of youth were getting SRH services that were not contraceptive services.

Also, an analysis of family values in this study showed that some SRH issues like pregnancy and HIV are discussed within homes. It is likely that the information or SRH services received from friends and relatives is either not correct or adequately enabling utilization of SRH services, which therefore contributes to the high number of youth that are not using the routine SRH services like family planning, life skills education and SRH information from health providers as well as those that are experience challenges using SRH services. Efforts should be put on encouraging adolescents to seek for advice from qualified health workers to avoid the consequences of wrong advice. Almost all of respondents reported that discussions on sexual and reproductive health related information to the youth is a taboo. Despite the fact that most youth are sexually active and are highly at risk of STI/HIV infection and unintended pregnancies, this kind of belief may shield parents, teachers and even health workers from providing education or advice on safe sex practices. This is evidence that there is need to empower all possible sources of information about SRH services to provide accurate and reliable services to the use.

5.4 Health system factors affecting SRH service utilization among youth

This study found that majority (98.8 percent) were aware of the common SRH services provided in their community. This is comparable to a study in Amhara region, Ethiopia which found that almost all respondents (94%) had heard ever about reproductive health services (Negash et al., 2016). This knowledge could because the Town Council has only two main health facilities and communities know that most illnesses are managed at health facilities. The 52.2% youth that mentioned lack of knowledge of specific places to access SRH services as a barrier to accessing SRH services shows a need to educate the community on the SRH package for youth and where it is readily available, for example some services are not offered at the HC II which is the only government health facility in the Town Council. For the services that are over utilized by majority of respondents due to mobilization campaigns and outreaches show that some SRH services are promoted in isolation as compared to an integrated manner. However, improving youth SRH calls for integrated programming leaving no one behind and delivering comprehensive packages.

The majority of youth who ever faced any SRH problem had sought SRH services and up to 26% reported drug stock-outs at facilities. The issue of stock-outs of essential SRH drugs and equipment was also reported in Ethiopia and other low and middle income countries through a systematic review of literature (Jonas et al., 2017). The reported shortage of drugs may also be due to the high demand of SRH services which overwhelm a possibly weak health system in terms of reproductive health commodity logistics management. This is justified by the high proportion of adolescents (98.8%) reporting ever utilizing SRH services. This points to a need for training health workers in logistic management for SRH commodities.

About a quarter of the respondents reported cases of judgmental and unfriendly healthcare providers. The proportions of friendly SRH providers can be increased with regular training in youth friendly health services delivery.

Despite reports about the raising cases of GBV and mental health and high rates of alcohol consumption that require emotional support , this study found that the least sought services were; mental health and psychosocial support services (1%), services to prevent alcohol/substance abuse (13.6%) and clinical care for GBV survivors (28%). The district confirmed lack of health personnel to offer the least used SRH services like mental health and fistula. However, the underutilization of GBV services indicate a need to raise community ability to prevent and report GBV causes in a district where GBV prevalence is high.

Most of the study participants preferred seeking SRH services from government health facilities. This may be due to the fact that services at government facilities are free of charge as high costs are among the issues raised from qualitative interviews. The youth's failure to utilize available SRH services were also linked to negative attitude of youth themselves and fear to be stigmatized or discriminated against which call for community health education targeting the negative attitudes that stigmatize youth.

Government needs to find alternatives to offer services that are affordable at a level higher than HC 11 since the Town Council is the core of the District. Outreach services, safe spaces for youth, government HC III, government HCIV or hospital within the Town Council are possible solutions.

5.5 Study Limitations

This being a cross-sectional study, it cannot escape design-inherent limitations. There might have been recall bias in this study since the questions required recall of past sexual and reproductive concerns. Those who might have had serious concerns could have easily recalled compared to those who did not have serious concerns.

Questions requiring behavioral and practice description by respondents might have also attracted the most socially desirable answers which may lead to misclassification as respondents who know the right things to do might have answered questions to fit the norm.

This study was carried out during school days and those in boarding schools could have been missed limiting representativeness of the study.

The study did not undertake a deep analysis of SRH utilization by sex for all determinants. This is recommended for future research undertakings.

CHAPTER SIX

6.0 CONCLUSION AND RECOMMENDATIONS

6.1 Conclusion

This study indicates high utilization of SRH services among youth who have ever had SRH problems. Some of the reasons for youth's failure to utilize the available SRH services were; long distance to service centers; unfriendly and judgmental healthcare providers; drug stock outs at health units; negative attitude by youth towards use of SRH services; fear to be stigmatized or discriminated against and traditional beliefs. Factors found to be significantly associated with SRH utilization include: being a teenager, being out-of-school, agreeing that religion approves youth to seek SRH services; and disagreeing that contraception use encourages promiscuity.

Services supported by projects and offered through outreaches such Hepatitis B vaccination, cervical cancer screening and HIV testing are more utilized by youth, as well as those associated with nutrition supplements in this semi-arid drought prone district.

There is high knowledge regarding SRH services available in the community, though youth are not sure of where to access what SRH services. High perception of SRH problems among youth that have ever faced SRH problem is an opportunity in support of quality health education for SRH. In addition, the community social cultural beliefs and attitudes are less supportive of family planning services utilization. It is further noted that discussing SRH issues is a taboo in the community, however, families find it acceptable to discuss HIV and pregnancy.

The only government health facility is at HC II level, which is not adequate to meet the needs for most youth that need SRH services which are not available at HC II level, and in addition, the Town Council and District lack human resource to offer psychosocial support and clinical services for gender based violence, fistula and alcohol abuse.

Study results show that youth utilization of SRH services can be increased by offering integrated SRH outreach services, training more health workers in youth friendly SRH services delivery, reaching youth gatekeepers with accurate SRH information, fostering family values that favor open discussions on SRH, promoting girl child education and preventing child marriage, providing accessible and affordable quality government SRH services that addresses drug stock outs, offers variety of services and knowledge on where to access what services.

6.2 Recommendations

To increase youth utilization of SRH services and information in Amudat Town Council, key stakeholders need to implement the suggested actions and programming decisions. For example:

The Ministry of Health and District Health Management need to: devise SRH programs that respond to needs in rural underperforming districts; upgrade/establish Government HCIV or Hospital in Amudat to ensure that youth are able to access a wider choice of free quality SRH services; address frequent medicine and SRH commodity stock-outs through improved logistics management and training of more Officers in health logistics management; invest in integrated SRH outreach services to increase youth access and SRH services; train more health workers in youth friendly SRH services; train and deploy health workers that can offer variety of services; and strengthen community health systems that offer youth SRH services through Village Health Teams, Community Health Extension Workers (CHEWS), Teachers and peer Educators as appropriate for role within policy and within their spheres of influence

The District Leadership, involving relevant Technical sector heads and Political Leaders need to either initiate or strengthen efforts to: reach youth gatekeepers with accurate SRH information; foster family values that favor open discussions on SRH; promote girl child

education and preventing child marriage; intensify local social and behavior change communication on SRH to address social cultural barriers to SRH service utilization; and mobilize multiple stakeholders to implement quality improvement in SRH services delivery. District Leaders could also empower and provide social support for youth champions to lead behavior change among fellow youth in SRH utilization.

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APPENDICES

Appendix I: Consent Form

Background: I am Bernadette Nalumansi pursuing a Master's degree of Public Health at Uganda Martyrs University. I am conducting a study to assess the "***Determinants of Sexual and Reproductive Health Service Utilization among Youth (15-24 years) in Amudat Town Council, Amudat District".***

Procedures: Participating in this study requires you to have been in Amudat Town Council for **over six months** and to respond to a questionnaire estimated to take about 20 minutes. The questionnaire will be conducted by a trained research assistant.

Purpose of the Study: Young people face a numerous problems in accessing Sexual and Reproductive Health services. This study therefore seeks to assess the determinants of Sexual and Reproductive Health Service utilization among youth (15-24 years) in Amudat Town Council, Amudat District.

Study Procedures: We cannot study everybody due to time and other resources, we selected some you as representatives a you are one of those randomly selected to respond to the questions in this questionnaire. You are therefore requested to participate in this study by responding to the questions that I will ask you in the next few minutes.

Benefits and Risks: Acceptance to participate in this study has both direct and indirect benefits. The direct benefit will include the Principal Investigator answering your questions about prevention of injury at construction sites. In case you need further information or particular form of care, you will be referred for appropriate services. Information generated from this study will help relevant authorities in formulating strategies to promote SRH. No risks are anticipated in your participation.

Confidentiality: The information you provide will be treated with privacy and confidentiality, your name will not be recorded anywhere and your specific identifier will not appear in the report that will be generated. Questionnaires will be anonymous and data will be securely kept.

Voluntary participation: Taking part in this study is entirely voluntary. If you decide not to take part, no accusation will be made against you at all. If you agree to take part in this study, you will be contributing to the national effort of prevention and control of injuries at building construction sites. It is therefore important that you participate although you are free to decline. If you agree to participate, you will be asked to sign this consent form.

Declaration and signature

I hereby **ACCEPT** to take part in this study on "***Determinants of Sexual and Reproductive Health Service Utilization among Youth (15-24 years) in Amudat Town Council, Amudat District"***.

Thumbprint/Signature of respondent ……..

Date…….

Signature of interviewer……. Date…….

Contact information:

If you have any questions regarding this study, call the Principal Investigator; Ms. Bernadette Nalumansi on Tel: 0756137137. If you have any issues pertaining to your rights and participation in the study please contact my Supervisor, Dr Miisa Nanyingi at the Faculty of Health Sciences, Uganda Martyrs University.

Appendix II: Questionnaire

Determinants of Sexual and Reproductive Health Service Utilization among Youth (15-24 years) in Amudat Town Council, Amudat District

A. General information

Name of Interviewer: ……..
Respondent ID: ……..
Date of interview: ……../……../ 2018
Parish/Ward: ……

B. Screening

B001	Age Category	Less than 15 yrs	1	Terminate interview
		15-19 yrs	2	
		20-24 yrs	3	
		Above 24 yrs	4	Terminate interview
B002	Schooling status (Are you currently in school?)	In-school	1	
		Out of school	2	

C: Socio-demographic characteristics of the respondent

No	Questions	Options	Response Code
C001	Sex of the respondent	1= Male 2= Female	
C002	How old are you in complete years?	…….. years	
C003	What is your religion?	1= Catholic 2= Protestant 3= Muslim 4= Pentecostal/Born-again 5=Other *(specify)*……	
C004	What is your current marital status?	1= Single 2= Married 3= Separated or divorced 4= Widowed	
C005	How old were you at first marriage-yr		
C006	What is your tribe?	1=Matheniko 2=Pian 3=Bokora 4=Tepeth 5=Pokot 6=Jie	

		7=Dodoth 8=Labwor 9=Ik 10=Napore 11=Nyangia 97=Other (specify) ……	
C007	What is the highest level of education attained?	1= None 2= P1-P4 3= P5-P7 4= Secondary (O'level) 5= Secondary (A'level) 6= Tertiary-University 7= Tertiary- non university	
C008	What is the main activity you do for your livelihood?	1=Crop cultivation 2=Trader/business 3=Artisan/skilled technician 4=Formal job/Salaried 5=Brewing/selling local brew 6=Sell charcoal/firewood 7=Casual worker 8=Student 9=Animal rearing 97=Other (Specify)……	
D: SRH service seeking behaviors			
D001	Have you ever had any sexual or reproductive health problems or concerns?	1=Yes 2=No	
D002	If yes, what kind of problems or concerns did you have?	1= Family Planning 2=Fertility 3=Fistula 4=Body changes 5=Personal care and hygiene 6=Nutrition 7=Alcohol and substance abuse 8=STI/HIV treatment and prevention 9=Life skills 10=Clinical Care for GBV 11=ANC/Delivery/PNC 13=Referral and follow up 14= mental health and psychosocial issues 15=Out of school and back to school after child birth 16=Information on SRHR 17=Hepatitis vaccination, Cervical Cancer Vaccination 97=Other (Specify).....	

D003	Where did you go for medical care or advice for the concerns if needed any help or advice regarding sexual and reproductive health matters? (Tick all that apply)	1= Clinic/hospital 2= Qualified doctor 3=Spouse 4=Parents 5=Traditional healer 6=Friends 7=Teachers 97=Other (specify).....	
D004	Which sexual and reproductive health services have you ever sought from a health facility? Circle all correct responses	1= Family Planning 2=Fertility 3=Fistula 4=Body changes 5=Personal care and hygiene 6=Nutrition 7=Alcohol and substance abuse 8=STI/HIV treatment and prevention 9=Life skills 10=Clinical Care for GBV 11=ANC/Delivery/PNC 13=Referral and follow up 14= mental health and psychosocial issues 15=Out of school and back to school after child birth 16=Information on SRHR 17=Hepatitis vaccination, Cervical Cancer Vaccination 97=Other (Specify).....	
E: Socio-cultural determinants of SRH utilization			
For each statement Questions ***E001- E004***, Answer: 1=Strongly Agree, 2=Agree, 3=Disagree, or 4=Strongly disagree for each the statements,			
E001	**Religion:** What do you think about the information your religion gives on the above issues?		
	My religion approves young seeking SRH behavior		
	Contraceptive use is against God's teaching		
	Contraception kills		
	Contraception encourages promiscuity		
	Youth can access contraception		
	Youth can access safe abortion		
	Single Youth can have safe sex		
	Single Youth must practice abstinence.		
	Youth should go for HCT		
E002	**Peer influence:** Please rate the following in relation to SRH information.		
	Youth learn about reproductive health from peers.		
	Peers are first to give information on sex		
	I learned about contraceptive from friends		
	I would first seek help from friends if realize I'm pregnant		

	I Would go for a HIV test if friends decided the same		
E003	**Family Values:** My family readily gives information on the following reproductive health services		
	Contraception		
	Safe/unsafe sex		
	Abortion		
	HIV/AIDS		
	STIs		
	Pregnancy		
E004	**Customs and Taboos:** What do you think about the customs and taboos gives in relation to SRH information?		
	Community norms and taboos determine individual reproductive behavior		
	Cultural taboos are obstacles to informed SRH information.		
	Premarital sex is forbidden.		
	Family planning is not part of our society norms.		
	Discussions on SRH information is a taboo.		
F: Health System related determinants of SRH service utilization			
F001	Are there SRH services that you know of which are available in this area?	1=Yes 2=No (if No, skip to E003)	
F002	If yes, what services are these?	1= Family Planning 2=Fertility 3=Fistula 4=Body changes 5=Personal care and hygiene 6=Nutrition 7=Alcohol and substance abuse 8=STI/HIV treatment and prevention 9=Life skills 10=Clinical Care for GBV 11=ANC/Delivery/PNC 13=Referral and follow up 14= mental health and psychosocial issues 15=Out of school and back to school after child birth 16=Information on SRHR 17=Hepatitis vaccination, Cervical Cancer Vaccination 97=Other (Specify).....	
F003	Do you or other people in this area who need SRH services have access to them?	1=Yes 2=No (if No, skip to E005)	
F004	What are the places that people in this area can access SRH services?	1=Govt. Health facility 2=NGO. Health facility 3=Private for profit health facility 4=Pharmacy	

		5=Drug Shop 97=Other (Specify)…….	
F005	What are the reasons that prevent you or other people from accessing SRH services?	1=Long distance 2=Lack of transport 3=Poverty 4=Unfriendly health workers 5=Non-availability of services 6=Lack of knowledge on where they exist 6=Lack of drugs 97=Other (Specify)----------	
F006	Are there factors that you know of which prevent people in this area from utilizing SRH services?	1=Yes 2=No 3=Don't know	
F007	What factors are these?	1=Preference for traditional services 2=Lack of trust in modern services 3=Fear to be stigmatized & discriminated 4=Traditional beliefs 5=Negative attitude 97=Others specify ----------	

End of the questionnaire, Thank you very much for your time

Appendix III: Focus Group Discussion Guide for Parents/Guardians of Youth

Introduction

Good morning/afternoon. My name is _____, and my colleague is _____.

We are working on academic research focusing on the health of youth, specifically pertaining to sexual and reproductive health service utilization. I would like to talk to you about your knowledge of sexual and reproductive health services, where the services can be obtained and determinants of the utilization of the services. The results of this study will be used to improve access to and the quality of programming for sexual and reproductive health service delivery in Amudat town council and the district at large. You have been selected to participate in this study not because anything is known about you, but purely by chance to represent other parents/guardians of youth that live in this community. What you tell us will be strictly confidential and your names will not be written in our Report.

Please capture the following information:

1. Description of participants (include age)
2. Location:
3. Sex and Age of group participants (separate male/female)

General views:

4. Main problems in the community. Probe particularly on health problems if not mentioned
5. Coping measures with the problems mentioned—internal and external measures

Sexual and Reproductive Health

6. What are the most important health issues for female and male youth aged 15-24? ***Probe for sexual and reproductive health problems and service utilization.***
7. What are the available health services you can access in your community to meet the health needs for youth people with regard to Sexual and Reproductive Health.
8. Who are the key providers of the services you have ever talked to about with respect to Sexual and Reproductive Health (Family planning, Maternal Health, ANC, prevention of management of STIs?)
9. What are the good things in this community that positively promote the health of the youth people? ***Probe for facilitators of sexual and reproductive health service utilization.***
10. What are the major barriers that youth face in accessing the services on Sexual and Reproductive Health (Family planning, Maternal Health, ANC, prevention of management of STIs?)

    Probe for religious, cultural norms.

Thank you very much for taking time to contribute your views and experiences

Appendix IV: Key Informant Interview Guide for Health Service Providers

(In-Charges/Health Service Providers at SRH Service Points)

Introduction

Good morning/afternoon. My name is _____

We are working on academic research focusing on the health of youth, specifically pertaining to sexual and reproductive health service utilization. I would like to talk to you about your knowledge of sexual and reproductive health services, where the services can be obtained and determinants of the utilization of the services. The results of this study will be used to improve access to and the quality of programming for sexual and reproductive health service delivery in Amudat town council and the district at large. You have been selected to participate in this study not because anything is known about you, but purely by chance to represent other parents/guardians of youth that live in this community. What you tell us will be strictly confidential and your names will not be written in our Report.

Record type/level of facility, type of ownership, Name and position of informant

1. What are your hours of operation?
2. Who are your main target groups for services?
3. Who are your main clients?
4. What is your geographical coverage/catchment area?
5. How many health workers work here?
    a. Comment on the adequacy of the human resources at this facility
    b. If inadequate, what are the reasons?

6. Which SRH services are available at this health facility?

1. Probe for:

    a) IEC

    b) HIV prevention services e.g. condom distribution, safe male circumcision

    c) Voluntary Counseling & Testing (VCT) for HIV

    d) Management of all STDs including Syphilis

    e) Cotrimoxazole prophylaxis and other basic medical care (OPD services)

    f) HIV Management

    g) Post Test Club/Philly Lutaaya Initiative services

    h) SRH/FP

    i) STI testing

    j) PMTCT

    k) Psycho-social support and protection

    l) ART

7. (If STI services are provided) How often do you receive people with STIs? About how many per week? Per month?
8. Do you have drugs for management of STIs in stock today?
9. (If HIV testing is provided) Do you have HIV testing kits in stock?
10. Comment on the availability of other supplies/materials/equipment needed to provide SRH services including HIV/AIDS care
11. What infrastructure is available to provide SRH/HIV/AIDS services?

    a. Probe for laboratories

    b. Counseling rooms, etc

12. What are the gaps/limitations in the SRH services that you provide?
13. What SRH services are lacking in the town?

14. In your view, are the available SRH services in the town council accessible to the local population?
15. Give reasons for your answer
16. To what extent do youth utilize SRH services?
17. What barriers/constraints make it difficult for local people to access HIV/AIDS services at this facility?
18. What are the main challenges you face as health service providers in providing SRH services to people in this community?
19. What support do you receive from the local government (sub-county/urban council?)
20. What links exist between the service providers and the community (including referral, outreach?)
21. How can referral systems be improved to strengthen the continuum of care?
22. What can local governments do to improve SRH services at the community level?

Appendix V: Study work plan and budget

No	Activity	Expected Result	Timeline 2018				Budget
			Jan to Mar	Apr to Jun	Jul to Sep	Oct to Dec	
1	Concept development and review	Approved concept					Printing Concept @ UGX 2,000
2	Proposal development and review	Approved proposal Data collection clearance					Printing Proposal @ UGX 3,600
3	Data collection	Clean analyzed study data					Printing 2,600pages @100 = 260,000 6 RA for 5 days @ 200,000 per RA =1,200,000
4	Report writing and Submission	Dissertation submitted					Print and Bind Dissertation @ 20,000
5	Proposal Defense						Travel from Karamoja @UGX 100,000