

**FACTORS ASSOCIATED WITH UTILISATION OF SEXUAL
AND REPRODUCTIVE HEALTH SERVICES AMONG
ADOLESCENTS IN LUWERO TOWN COUNCIL
LUWERO DISTRICT UGANDA**

NANDAGALA ROSE KAJUBI

MASTER OF PUBLIC HEALTH

SEPTEMBER, 2018

**FACTORS ASSOCIATED WITH UTILISATION OF SEXUAL
AND REPRODUCTIVE HEALTH SERVICES AMONG
ADOLESCENTS IN LUWERO TOWN COUNCIL
LUWERO DISTRICT UGANDA**

**NANDAGALA ROSE KAJUBI
(15/MPH/BU/G/1006)**

A Thesis Submitted to School of Graduate Studies in Partial Fulfillment of the
Requirements of the Award of the Degree of Master of public health, Bugema University

SEPTEMBER, 2018

ACCEPTANCE SHEET

This thesis entitled, “**FACTORS ASSOCIATED WITH UTILISATION OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG ADOLESCENTS IN LUWERO TOWN COUNCIL LUWERO DISTRICT UGANDA**”, prepared and submitted by **NANDAGALA ROSE KAJUBI** in partial fulfillment of the requirements for the degree of **MASTER OF PUBLIC HEALTH**, is hereby accepted.

Micheal Wolwa, MD, MPH
Member, Advisory Committee

Date Signed

Christopher Ddamulira, DCM, Bsc,
Member, Advisory Committee

Date Signed

Frank Pio Kiyingi, Ph.D.
Chairperson, Advisory Committee

Date Signed

Assoc. Prof. Nazarius. M. Tumwesigye
Chairperson, External Examining Committee

Date Signed

Stephen S Kizza, Ph.D.
Member, Internal Examining Committee

Date Signed

Accepted as partial fulfillment of the requirements for the degree of **MASTER OF PUBLIC HEALTH**, Bugema University.

Sylvia T. Callender-Carter, Dr PH
Chairperson, Department of Public Health

Date Signed

Rosette Kabuye, PhD
Dean, School of Graduate Studies

Date Signed

DECLARATION

I Nandagala Rose Kajubi, declare that this dissertation entitled **“FACTORS ASSOCIATED WITH UTILISATION OF SEXUAL AND REPRODUCTIVE HEALTHSERVICES AMONG ADOLESCENTS IN LUWERO TOWN COUNCIL LUWERO DISTRICT UGANDA”** is my personal work and to the best of my knowledge it has never been submitted to any University or academic institution for an Academic award.

Signature _____

Rose Kajubi Nandagala

Date _____

DEDICATION

This academic work is dedicated to the Seventh-day Adventist Church through the Uganda Union for the financial assistance rendered to me throughout the period of my studies. I also dedicate this work to my dear husband and children especially baby Jonathan for bearing with the loneliness all through my period of study.

Finally, this work is dedicated to my students in Mazzi vocational secondary school and all students in Luwero town council to be an inspiration for good health as they go through their adolescence stage of life.

BIOGRAPHICAL SKETCH

The author was born on the 8th day of March 1982 to the late Mr. Kajubi Eriabu Charles and Mrs. Janet Kajubi in Mukono. She went to Namuyenje Primary School from 1988-1994 for PLE, Bishop's Senior School for her Ordinary and Advanced level in 1995-2000. She joined National Teachers' College –Nagongera for a diploma in Education Secondary in 2001-2003 and later Kyambogo University for Bachelor of Education (science) in 2012 in the subjects of biology and chemistry. She enrolled in Bugema University in 2015 to pursue a Master of Public health. Currently the author is teacher of biology and chemistry and senior woman in Mazzi vocational secondary school. The researcher is currently married with four children to Mr. Mutabaazi Matthew the head teacher of Katikamu SDA secondary school.

ACKNOWLEDGEMENTS

I am indebted to the Almighty God for the grace, love and care he has bestowed upon me to this far. My heartfelt thanks go to my supervisors Dr. Frank Pio Kiyingi, Mr. Ddamulira Christopher, Dr. Wolwa Michael and DR. Kizza Stephen for their time, commitment and professional guidance. With great pleasure I thank Pastor Mafaabi John, his generosity has compelled me this far.

TABLE OF CONTENTS

PAGE

ACCEPTANCE SHEET.....	i
DECLARATION.....	ii
DEDICATION.....	iii
BIOGRAPHICAL SKETCH.....	iv
ACKNOWLEDGEMENTS.....	v
TABLE OF CONTENTS.....	vi
LIST OF TABLES.....	viii
LIST OF FIGURES.....	ix
LIST OF APPENDICES.....	x
LIST OF ACRONYMS AND ABBREVIATIONS.....	xi
CHAPTER ONE.....	1
INTRODUCTION.....	1
Background of the Study.....	1
Statement of the Problem.....	3
General Objective of the Study.....	4
Specific Objectives.....	4
Hypothesis.....	5
Significance of the Study.....	5
Scope of the Study.....	6
Limitations of the Study.....	6
Theoretical Framework.....	6
Conceptual Framework.....	8
Operational Definition of Terms.....	9
CHAPTER TWO.....	13
LITERATURE REVIEW.....	13
Individual Factors.....	13
Health System and Community Factors.....	15
Utilization of Sexual and Reproductive Health Services.....	21
Summary of Identified Research Gaps.....	22
CHAPTER THREE.....	24
METHODOLOGY.....	24
Research Design.....	24
Locale of the Study.....	24
	PAGE
Population of the Study.....	24
Sample Size.....	25

Sampling Procedure.....	26
Research Instruments.....	27
Validity and Reliability of the Research Instruments.....	28
Data Collection Procedure.....	29
Data Analysis.....	30
CHAPTER FOUR.....	32
RESULTS AND DISCUSSION.....	32
Individual Factors and Adolescent Utilization of SRH Services.....	32
Health System and Community Factors and Adolescent Utilization of SRH Services.....	34
Level of Adolescent Utilization of SRH Services.....	39
Factors Associated with Adolescent Utilization SRH Services.....	40
Hypothesis Test Analysis.....	47
CHAPTER FIVE.....	48
SUMMARY, CONCLUSION AND RECOMMENDATIONS.....	48
Summary.....	48
Conclusion.....	49
Recommendations.....	50
REFERENCES.....	52
APPENDICES.....	56

LIST OF TABLES

TABLE	PAGE
Table 1: Target Population and Sample Size.....	26
Table 2: Individual Factors that Influence Utilization of SRH Services by Adolescents in Luwero Town Council.....	32
Table 3: Health System and Community Factors that Influence Utilization of SRH Services by Adolescents in the Study.....	34
Table 4: Bivariate analysis Of Possible Individual Factors that Influence Utilization of SRH Services by Adolescents in the Study.....	41
Table 5: Bivariate analysis of Possible Health System and Community Factors that Influence Utilization of SRH Services by Adolescents in the Study.....	42
Table 6: Multivariate Analysis of the Factors associated with SRH Utilization by Adolescents in Luwero Town Council.....	43

LIST OF FIGURES

FIGURE	PAGE
Figure 1: Conceptual Framework.....	8
Figure 2: Level of Adolescent Utilization of SRH services in the Past Six Months in the Study.....	39

LIST OF APPENDICES

APPENDIX	PAGE
Appendix I: Consent Form for Respondents.....	56
Appendix II: Questionnaire Guide for Adolescents.....	58
Appendix III: Key informative Guide.....	62
Appendix IV: Introductory Letter to Institutional Review Board (IRB).....	63
Appendix V: Introductory Letter for Data Collection.....	64
Appendix VI: IRB/ REC Ethical Approval Letter.....	65
Appendix VII: Acceptance Letter for Data Collection.....	66
Appendix VIII: Tables for Descriptive Analysis.....	67
Appendix IX: Bivariate Logistic Regression Analysis Tables.....	70
Appendix X: Multivariate Logistic Regression Analysis Table.....	72

LIST OF ACRONYMS AND ABBREVIATIONS

ASRH	Adolescent Sexual and Reproductive Health
SRH	Sexual and Reproductive health
AFRHS	Adolescent Friendly Reproductive Health services
RHU	Reproductive Health Uganda
STIs	Sexually Transmitted Infections
STDs	Sexually Transmitted diseases
DHIS	District Health Information Systems
AIDS	Acquired Immune Deficiency Syndrome
ANC	Antenatal Care
NTIHC	Naguru Teenage Information and Health Care
HIV	Human Immune- deficiency Virus
MOH	Ministry of Health
NGO	Non Governmental organization
UBOS	Uganda Bureau of statistics
UDHS	Uganda Demographic Health Survey
UN	United Nations
UNFPA	United Nations population Fund
VCT	Voluntary Counseling and Testing
WHO	World Health Organization
HBM	Health Belief Model
SDA	Seventh - day Adventist
PAC	Post Abortion Care

SHE	Sexual Health Education
HPV	Human Papilloma Virus
ICPD	International Conference on Population Development
FGM	Female Genital Mutilation
UNICEF	United Nations International Children's Emergency Fund
RHS	Reproductive Health Services
UBOS	Uganda Bureau of Statistics
DHO	District Health Officer
CVI	Content Validity Index
SPSS	Statistical Package for Social Sciences
LDLGSA	Luwero District Local Government Statistical Abstract
COR	Crude Odds Ratio
AOR	Adjusted Odds Ratio

ABSTRACT

NANDAGALA ROSE KAJUBI, School of Graduate Studies, Bugema University, August, 2018. Thesis title **FACTORS ASSOCIATED WITH UTILISATION OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG ADOLESCENTS IN LUWERO TOWN COUNCIL LUWERO DISTRICT UGANDA**

Supervisor: Frank Pio Kiyingi, Ph.D.

A big proportion of adolescents in Luwero town council are not knowledgeable, and not supported by family in utilizing reproductive health services yet are sexually active so they are yet to face the results of not utilizing SRH services. This study assessed sexual and reproductive health service utilization and associated factors among adolescents aged 15-19 in Luwero town council Luwero district Uganda. A community based cross-sectional study was conducted in 2018. A sample size of 196 respondents was interviewed using structured questionnaire. The study found out that majority of respondents had low levels of knowledge about SRH (66.3%), while slightly above average had already started sexual activity/ engagement (56.1%). Majority of adolescents (64.8%) reported existence of negative health worker's attitude, 64.5% of the respondents reported low family support and high levels of misconceptions (77.0%). Bivariate logistic linear regression indicated that knowledge levels, sexual activity, health workers' attitude and family support were significant factors associated with adolescent utilization of SRH services with $p < 0.05$. The level of adolescent utilization of SRH services in the past six months was 29.1% which is still low and to mitigate this situation there is need to increase awareness about SRH services among adolescents, empower parents to freely talk to their adolescents about sexual issues and encouraging SRH service providers to have a positive attitude towards adolescents.

CHAPTER ONE

INTRODUCTION

Background of the Study

Globally, the Adolescent Sexual and Reproductive Health (ASRH) issues have become a big concern (Morris & Rushwan, 2015). According to the World Health Organization (WHO), an estimated 1.2 million adolescents died in 2015 but also over 3000 adolescents die daily mostly due to preventable or and treatable causes like HIV/AIDS and other Sexual Reproductive Health (SRH) issues (WHO, 2017). It is estimated that 4.5million adolescents 15-19 years worldwide undertake abortion every year, and 40% of these abortions are under unsafe /unhealthy conditions and this is attributed to failure to utilize SRH services implying that Low utilization of Adolescent sexual reproductive health (ASRH) services is a global problem (The international Federation of Gynecology and Obstetrics, 2015) and WHO recommended that one area of chief concern during the period of adolescence must be sexual and reproductive health (WHO, 2015) so as to help youths grow up healthy.

In developing countries particularly in Sub-Saharan Africa (SSA), SRH utilization is as low as 40% (WHO, 2016). This low utilization of SRH services has resulted into several challenges among adolescents for example 21 million girls aged 15-19 years become pregnant every year of which 49% are unintended (WHO, 2017). Also in 2008 16m births were registered amongst adolescents 15-19 years and 95% of these occurred in low and middle income countries (WHO 2008). In the SSA, 76% of girls below 19 years who have ever been pregnant were found to have been infected with HIV/

AIDS (IFGO, 2015). The joint United Nation's Programme on HIV/AIDS, 2004 report indicates that negative outcomes of early sex like early pregnancy, sexually transmitted infections (STIs) including (HIV/AIDS, threaten the health of adolescents more than any other age group thus high need for contraception and capacity building. The United Nations Fund for Population Activities (UNFPA) noted that 25% of the adolescents between 15-19 years undergo unsafe abortions every year in SSR (UNFPA, 2013). The WHO recommends that adolescent SRH issues should be addressed through the promotion of responsible and healthy reproductive and sexual behavior, including voluntary abstinence and provision of appropriate services and counseling specifically suitable for that age group (WHO, 2013) hence Adolescent Friendly Reproductive Health services (AFRHs).

In East Africa, SRH information and services to the adolescents is still limited. In Uganda, according to Naguru Teenage Information and Health Centre (NTIHC) very few adolescents in Uganda (22.5%) are utilizing the SRH services (NTIHC, 2016). This low uptake is attributed to personal, social, cultural, as well as health system barriers like long distances to health centers, long time spent at health units and service points, lack of privacy, lack of awareness, limited counseling, negative attitudes of adolescents or health workers, and training gaps (Mugerwa 2012) and other areas like Luwero may have similar characteristics.

Luwero Town Council is one of the three town councils that make Luwero district. The population of adolescents (15-19) is estimated at 55044 (UBOS, 2014). Data from Luwero Health Centre IV which is the largest health unit in the town council showed that only 1219 adolescents (15-19) visited the youth corner in the year 2016 and

2017, 358 screened for STIs, 847 attended ANC and 173 are in care for HIV therefore approximately 2697 adolescents utilized services out of 18348 expected population in Luwero town council therefore utilization of the services is approximately 15%.(DHIS, 2017). Although a lot of effort to avail services has been done like introduction of adolescent friendly reproductive health services (AFRHS) at Luwero Health Centre IV, utilization of the services is still low. This is a low percentage as compared to the expected 60% uptake set by the Ugandan government. This low uptake results into unplanned/early pregnancies, unsafe abortions, and increase in the prevalence of STIs including HIV and dependence yet the factors that contribute to this low utilization are not yet known. The researcher therefore intended to find out what factors are associated with utilization of SRH services among adolescents in Luwero Town Council so as to search for possible solutions to challenges.

Statement of the Problem

Luwero Town Council is one of the three town councils that make Luwero District. The population of adolescents in the district (15-19) is estimated at 55,044 (UBOS, 2014) and so that of adolescents in Luwero Town Council estimated to be 18,348. Although a lot of effort has been done like introduction of adolescent friendly reproductive health services (AFRHS) at Luwero Health Centre IV which are free to adolescents, utilization of ASRH services is approximately 15 % (DHIS, 2017) which is a low percentage as compared to the expected 60% uptake set by the Ugandan government (MOH 2015). This low uptake results into unplanned, early and complicated pregnancies, unsafe abortions, and increase in the prevalence of STIs including HIV and dependence

thus researcher intends to find out which other factors are associated to utilization of SRH services.

Research Questions

The study was guided by the following research questions:

1. What individual factors are associated with utilization of SRH services by adolescents in Luwero town council?
2. What are the health system and community factors associated with the utilization of SRH services by adolescents?
3. What proportion of adolescents utilized SRH services in the past six months within Luwero town council?
4. What is the association between individual factors, health system factors and community factors with utilization of SRH services by adolescents in Luwero town council?

General Objective of the Study

The general objective of this study is to assess the factors that are associated with utilization of SRH services among adolescents in Luwero town council Luwero district.

Specific Objectives

1. To identify individual factors associated with utilization of SRH services by adolescents in Luwero town council.
2. To find out the health system and community factors associated with utilization of SRH services by adolescents.

3. To find out the percentage of adolescents utilizing SRH services in the past six months within Luwero town council.
4. To establish the association between individual factors, health system factors and community factors with utilization of SRH services by adolescents in Luwero town council.

Hypothesis

Ho.1 There is no significant association between individual factors with utilization of Sexual and Reproductive Health services (SRHs) by adolescents in Luwero town council.

Ho.2 There is no significant association between health system factors and community factors with utilization of sexual and reproductive health services by adolescents in Luwero town council.

Significance of the Study

Information from this study should be of benefit to the researcher as there was deeper knowledge into the needs of adolescents especially in the sexual and reproductive areas of life. It will also benefit Luwero District Health Department, Luwero District Education Department, Ministry of Health and Ministry of Education as far as planning for adolescents' reproductive health is done.

Community leaders like Religious leaders, school leaders, and local council leaders benefited as they gained more understanding of the importance of SRH of adolescents and make useful programs to help adolescents with sexual needs.

It will be a source of knowledge to parents and caregivers of adolescents in understanding the reasons as to why there are SRH service gaps and how services can be fully utilized to help and support the young people through the adolescence period safely.

Scope of the Study

This study was based on the utilization of SRH services by adolescents in Luwero town council during the study period. The study covered SRH services that are relevant to the adolescents including sexual health education, access to condom use, diagnosis and treatment of STIs including HIV and Post abortion care.

Luweero district lies north of Kampala, it is bordered by [Nakasongola district](#) to the north, [Kayunga district](#) to the east, it is flanked by [Mukono district](#) to the southeast, [Wakiso district](#) to the south, and [Nakaseke district](#) to the west. Most of the adolescents in Luwero district are in school and this is where they are most of their time however they do clubbing at night especially weekends, shopping from a big market every Monday and they go to church or mosques depending on their beliefs, in these places adolescents of opposite sex bond and are likely to make sexual relationships.

This study was carried out in a period between June 2018 to Jul 2018 the information was obtained from respondents depending on their experience in the last 6 months. It was analyzed and a report produced by August.

Limitations of the Study

Methodology: Data was collected collected from adolescents in schools due to the limited time however there are adolescents not in schools for which a community based study would be used to include them in the study.

Theoretical Framework

The study was guided by Health Belief Model of Rosen stock, Becker, Kirsch, et al (1950) which was later revised by (Taylor et al 2007) to better relate this problem to the existing body of knowledge. The Health Belief Model (HBM) is a psychological model that attempts to explain and predict health behaviors. This is done by focusing on the attitudes and beliefs of individuals.

The model is based on the fact that for people to adopt recommended health behaviors, their perceived threat of disease and its severity must outweigh their perceived barriers to action. This model is adopted in this study because adolescents can be give information about nonuse of SRH services which can cause contraction of STIs including HIV/AIDS which is still a global threat and early pregnancies which can cause permanent complications to their lives or death through unsafe abortions or during delivery of babies also coupled with stressful early dropping out of school. These threats can cause them to change behavior. The basic constructs which guided this study are the following:

Perceived Susceptibility which is one's belief of the chances of getting a condition. Perceived Severity which is one's belief of how serious a condition is and its consequences are. Perceived benefit which is one's belief in the efficacy of the advised action to reduce risk or seriousness of impact. Perceived Barriers stand for one's belief in the tangible and psychological costs of the advised behavior, Cues to action are the strategies to activate "readiness" and the Self-Efficacy which is confidence in one's ability to take action.

The model was applicable to this study because it was predicted that when adolescents were given effective and sufficient sexual health education, they would

become aware of the seriousness of the dangers of unsafe sex like contracting STIs including the incurable HIV and the human papilloma virus coupled with loss of education due to pregnancy and will either decide to take action which reduces the risk for example to abstain or to have safe sex so as to go through their adolescence safely.

Conceptual Framework

In this study the independent variables were: Individual factors which included, Sex, knowledge about SRH services, and Sexual activity.. Health system factors which included: Health workers’ attitude towards adolescents, Availability of Adolescent friendly services and waiting time, Community factors included: Family support, School support, Myths & misconceptions about Sexual health and SRH services.

Independent Variables

Dependent Variables

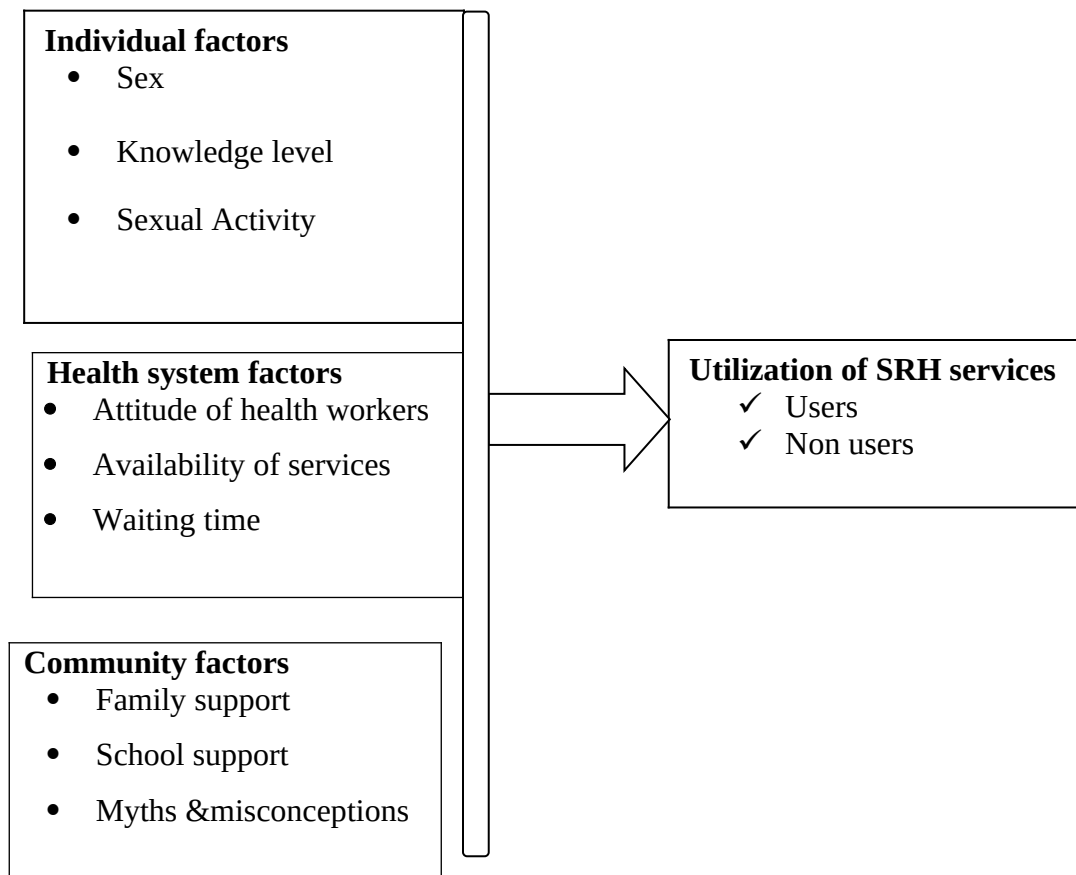


Figure 1: Conceptual Framework

Operational Definition of Terms

Individual Factors

In this study individual factors were those characteristics and potential held by the adolescent, they were limited to sex, knowledge about SRH services and sexual activity.

Sex: This refers to whether the respondent was male or female and it was measured on a scale of Male=1, Female=2

Knowledge level: This refers to how much the respondent was equipped with information about ASRH. It was determined by ability of respondent to tell whether he/she has heard about ASRH services, stating if he/ she knew where ASRH services are delivered, and their benefit to the adolescent. It was measured by asking respondents to answer questions which require yes or no. Have you ever heard of ASRH services? 1=Yes, 2=No; Do you know where ASRH services are delivered? 1=Yes, 2=No; From the responses given knowledge level was determined as high if all answers are positive, and low levels if one or none of the answers is positive.

Sexual activity: Sexual activity refers to if the adolescent is actively involved in sexual encounters. He/she was required to also give the age at which he/she started active sexual encounters and was measured by the adolescent responding Yes or No to the question: have you ever had a sexual encounter? 1= Yes 2= No; what was your age? Final measurement was based on adolescent being active sexually or not active.

Health System Factors: These are those factors that rotate around the health facility and its workers. These were limited to attitude of health workers towards

adolescents, availability of services and commodities at the health facility, and waiting time at the facility.

Health worker's attitude towards adolescents: This meant whether the health workers were friendly to the adolescent by showing care and attention. The adolescent was given the statement "Health workers are friendly showing care and attention when you visit the health unit? It was measured from the adolescents' point of view on a 4-likert scale of 1=strongly agree (very good) 2=agree (good) 3=disagree (poor) 4=strongly disagree (very poor) and this was further interpreted as positive attitude if very good or good and negative attitude if poor or very poor in the analysis of data.

Availability of adolescent friendly services/ commodities: This meant that services like: Sexual health education; Prevention of pregnancy; diagnosis and treatment of STIs voluntary counseling testing and treatment of HIV and post abortion care were readily available in centers and health workers were ready to offer them to the adolescents. It was measured by asking respondents if the availability of services at the health facility/youth centre is satisfying. This was answered on a 4- likert scale of 1=very satisfying (good availability) 2= satisfying (good availability) 3= Unsatisfying (poor availability) 4= unsatisfying (poor availability), this was further measured as good availability if very satisfying or satisfying and poor if unsatisfying or very unsatisfying.

Waiting time at the health facility: This referred to hours spent by the adolescent before he /she accessed the services at the health facility. It was measured on a 4-likert scale of 1=very short time , 2=short time , 3= long time, 4=very long time and however this is further categorized as short time for both short and very short and then longtime for both long and very long time.

Community Factors: Community factors meant external forces from the family, school, and myths which may have a significant influence the adolescents' decision to utilize SRH services or not.

Family support: This meant that parents or guardians or any family member provides help to the adolescent in utilizing SRH services in terms of giving her financial assistance like transport costs to health center, having parental discussions about sexual health, ability to disclose status, and parent advising adolescent to go to health facility for sexual health care. This was scaled as: Got financial support, 1=Yes 2=No, discussed sexual health issues with parents or guardians 1=Yes 2=No., could disclose to parents/guardians his /her HIV, STI, Pregnancy status, 1=Yes, 2=No. parent ever advised adolescent to go to health center for sexual health care 1=Yes 2= No.

Parental support was then generalized as high family support if 3of 4 responses are positive and low if only one or none of the responses is positive.

School support: This meant that the school has a program of giving students sexual health education. Adolescents were asked if they received SHE/ASRH messages at school scaled as 1=Yes, 2=No, if they had access to materials for sexual health messages, and if the health educator advised students to go to the health facility for sexual health care, scaled as 1 =Yes, 2 = No. School support was rated high if all three responses were positive and low if only one or none is positive.

Myths about SRH services: Myths about SRH services meant widely held but false beliefs about sexual issues and SRH services. These were determined by respondents answering true or false to the assertions made in the questionnaire. Myths

were measured as high misconceptions if all responses or 4/5 were wrong and low misconceptions if only one was wrong.

Utilization of SRH Services: In this study, utilization of SRH services referred to whether the adolescent had recently used any of the following SRH services including: Sexual health education; condom use; diagnosis and treatment of STIs; voluntary counseling and testing of HIV and post abortion care six months prior to the time of research. Respondents were asked: Have you gone to a health facility for any of the following services? Sexual health education; Condom use; diagnosis and treatment of STIs; voluntary counseling and testing of HIV and post abortion care 1=Yes 2=No. adolescents were also required to tick which service they have used and when they last used it.

Adolescents were rated as users if they had used any of the services in the last six months and as non-users if they had ever used the services one year back or they have never used the services at all. For approximations 7-8 months was taken to be users while 9-11 was taken as non-users.

CHAPTER TWO

LITERATURE REVIEW

This chapter presents the review of literature related to the study: This includes books, journals, websites, and other sources found relevant. The research is done in an area of sexual and reproductive health particularly utilization of these services by adolescents.

Individual Factors

Sex and Utilization of SRH Services

In a survey done in 1999 amongst students as cited by Polo (2011) indicated that approximately 40% of ninth graders across the United States reported having had sexual intercourse with males more sexually active than females of same age. Kalo (2012) in Vanuatu found out that females utilized SRH services twice as more than males which is similar to Ngoni (2008) who found out that in Botswana female adolescents used SRH services more than male counterparts and Nicaragua who found out that male adolescents utilized SRH services at a less extent compared to females. (Polo, Chandramouli Decat et al, 2015).

However, on the other hand in the study done in Zimbabwe it was found out that male adolescents utilized SRH services more frequently than female adolescents (Mapfurira 2013). This shows that sex is a factor influencing utilization of Adolescent sexual and reproductive health services, however, it is not known whether female adolescents are more sexually active and how much they utilize the ASRH in Luwero town council.

Knowledge Level and Utilization of SRH Services

In a study carried out in Ethiopia, 33% of the adolescents were not knowledgeable about SRH services (Alemu et al, 2012) this indicates low knowledge levels, similarly according to the UDHS report 2016, of the respondents aged 15-19, 89% were less likely to know a place where they could go to be tested for HIV or STIs (UDHS, 2016). In the same line, Gangu (2008) in his study to find out the factors influencing utilization of adolescent reproductive health services in Iganga found out that 54% of the respondents had no knowledge about SRH services

However, Mapfurira (2013) found out that 64.7% of his respondents were knowledgeable about SRH services. The literature presented here however, do not show clearly how knowledge is linked to utilization of SRH services hence justification for a study to establish the level of knowledge of the adolescents and effect on utilization of SRH services in Luwero town council, Luwero district.

Sexual activity and Utilization of SRH Services

In a cross-sectional study conducted by Manlove (Manlove, 2004) in Washington it was found that adolescents who had started sexual activity in their early teens were less likely to use contraception. In the same line Ayalew (2015), in his study to find out the magnitude and predictors of early Sexual debut among High and preparatory school students in Northern Ethiopia found out that 19% of the respondents had started active sexual encounters but not utilizing any SRH service this means they are at risk for unsafe sex consequences.

However, a study carried out in four countries of the European Union that is Belgium, the Czech Republic, Estonia and Portugal among female and male students

aged between 16 and 19 years found out that 85% had started sexual activity and had used a contraceptive method. Mwinga (2012), in his study to establish factors contributing to unsafe sex among teenagers in secondary schools in Botswana found out that 35.5% of the teenagers were in active sexual engagement but did not find out if those involved in active sexual engagement utilized any of the SRH services, thus the researcher intended to find out if adolescents(15-19) in Luwero town council are already involved in active sexual activity and if sexual activity is associated with utilization of SRH services.

Health System and Community Factors

Attitude of Health Workers and Utilization of SRH Services

Pozo et al (2015), in his study aimed at improving adolescent sexual and reproductive health in Latin America it was found out that lack of confidentiality from health care givers was one of the factors influencing utilization of the services. Similar findings were obtained in a study carried out among adolescents 15-19 years living in Gondar town northwest of Ethiopia, on reproductive health services utilization and associated factors which found out that out of 445 participants, 57.7% reported they disliked the judgmental attitude of health workers (Feleke SA 2013).

Similarly, in a study conducted in Kenya and Zambia it was found out that only 55% to 67% of nurse midwives agreed that “a school girl who is sexually active should be allowed to use contraceptives” (Warenius 2006) which indicates negative attitude. In China 40% of the providers did not approve of government provision of contraceptive services to young people and approximately 75% felt these services should not be extended to high school students (Tu X et al. 2004). Contrary to all the above findings,

Tilahan et al (2012), in the study to find out health workers attitude toward sexual and reproductive health services for unmarried adolescents in Ethiopia in a descriptive cross sectional approach found that about 2/3 (75%) of the health workers had a positive attitude towards adolescents. It is therefore important to find out the attitude of health workers in Luwero town council and to determine how the attitude of the health workers influences utilization of SRH services by adolescents.

Availability of SRH Services/ Commodities and Utilization of SRH Services

Hodgson, Ross, Haamujompa and Gitau (2012), in their cross-sectional study using interviews and focus groups to explore and document the informational psychosocial sexual and reproductive health needs of adolescents aged 10-19 living with HIV in Zambia found out that adolescents highly valued situations where services and commodities were available and of good quality. This is in agreement with Donna, Hoopes and Chandramouli (2015) who in their cross-sectional study to find out effective strategies to provide Adolescent sexual and reproductive health services and to increase demand and community support established that availability and access to youth friendly health services is vital to ensure wellbeing of adolescents in sexual and reproductive health.

Similarly, a study by Akinyi (2012), to find out determinants of utilization of youth friendly reproductive health services among school and college youth in Thika west district, Kiambu county, Kenya found out that 82.3% of the respondents failed to use SRH services because they were not available in the health facilities found in their localities. In the same line. Laffort, Greener, and Roy (2017) in a cross-sectional survey in India and Kenya to find out sexual and reproductive services utilization by the female sex

workers found out that the use of the services and commodities by the female sex workers was often low and this low usage was attributed to low availability and accessibility of these services, this could be the same or different situations for Luwero town council adolescents, hence the timely need for the current study to find out if SRH services are available and if it has any effect on utilization..

Waiting Time and Utilization of SRH Services

Ngomi (2009), in his study to establish factors influencing utilization of sexual and reproductive health services by secondary school adolescents in Mochudi, he found out that long period of waiting at the centre was one of the service related determinant, this is also in the same line as noted by (Pozo and Chandramouli, 2015) in their study on improving the adolescent SRH in Latin America and promoting ASRH in Ecuador and Cuenca that long waiting times greatly affected adolescents use of SRH services from service centres.

This is further grounded by (Ali, Maharaj &Vawola, 2013) in the study to find out barriers to accessing sexual and reproductive healthcare using data from 200 clients in in-depth interviews with university students in Kwazulu –Natal South Africa the researcher found out many participants highlighted that to increase utilization of the services it was important to adjust waiting times as young people were found not to be patient after one hour of waiting for services. The current researcher therefore intends to find out the response of adolescents to waiting time as they utilize SRH services in Luwero town council.

Family Support and Utilization of SRH Services

Negash (2016) in his study to assess RHS utilization and associated factors among youths in North Shewa zone Amhara region Ethiopia using a community based cross-sectional study found out that adolescents with good parental monitoring especially families that asked their children about their friends the adolescents from such homes utilized RHS more.

In the same way Feleke (2013) in his study carried out among adolescents 15-19 years living in Gondar town north west of Ethiopia, on reproductive health services utilization and associated factors, it was found out that adolescents with parental discussion were 10 times more likely to utilize SRH services(VCT) than those with no parental discussions.

Similarly, Nwogi (2011) in his cross-sectional study to find out the factors affecting adolescent risk taking behavior in Nigeria and gaps for programming, found out that low levels of family cohesion is associated with adolescent sexual risk behaviors. and Aheyu (2016) in his study to assess the level of young people's sexual and reproductive health service utilization and associated factors among young people in Awabel district North West Ethiopia in a community based cross-sectional study found out that adolescents with parental discussions utilize SRH services more.

However, Taffa (2017) in a survey carried out in Ethiopia amongst 343 high school adolescents and 246 families aimed at assessing the level of Parent-Adolescent communication on matters related to young peoples' sexuality; discovered that about 50% of the adolescents believed it was unacceptable to discuss growth changes and sexual issues with parents. Whereas these scholars showed that adolescents who had

parental discussions utilized SRH services more likely than those who did not have discussions with their parents, the scholars did not show clearly whether the discussions were accompanied by financial support and referral to the health centres for which this research intends to fill this theoretical gap.

School Support and Utilization of SRH Services

School support includes extracurricular activities done at school, sex education provision at school and school administrative monitoring.

Binu (2017) in his study to find out factors associated to sexual and reproductive health services among secondary school students in Nekemte Town Ethiopia in a school based cross-sectional study using multistage cluster sampling technique found out that exposure to information from school teachers was associated to utilization of services.

Similarly, according to a study in secondary schools of Nigeria, students who received sexuality education from both peer educators and teachers reported significant increase in use of condoms from 20.8%-53.1% (Ajuwon, 2003). In Soroti District it was established that adolescents received ASRH messages from teachers especially when in schools (Ntonzi, 2001). This is in line with a survey carried out in Uganda, which established that most adolescents are exposed to STI and pregnancy prevention information and services through a variety of sources, the most common ones being school/teachers, but they preferred to obtain such information from their school/teachers, (Neema, et, al.2005).

This is further grounded by Man love & Jennifer (2002) who found that youth who do not spend time in extracurricular activities after school are 37% more likely to become teen parents than youths who spend time in after school programs after school programs

help by encouraging good decision making and providing youth health education and providing role through clubs. Whereas these scholars found out that students who got SRH information from schoolteachers utilized the available SRH services than those who did not get information from their schoolteachers, they did not consider how often this information was given to the students to bring such results and did not show if the students had exposure to SRH materials to aid the information that the teachers gave them for which this research intends to fill the knowledge gap.

Myths & Misconceptions and Utilization of SRH Services

Kennedy (2013) in his cross sectional study using 66 focus groups to find out the barriers preventing adolescents from accessing SRH services in Vanuatu, found out that social cultural norms and taboos were the most significant factors restricting adolescents from accessing SRH services. This is in line with the study among secondary school students in Nigeria, which found out that about 40% of the total sampled population believed contraception was not safe (Idonije et al. 2011) and this meant that students would not use the contraceptives. This means they are less likely to use the services. Similarly, according to a survey by UNFPA and Straight Talk Foundation carried out in Kampala, Mityana, Mubende and Wakiso districts, while 70 per cent of boys and 54 per cent of girls start sexual intercourse as early as 15 years, 50 per cent of them believed a girl could not get pregnant if she had while standing and 46% believed a girl could not get pregnant the first time she had sex. (UNFPA fact sheet 2012).

According to Christiana myths and misinformation on healthcare leads to risky sexual behaviour (Christiana 2013), such beliefs have caused adolescents to be less careful to protect themselves. In the same line in an analysis of text messages sent to a

sexual and reproductive health Q &A service in Nigeria, young people asked questions on SRH via text messages, e-mail and analysis done on 366,605 messages and these showed that there was a strong culture of silence surrounding SRH of young people (AK Blanc 2007) and this may be one of the causes of low utilization of the SRH services by adolescents. This is further supported by San Rashid (2016) in his cross sectional study to find out the effect of sex education on the risky sexual behavior of school going adolescents in Machinga concluded that sex education is failing to positively impact schooling youth's behavior because of some cultural and personal factors which seems to contradict the whole purpose of sex and sexuality education amongst youths.

Whereas a lot has been written on risky sexual behavior observed amongst youths, the writers Christiana (2013), and San Rashid (2016), did not show how sexual activity affected utilization of SRH services amongst adolescents of the specific age group of 15-19 years so the current study intended to find out how sexual activity affects utilization of SRH services among adolescents 15-19 years.

Utilization of Sexual and Reproductive Health Services

According to a study carried out among female undergraduate students in universities of Kilimanjaro region in Tanzania it was discovered that 93.8% of the respondents had knowledge of contraception yet only 43.6% reported having used contraceptives and 40.4% were current contraceptive users yet 78% reported having sexual partners (Mussa 2016). Similarly, the study conducted in Nepal on utilization of SRH services amongst youths living in Kathmandu valley, it was found out that over 90% of the youths reported feelings of shame as the major barrier to accessing SRH services so utilization was low (Laxmi Talmang &Camille Raynes-Greenow 2015).

This is further grounded by SM Bilal (2015) in a cross sectional survey conducted in Mekelle town North-Ethiopia who found out that on 1031 students taken in the study, 1/5 had used SRH services in the past one year (Bilal SM, 2015). Similar results were obtained by Atitegeb (2016) in his study to find out Utilisation and factors affecting adolescents and youth friendly reproductive health services among secondary school students in Hadiya zone Ethiopia in an institution based cross-sectional study, level of utilization of SRH services was 38.5% and Ontiri (2015) in his descriptive cross-sectional study to identify factors influencing Utilisation of RHS among young people in the rift valley provincial hospital Nakuru Kenya found out that utilization was at 30% which is still a low percentage. It is therefore the interest of the researcher to find out the level of utilization of SRH services by adolescents in Luwero town council.

Summary of Identified Research Gaps

From the reviewed literature, it was observed that majority of the findings presented were from different geographical areas, therefore more investigation is needed to produce findings in Luwero town council Luwero district which this study is designed to carry out.

Whereas scholars Gangu (2008) in Iganga district Uganda, Mapfurira (2013) in Zimbabwe and Alemu (2012), in Ethiopia found out the proportion of adolescents with knowledge about SRH they failed to show the relation with utilization of SRH services among adolescents for which this research intends to fill this knowledge gap.

Whereas these scholars Negash (2016), Feleke (2013), Ayehu (2016) showed that adolescents who had parental discussions utilized SRH services more likely than those who did not have discussions with their parents, the scholars did not show clearly

whether the discussions were accompanied by financial support and referral to the health centres for which this research intends to fill this theoretical gap.

Whereas scholars Binu (2017) and Ajuwon (2003) found out that students who got SRH information from school teachers utilized the available SRH services than those who did not get information from their school teachers, they did not show if the students had exposure to SRH materials to aid the information that the teachers gave them and not clear if the teachers referred adolescents to the health centers for which this research intends to fill the knowledge gap.

The review of literature showed that Feleke (2013) in Ethiopia, Tux et al (2004) in China and Warenus (2006), in Zambia found that SRH service providers to adolescents had a negative attitude yet Tilahan et al (2012) in Zambia found it contrary as adolescents reported providers having a positive attitude thus this research tasked to find out attitude of SRH service providers towards the adolescents, how this attitude affects the level of utilization of SRH services by the adolescents in the study area.

Whereas a lot has been written on risky sexual behavior observed amongst youths, the writers Christiana (2013), and San Rashid (2016), did not show how sexual activity affected utilization of SRH services amongst adolescents of the specific age group of 15-19 years so the current study intended to find out how sexual activity affects utilization of SRH services among adolescents 15-19 years.

CHAPTER THREE

METHODOLOGY

This chapter comprises of the methods used in carrying out this study. It covers the research design, locale, study population, sample size, sampling procedures, data collection instruments, data analysis, ethical consideration, reliability, and validity of the study.

Research Design

The study design was cross-sectional and employed both quantitative and qualitative approaches. Quantitative methods were used to collect and present data in numerical form while qualitative methods were used to investigate characteristics which cannot be easily numerically described. A cross-sectional study design was employed to collect data at a single point in time.

Locale of the Study

This study took place in Luwero Town Council, where the largest health facility of the district is located. This is where the Adolescent mainly go for free youth friendly sexual and reproductive health services. The adolescents in the area are mainly students in secondary schools.

Population of the Study

The population of the study involved 1106 adolescents (15-19) who have lived for at least 6 months in Luwero Town Council. These were found in 5 selected day secondary schools.

Sample Size

The sample size of the study was 196 adolescents between aged 15-19 and have lived at least for 6months within Luwero Town Council. In this study, sample size determination was based on Cochran formula for calculating a representative sample for proportions for a large population. Cochran (1963:75). Because the population of adolescents (15-19) in Luwero town council is large the following assumptions were considered;

- a) Assume $p = 0.85$ proportion of non-users of ASRH services (DHIS, 2017) Luwero.
- b) Assume the level of precision desired in this study is estimated to approximately 5%
 $d = 0.05$. it is also the error margin allowed.
- c) Assume a confidence limit of 95% is desired in this study therefore the Z score at 95%, confidence limit constant is $Z = 1.96$
- d) N is the required sample size
- e) $q = 1 - p$

Therefore,

$$N = \frac{Z^2 Pq}{e^2}$$

$$e^2$$

$$N = \frac{1.96^2 \times 0.85 \times (0.15)}{0.05^2}$$

$$= 195.9$$

$$= 196 \text{ adolescents}$$

Sampling Procedure

The study employed both purposive and simple random sampling designs. Purposive sampling was used to identify the schools and the adolescents in the schools. Thereafter simple random sampling was used to randomly select the identified adolescents using Lottery method. Table 2 provides the summary of the target population and sample size. The 196 respondents were selected from the target population of 1106 who are the adolescents who have lived in Luwero Town Council for at least six months and are day scholars in the secondary schools with in Luwero Town council.

Table 1: Target Population and Sample Size

School	Target population	Sample size
Buscisa College School	442	40
Victoria Model S.S	170	34
New life S.S	409	37
Luwero High School	674	61
Bright Academy S.S	266	24
Total population	1106	196

The key informants were purposively selected by the non-probability sampling strategy employing purposive sampling technique and using the purposeful type of sampling chosen because it was to look at a critical case who can explore the phenomenon (SRHs) well/useful cases only taken up for study and it saves both time and money. These included: 4 ASRH service providers and 4 school senior teachers.

Research Instruments

The study employed two data collection instruments to obtain information from all respondents. These included self-administered questionnaires and key informant interview guide.

Self-Administered Questionnaire

The questionnaire was used to collect quantitative data from adolescents. It was self-administered questionnaire comprising mainly of multiple choice items though some were open ended. The advantage of self-administered questionnaire is that it is cost effective and it reduces the possibility of interviewer being biased. The questionnaire was written in English and translated to Luganda for those adolescents who were not be able to understand English especially those out of school.

The questionnaire comprised mainly of closed ended questions with sections labeled A-D. Section A was about individual factors, which included : sex, religion, schooling status, and knowledge of the adolescents about SRH services, Section B was about health facility factors that influence utilization of SRH services, including: attitude of health workers towards adolescents who go for SRH services, availability of services and commodities and waiting time taken by adolescents at the health unit. Section C was about Community factors like family support, School support, and Myths about SRH and services Section D was about Utilization of sexual and reproductive health services among the adolescents in Luwero town council Luwero district.

Key Informant Interviews

The researcher conducted key informant interviews. This was used in collecting data that could not be obtained from the questionnaire, data that could not be directly observed and also to capture the meaning beyond the words on knowledge, attitudes and related information. The key informant interviews included: Four ASRH service providers and four school teachers. Each interview lasted about 15-20 minutes, Key information obtained included: knowledge about availability of ASRH services, challenges in giving SRH service and information to adolescents, community impact, challenges about planning and way forward.

Validity and Reliability of the Research Instruments

Before data collection, validity and reliability of the instrument were determined following a pilot study conducted in Bombo trading Centre a place far from the study area but with similar characteristics as the study area (Luwero town council).

Validity

Validity refers to the extent to which an instrument measures what it is supposed to measure rather than measuring something else or nothing at all (Amin, 2005). Content validity is the degree to which an instrument has an approximate sample of items for the construct being measured (Shi J 2012). Consultation from supervisors, research experts and fellow students helped to check the items consistence, relevancy and clarity. Validity was determined using the Content Validity Index (CVI).

$$\text{CVI} = \frac{\text{No of relevant items in the questionnaire}}{\text{Total no of items on the questionnaire}}$$

$$= 18 / 22$$

= 0.82

The content validity index was 0.82

Reliability

Reliability is the degree to which a measurement technique can be dependent upon to secure consistent results upon repeated application (Weiner, 2007). The sampled respondents were asked to fill the questionnaire during the pretest each answered only one questionnaire and alone at a time. Those who preferred to be interviewed were interviewed basing on the contents of the questionnaire. For those questions they felt uncomfortable to give responses, they were asked to provide their options of giving the answers and the option was to write down secretly.

Data Collection Procedure

An introduction letter from the dean of studies, Bugema University was obtained; it was presented together with all the study instruments, consent forms and a copy of the research proposal to the Institutional Review Board for ethical approval. The approval was presented to university authorities who issued a data collection letter which was taken to Luwero DHO office.

The DHO was requested for an authorization letter to carry out the study which was presented to the local leaders and school heads for permission to carry out the study in their respective schools. The researcher explained the meaning of SRH and the objective of the study and why they needed to participate then asked for their consent to participate in the study by signing the informed consent forms and then given questionnaires.

Assurance of confidentiality was given to the study participants and were informed that participation was voluntary and they had the right to withdraw at any point. The participants were informed that there were no incentives like money to be given out, this ensured that each respondent who decided to participate did so out of his will but not influenced by incentives. Questionnaires and consent forms were kept differently so that there was no association of what was filled in the questionnaire to the respondent.

Data Analysis

The researcher collected filled in questionnaires, manually cleaned data and removed outliers by error then filled missing data. All cleaned questionnaires were safely stored in a secure location. Data was analyzed using the statistical package for the social sciences (SPSS) V 16.0, descriptive statistical and inferential statistical methods were employed. Analysis focused on addressing each study objective below;

To find out individual factors, health system factors and community factors respectively associated with utilization of ASRH services the researcher adopted descriptive analysis, frequencies and percentages were determined to determine how many of the respondents fell in a given category of the independent variable and then bivariate analysis for non-parametric statistics using Pearson's chi-square tests for independence were employed to test the statistical association/ relationship between each given independent categorical variable and the outcome variable. For significant association a p value of $p \leq 0.05$ was observed. For any p-value greater than 0.05 it meant there was no association between the independent variable given and the dependent variable.

To find out the proportion of adolescents that utilized SRH services in the previous 6 months, univariate descriptive analysis was done, frequencies and percentages were determined and proportion was illustrated using a pie chart.

To establish the relationship between individual, health system and community factors associated with utilization of ASRH services, a multivariate analysis was done using logistic regression model to find out the variables significantly associated with utilization of ASRH services.

Interview guide responses were summarized employing content analysis. The obtained results were triangulated to generate similarities and differences then generate meanings and conclusions incorporated to supplement the information from the main respondents.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents, analyses, and interprets the study results and gives the discussion of the findings in relation to the study objectives. It covers the individual factors, health system factors and community factors and the relationship between these factors with adolescent utilization of SRH services in Luwero Town council.

Individual Factors and Adolescent Utilization of SRH Services

Objective 1 of the study was to identify individual factors that influence utilization of SRH services by adolescents in Luwero town council. The study objective was based on sex of the respondent/ adolescent, knowledge levels of the adolescent on SRH issues, sexual activity of the adolescent.

Descriptive statistics were employed to analyze the data, as presented in Table 2

Table 2: Individual Factors that Influence Utilization of SRH Services by Adolescents in Luwero Town Council

Factor	Frequency (n=196)	Percent
Sex		
Male	88	44.9
Female	108	55.1
Knowledge level		
High	66	33.7
Low	130	66.3
Sexual activity		

Active	110	56.1
Not active	86	43.9

Sex

Results from Table 2 show that there were more females 108 (55.1%) than male 88 (44.9%) respondents who participated in the study. This may be due to the fact that there are more females than males aged 15-19 years in Luwero District (LDLGA, 2014). There is therefore important to address challenges in SRH among female adolescents.

Knowledge Level

Results in Table 2 indicate that majority 130 (66.3%) had low knowledge levels concerning adolescent SRH issues. This finding is in line with Gangu (2008) in Iganga district – Uganda and Alemu (2012) in Ethiopia who found that knowledge levels were low but contrary to Mussa 2016 who reported that 93.8% had knowledge and Mapfurira (2013) reported 64.7% being knowledgeable. This low knowledge about SRH services may be attributed to lack of youth centres where youths including adolescents may be massively gathered to be taught about SRH issues and services and less involvement of religious forum to educate youths about SRH issues and services however other source of information like mass media would have been used by the adolescents to acquire knowledge about SRH.

Sexual Activity

From Table 2, slightly more than half 110 (56.1%) of adolescents in the study had started sexual engagement/ activity. This finding is in line with (Ayalew et al 2015) and Mwinga (2012) in Botswana where the respondents had started sexual activity this result may be attributed to the power of mass media where adolescents are so exposed to sex and try to imitate what they watch since the study was conducted in a semi urban setting but also to the fact that adolescents are less empowered to delay sex through life skill

building trainings and to parents who are less supportive to their children in providing monitoring, personal needs among others which make their children at risk of being lured by males willing to give money for sex.

Health System and Community Factors and Adolescent Utilization of SRH Services

Objective 2 of the study was to find out health system and community factors related to adolescent utilization of SRH services in Luwero town council. The study objective was based on health worker’s attitude, availability of services, waiting time, family support, school support and myths. The descriptive features in this regard are presented in Table 3 below.

Table 3: Health System and Community Factors that Influence Utilization of SRH Services by Adolescents in the Study

Factor	Frequency (n = 196)	Percent
Health Worker’s Attitude		
Positive	69	35.2
Negative	127	64.8
Availability of services		
Yes	139	70.9
No	57	29.1
Waiting time		
Short Time	78	39.8
Long Time	118	60.2
Family support		
High	70	35.7
Low	126	64.3
School support		
High	120	61.2
Low	76	38.8
Myths		
Low level	45	23.0
High level	151	77.0

Source: Primary

Health Worker's Attitude

According to Table 3, majority 127 (64.8%) of the respondents reported that the health workers had negative attitude. This finding is in line with findings by Feleke (2013), Tu x et al 2004 and Warenius 2006 where health workers had a negative attitude towards giving SRH services to adolescents but contrary to Tilahan et al (2012) who reported positive attitude of health workers. This negative attitude by health workers of Luwero may be attributed to the existence of a big gap between adolescents and the health workers where the two only meet when the challenge has occurred however if youth centers are strengthened the two can always meet for counselling before adolescents undertake results of unsafe sexual activity however trainings can help to change attitude. Pozo et al. (2015) described health worker's poor attitude as one of the major hindrances to adolescent utilization of SRH services, as it creates stigma among the adolescents.

Availability of Services

Results from Table 3 indicate that majority 239 (70.9%) of respondents reported the availability of SRH services. This is attributed to services being offered by government. This finding was in line with Akinyi (2012) who found out that a very big percentage (82.3%) of respondents from his study in Niger reported of failing to use SRH services due to the reason that there was no single health facility providing the SRH services in their localities and Roy (2017) who found that high availability of services led to high utilization. This means that the adolescents could easily access the SRH services whenever they wanted to access them. The high presence of SRH services at health

facilities was because of the presence of the largest government funded health facility meant to provide SRH services to adolescents in Luwero district.

Waiting Time

Results in Table 3, more than half 118 (60.2%) of respondents reported longer waiting time at health facilities. This implies that the adolescents had to keep waiting for longer time until they could receive the services from the health workers. This was attached to the low man power present to serve the many adolescents coming for the services at a given time. This was also supported by one of the key informants who was the health worker, who reported that,

“Sometimes the cues are longer yet we are only two people to serve the SRH services to the adolescents, some of the adolescents fail to wait for long and end up going back. For me I think some of these adolescents just fear to remain in the cues as someone who knows them may find them and report to the parents.” (KII-4).

In a similar study done in Kenya, results indicated that majority of the respondents failed to utilize SRH services due to long queues and a lot of time spent at the health service points (Akinyi, 2012). Whereas, Ali et al. (2013) attach such findings to the impatience of young people, who cannot wait for a period of more than 1 hour before receiving medication services.

Family Support

Findings from Table 3 indicate that majority 126 (64.3%) of respondents in the study had low family support towards SRH utilization. The low family support is attributed to the fact that parents lack training on how to open up to their adolescent children on sexual matters, some parents completely avoid discussions and so fail to know the challenges of their children and so cannot help them out. This finding is in line

with Negash (2016) in Ethiopia and Nwogi (2011) in Nigeria who found out that parental support was low in the studies conducted but affecting utilization of SRH services. In a community-based cross-sectional study done in Ethiopia, it was discovered that adolescents with good parental monitoring especially families that asked their children about their friends the adolescents from such homes utilized SRH more (Negash, 2016).

This implied that many parents/ guardians do not positively support their adolescent children towards SRH utilization. This is likely because in Uganda, most especially in central region, parents take issues concerning sex and reproductive health to be obscene that are not supposed to be talked about in public, and this hinders the utilization of SRH services (Birungi et al.2008).

School Support

From Table 3, findings show that majority 120 (61.2%) of respondents had high school support towards SRH utilization this is attributed to the fact that adolescents spend much of their time in school, they become free to talk to their teachers who are able to advise them on sexual matters, the high school support is also attributed to the various NGOs who visit schools and talk to adolescents and provide some readable materials. This finding is in line with Binu (2017) who found out that exposure to SRH information from school teachers was associated to utilization of services and Ajuwon who found that adolescents who received SRH messages from teachers showed more use of condoms.

This finding was expected since schools are always taken to be the right places where a child is supposed to be taught all the RH issues and bodily changes that occur during development. In a year, a child spends over $\frac{3}{4}$ of his/her time at school, and spend

less than ¼ of the time with the parents. This was further emphasized by school teachers as quoted from key informants

“Adolescents are so eager to learn about their sexuality in fact it is the topic enjoyed most they are attentive and inquisitive by asking many questions. Sometimes the questions are above our capacity to answer them so we may need some extra training to increase our knowledge and to help by health workers. The major challenge is about time because that topic requires to give adolescents longer time to be free to talk out their mind”.
(KII-6).

This implies that school is a major ground to meet adolescents discuss with them, and teach them how to manage adolescence stage so every school ought to comply with the SRH program.

Myths & Misconceptions

According to Table 3, majority 151 (77.0%) of respondents had a high level of myths and misconceptions about SRH issues and services. This high level of misconceptions is attributed to minimal level of sensitization by health teams and parents. This finding is in line with Christiana (2013) and San Rashid (2016) who found that misconceptions have been identified to be among the major barriers to the utilization of SRH services by adolescents.

This implies that misconceptions attached to SRH services were common among these adolescents. In this regard, it was more evidenced by one of the key informants who argued that,

“Adolescents usually come for the SRH services with a lot of misconceptions in their minds about the services. They even look confused by the time they come to us. For example, many of them tell us that their friends tell them a person cannot get pregnant during his or her first time to have sexual intercourse, which is wrong. Others think that contraception make people barren.” (KII, 2018).

There is therefore need to demystify information about SRH to adolescents through different programs.

Level of Adolescent Utilization of SRH Services

Objective 3 was to find out what proportion of adolescents utilized SRH services in the past six months in the study. Respondents were asked to indicate when they last used the SRH services, or tell whether they had ever used or not. Descriptive statistics were employed to analyze the data to generate a pie chart, as presented in Figure 3.

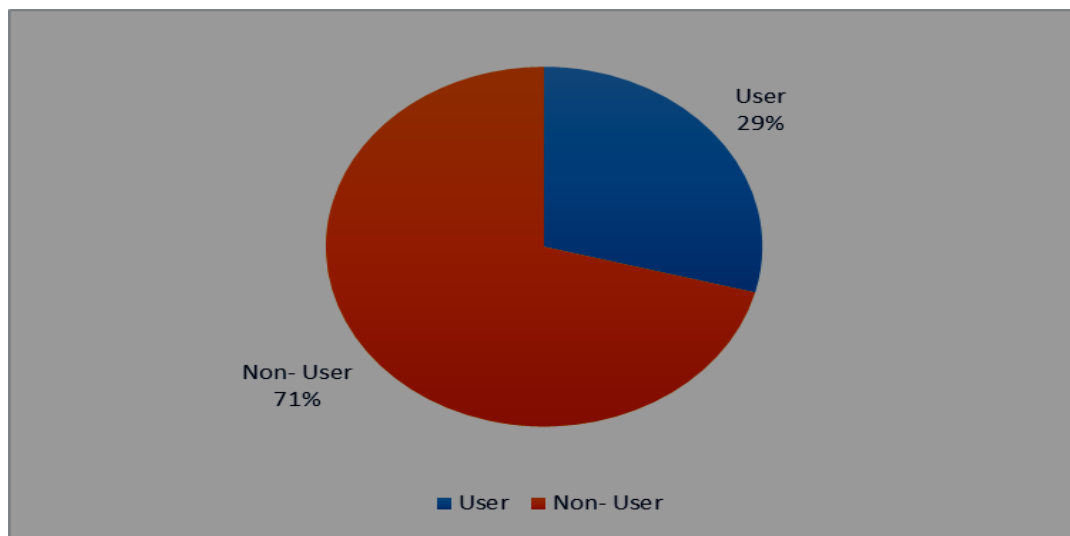


Figure 2: Level of Adolescent Utilization of SRH services in the Past Six Months in the Study

Findings in figure 3 show that very few 57 (29.1%) adolescents in the study were users to SRH services. The findings imply that there was a very low level of adolescent SRH utilization which may be due to adolescents being unknowledgeable or negative attitude of health workers, but also some factors which may be outside the scope of this study like quality of the services given and others. The findings are consistent with Alemu (2012), who did a similar study in Ethiopia and found out that SRH service utilization among adolescents was as low as 21.5% and Ontiri (2015), who found that utilization was as low as 30% in a study conducted in Kenya. According to MOH (2015), the targeted national uptake is required to be 60%, which is far above the obtained 29.1% from the study. This finding clearly shows how big the task is to promote utilization of SRH services among adolescents through training and sensitization of the adolescents, their parents, their teachers and all community at large.

Factors Associated with Adolescent Utilization SRH Services

Objective 4 was aimed at establishing the factors affecting adolescent utilization of SRH services in Luwero town council. To determine the significant association, inferential statistics by use of Pearson's chi square and logistic linear regression analysis were done.

Individual Factors

Table 4: Bivariate analysis Of Possible Individual Factors that Influence Utilization of SRH Services by Adolescents in the Study

Factors	Level of Utilization		df	χ^2	p-value	
	User	Non-User				
Sex						
	Male	20 (22.7)	68 (77.3)	1	3.127	0.077
	Female	37 (34.3)	71 (65.7)			
Knowledge level	High	12(18.2)	54(81.8)	1	5.732	0.017*
	Low	45(34.6)	85(65.4)			
Sexual activity	Yes	39(35.5)	71(64.5)	1	4.937	0.026*
	No	18(20.9)	68(79.1)			

**Significant at 5% level

From Table 4 above, study findings show that two factors had a significant association with utilization of ASRH services. These factors were Knowledge level of the adolescent about SRH services and sexual activity/engagement ($p > 0.05$). Whereas, the other factors that is sex was not significantly associated to adolescent utilization of SRH services. ($p < 0.05$).

Health System and Community Factors

The study results in relation to health system and community factors are presented in Table 5 below,

Table 5: Bivariate analysis of Possible Health System and Community Factors that Influence Utilization of **SRH Services by Adolescents in the Study**

Factors	Level of Utilization		df	χ^2	p-value
	User	Non-User			
Health Worker's Attitude					
Yes	27 (39.1)	42 (60.9)	1	5.214	0.022*
No	30 (23.6)	97 (76.4)			
Availability of services					
Yes	41 (29.5)	98 (70.5)	1	0.040	0.842
No	16 (28.1)	41 (71.9)			
Waiting time					
Short Time	24 (30.8)	54 (69.2)	1	0.179	0.672
Long Time	33 (28.0)	85 (72.0)			
Family support					
High	12 (17.1)	58 (82.9)	1	7.525	0.006**
Low	45 (35.7)	81 (64.3)			
School support					
High	33 (27.5)	87 (72.5)	1	0.375	0.540
Low	24 (31.6)	52 (68.4)			
Myths					
Good	11 (24.4)	34 (75.6)	1	0.609	0.435
Poor	46 (30.5)	105 (69.5)			

****Significant at 5% level**

From table 5 above study findings show that only two factors were significantly associated with adolescent utilization of SRH services in the study and these are health workers' attitude and family support ($p < 0.05$). While other factors were not significantly associated to adolescent utilization of SRH services in the study and these were availability of services, waiting time at the health center, school support and myths & misconceptions ($p > 0.05$).

Multivariate analysis

The factors that were statistically significant at the bivariate level after using chi-square independence test analysis were considered into the logit tables to test the strength of their association to utilization of SRH services. The factors were analyzed at

multivariate level using binary logistic regression, Crude Odds Ratio (COR) and adjusted odds ratio (AOR) were determined and the findings were summarized in Table 6 below.

Table 6: Multivariate Analysis of the Factors associated with SRH Utilization by Adolescents in Luwero Town Council

Factor	Level of Utilization		COR (95% CI)	AOR(95% CI)
	User n (%)	Non-User n (%)		
Knowledge Level				
High	12 (18.2)	54 (81.8)	1	1
Low	45 (34.6)	85 (65.4)	0.420 (0.204 - 0.864)*	0.487 (0.230 - 1.032)
Sexual Activity				
Yes	39(35.5)	71(64.5)	2.075 (1.083 - 3.975)*	2.109 (1.075 - 4.139)*
No	18(20.9)	68(79.1)	1	1
Health Worker's Attitude				
Yes	27 (39.1)	42 (60.9)	1	1
No	30 (23.6)	97 (76.4)	0.481 (0.255 - 0.907)*	0.601 (0.307 - 1.177)
Family support				
High	12 (17.1)	58 (82.9)	1	1
Low	45 (35.7)	81 (64.3)	0.372 (0.181 - 0.765)*	0.463 (0.217 - 0.990)*
*P<0.05		RC=1		

Knowledge Level

From Table 6, the Crude Odds Ratio [COR = 0.420, (CI 95% = 0.204 - 0.864), p = 0.017] show that knowledge level was significantly associated to utilization of SRH services. An adolescent with low knowledge level is two times less likely to utilize SRH services. This finding is attributed to the fact that when the adolescent is aware of where to get the services and know the importance for using the services he/she will be able to use the service unlike the one with no knowledge.

This finding is similar to (UDHS 2016) report, that 89% respondents were less likely to know a place where to get SRH services so would not use the services and in

line with Gangu (2008) in his study to find out the factors influencing utilization of adolescent reproductive health services in Iganga found out that knowledge about SRH services and Mapfurira (2013), who found out that knowledge was a significant factor to utilization of sexual and reproductive health services.

This implies that a knowledgeable adolescent is more likely to utilize SRH services as predicted by the theoretical frame work that if adolescents are taught about dangers of unsafe sex and alternative behavior (safe sex) reduces the risk they are more likely to take up the new behavior. HBM of Rosen stock, Becker, Kirsch, et al (1950) which was later revised by (Taylor et al 2007). The researcher therefore, found out that knowledge about SRH services and sexual activity were important factors in utilization of SRH services this may be because it is sexual activity that produces all the risks mentioned like complicated pregnancy, dependency and others.

However, analysis of the Adjusted Odds Ratio(AOR= 0.487 (CI=95%=0.230 - 1.032), $P > 0.05$ the knowledge level was not significant and this could be due to intervening factors not considered in this study like attitude of the adolescent towards using the available SRH services but also family support where by the adolescent may know where and why to use the SRH services but is denied by the parent or guardian who is negative about the adolescent using the service as reported by (KII, 2018) that most of the adolescents fear being seen by their parents.

Sexual Activity

From Table 6 above the crude odds ratio [COR = 2.075, (CI 95% = 1.083 – 3.975), $p = 0.026$] show that sexual activity is significantly associated to utilization of SRH services, the findings implied that adolescents who already started sexual

engagement were about 2 times more likely to utilize the adolescent SRH services. This finding is contrary to findings by (Ayalew, 2015) that the respondents who were sexually active were not utilizing the SRH services. This meant that these adolescents having had sexual intercourse, they tend to feel unsafe about their sexual and reproductive health challenges, and end up seeking for the SRH services.

Similarly, the adjusted odds ratio [AOR = 2.109, (CI 95% = 1.075 – 4.139), $p < 0.05$] indicate that sexual activity is still significantly associated to utilization of sexual and reproductive health services by adolescents.

Health Worker's Attitude

The crude odds ratio [COR = 0.481, (CI 95% = 0.255 – 0.907), $p = 0.022$] show that health workers' attitude is significantly associated to utilization of SRH services and implied that adolescents who reported negative health workers' attitude were about 2 times less likely to utilize the adolescent SRH services. This is due to the fact that when the adolescent finds that the health worker is negative and not supportive he/she is likely never to go back for the services and even tell peers who in turn may avoid seeking help from the same service point. This finding is in line with Pozo et al (2015) in his study which aimed at improving adolescent sexual and reproductive health in Latin America and found out that lack of confidentiality from health care givers was one of the factors influencing utilization of the services and also similar to Feleke who found out that out 57.7% reported they disliked the judgmental attitude of health workers and this deterred them from utilizing SRH services. This could be attributed to fear that the adolescent feels when he knows that the health worker is not comfortable working on him or her. This means that these adolescents get demoralized by the poor attitudes of the health workers, which hinders them from going back to seek for the SRH services.

However, the AOR 0.601 (CI=95%= 0.307 - 1.177, $p>0.05$) indicate that health workers' attitude was not significant and this may be due to other confounding factors not considered in this study and support from the parents as it was observed that health workers tend to change attitude from negative to positive when the adolescent is escorted by the parent/guardian as noted by Blanc (2007) when he analyzed messages given by adolescents on sexual and reproductive health issues and services offered in Nigeria.

Family Support

The crude odds ratio [COR = 0.372, (CI 95% = 0.181 – 0.765), $p = 0.007$] show that family support is significantly associated to utilization of SRH services and implied that adolescents who had low family support for SRH utilization were about 3 times less likely to utilize the adolescent SRH services. This finding is attributed to the fact that when the adolescent is allowed by the parent to go to the health unit for a cause on sexual issues he/she feels free from judgement and will take service willingly unlike that who finds the service important but is denied by the parent. This finding is similar to findings of Feleke (2013) and Aheyu (2016) who found that adolescents with parental discussions utilized services more than those who lacked parental discussions. This meant that parents and guardians do not positively contribute to ensuring that their children utilize the adolescent SRH services to utilization was low. This justification was supported by one of the key informants who narrated that,

“the parents have not supported us to ensure improvement towards SRH utilization by the adolescents. In fact, the parents have just driven us backwards to this cause. Even a few adolescents who come here for the services always caution and beg us never to reveal to anybody that they came, because the information may end up reaching the parent and things worsen”. (KII , 2018).

Similarly, Adjusted odds ratio [AOR = 0.463, (CI 95% = 0.217 – 0.990), $p = 0.047$] indicate that family support is still significant which implied that it is quite important that parents get involved in supporting their adolescents to utilize SRH services. The low support may be attributed to being unaware of how to help their children or lack of empowerment to do so.

Hypothesis Test Analysis

According to the results presented above, it was therefore stated that, the hypothesized individual factors like sexual activity and knowledge level had a significant relationship ($p < 0.05$) to utilization of SRH services among the adolescents in the study. The null hypothesis was hence rejected and the alternative hypothesis was adopted. While factors like sex, religion and schooling status were found to be not significantly associated ($P > 0.05$) to utilization of SRH services among the adolescents in the study therefore, the null hypothesis was retained.

Health system and community factors like health worker's attitude and family support were found to be significantly associated ($p < 0.05$) to utilization of SRH services among the adolescents in the study. The null hypothesis was hence rejected. Whereas, factors like availability of services, waiting time, school support and myths were found to be not significantly associated ($p > 0.05$) to utilization of SRH services among the adolescents in the study. Hence the null hypothesis was retained.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter presents the summary, conclusions and recommendations drawn from the discussed findings in line with the objectives of the study.

Summary

This study intended to find out the Factors Associated to Utilization of Sexual and Reproductive Health Services among Adolescents in Luwero Town Council, Luwero District, Uganda. The study was guided by four objectives, that is, to identify individual factors that influence utilization of SRH services by adolescents in Luwero town council, to find out the health system and community factors which influence the utilization of SRH services by adolescents, to find out the proportion of adolescents who had utilized SRH services in the past six months within Luwero town council, and to establish the relationship between factors associated to SRH and utilization of the SRH services by adolescents in Luwero town council.

The study was carried out in July, 2018, with a sample size of the study as 196 respondents. Random sampling technique was employed in the study with semi-structured and closed ended questionnaires and key informant interview guide as data collection tools. After cleaning, coding and entering data into SPSS, frequencies and percentages were used to analyze data. The Pearson's chi square (χ^2) analysis was used

followed by logistic regression to establish the factors associated with utilization of SRH services by adolescents. Qualitative data from the key informants' interviews was captured, content analyzed then integrated into the main findings.

The key findings from the study include the following: Majority of the adolescents (66.3%) had low levels of knowledge about SRH and 56.1% had already started sexual activity/ engagement. The study also discovered that majority of adolescents reported existence of poor health worker's attitude (64.8%), longer waiting hours (60.2%), and low family support (64.3%) yet with high levels of misconceptions (77.0%). The level of adolescent utilization of SRH services in the past six months was very low (29.1%).

Bivariate logistic linear regression indicated that knowledge levels, sexual activity, health workers' attitude and family support were significant factors associated with adolescent utilization of SRH services ($p < 0.05$). Subjected to multivariate logistic linear regression, sexual activity and family support were significant factors ($p < 0.05$).

Conclusion

The study concluded that, the individual factors associated to utilization of SRH services among adolescents in Luwero Town Council were knowledge level and sexual activity. This means that adolescents are not aware of their sexual and reproductive health issues and needs, yet many of them have already started sexual activity early which is a risky behavior for not utilizing SRH services as stated by Manlove, the adolescents therefore need to be assisted to obtain knowledge about SRH issues. (Manlove 2004).

The study further concluded that the health system and community factors that are associated to utilization of SRH services among adolescents in Luwero town council

were health workers' attitude towards adolescents who go to receive SRH services and family support towards the adolescent. This means that parents and guardians have not played a role to help the adolescents know or obtain and use the available SRH services in their communities, while the health workers have also mishandled the adolescents by their poor attitudes, all of which have led to poor adherence of adolescents to utilization of the SRH services. There is therefore need to work out mitigation procedures to ensure growing healthful self-supportive youths as the Sustainable Development Goal predicts. (“Ensure healthy lives and promote well-being for all at all ages”).

About proportion of adolescents who utilized SRH services in Luwero town council, the study concluded that utilization of the services was low. this calls for attention of the responsible bodies like the MOH, the District Health Office to devise measures on how to increase utilization of the SRH services by adolescents.

Finally, the adolescents who had low knowledge about SRH services, were two times less likely to utilize the same services, the adolescents who had started sexual activity were two times more likely to use SRH services, adolescents who expressed that health workers had negative attitude towards them were two times less likely to utilize the services and adolescents who exposed low family support were three times less likely to utilize the SRH services.

Recommendations

Ministry of Health

1. The MOH should strengthen the policy of youth friendly corner at every public health unit but also be extended to privately owned health facilities so as to cater

for the big number of adolescents at a time as about 60.2% of the respondents reported long waiting time at the health facility.

District Health Office

2. The study recommended that the District Health Office should increase access to information and constantly avail adolescents with correct and nonjudgmental information on SRH to create awareness. This can be done by strengthening youth outreach programs in secondary schools and religious centers to building life skills among adolescents so as to increase knowledge level which was found low in this study.

3. Community leaders

Local leaders, Religious leaders and School leaders need to lease with district health office may organize trainings to empower parents to freely talk about SRH issues with their children. This will improve parent-adolescent communication and family support which was reported low in the study as 64.3%. of respondents reported that they were not supported.

4. Areas for further research

The research recommended further study to be done in the following areas:

- To find out the Knowledge, Attitude and Practice of adolescents towards utilizing SRH services (a KAP study).
- To establish the quality of SRH services offered to adolescents

- To find out the factors associated to utilization of SRH services in rural areas of Luwero district to compare findings with semi urban of current study.

REFERENCES

- Ajuwon (2000). *Effects of educational intervention on reproductive health Knowledge Attitude and practices among secondary school students in Oyo state Nigeria*. PhD thesis of the University of Ibadan, Nigeria.
- Akinyi (2012). *Determinants of utilization of youth friendly reproductive health services among school and college youth in Thika west district, Kiambu County, Kenya*.
- Anguilar A, P Carter.M, Snead MC Kourtis A P (2013). *Social economic Disadvantage as a Social Determinant of Teen Child Bearing in the US*. Research Articles Retrieved from http://www.publichealthreports.org/issue_Poen_cfm article ID 2934.
- Ali, Maharaj & Vawola (2013). *Barriers to accessing sexual and reproductive health services*.
- Alem, A. (2012) *Reproductive health knowledge and services utilization among rural adolescents in Machkel Woreda East Gojam Zone Northwest Ethiopia* Addis Ababa University.
- Abajobir A.A& Seme,A (2014)BMC Health services Research. *Reproductive health knowledge & services utilization among Rural adolescents in East Gojjan Zone Ethiopia*.
- Ayalew.A, Kidan.A & Ashenafi S (2015).*Magnitude and predictors of early Sexual debut among High and preparatory school students in Northern Ethiopia*.
- Basinga Paulin, Bizimana Jean de Dien and Munyashongore Cyprien (2005). *Assessment of the Role of Forum Theatre in HIV/AIDS Behavioral Change Process Among Secondary School Adolescents in Butare Province Rwanda*.
- Bent C. Miller, Brad Benson and Kevin A. Galbraith (2001). *Family relationships and Adolescent Pregnancy risk: A research Synthesis, USA*.
- Bilal SM (2015).*Factors that affect utilization of adolescent sexual and reproductive health Services among secondary school students in Ethiopia*.

- Binu (2017) *Factors associated to sexual and reproductive health services usage among school students in Nekemte town Ethiopia.*
- Birungi H, Mugisha J F and Nyombi J K(2007) “*Sexuality of young people Perinatally Infected With HIV. A neglected element in HIV/AIDS Programming in Uganda,*” *Exchange on HIV/AIDS sexuality and gender.*2017.11.
- Donna DM, Hoopes AJ, V Chandramouli (2015).*Effective strategies to provide adolescent sexual and reproductive health services and to increase demand and community support. retrieved 2018.07.11.*
- Feleke S. A (2013). *Reproductive Health Utilisation and Factors Associated Factors Among Adolescents in Gondar town Ethiopia.*
- Gangu(2008).*Factors influencing utilization of adolescent reproductive health services in Iganga district.*
- Hall Kelli Stidham (2012). *Associations between Religious characteristics and Sexual Reproductive Health service use among young women in the United States.*
- Hodgson .I, Ross J, Haamujompa C, Gitau-Mburu (2012).*Living as an adolescent with HIV in Zambia-lived experiences , sexual health and reproductive needs.* retrieved 2018.07.11.
- Jaruseviciene, L.Pozo, K.C.et al (2015) *Improving adolescent sexual and reproductive health in Latin America. Reflections from an international Congress.* Biomed. Central[http://www.reproductive health.Journal.com/content/2017 /1/11](http://www.reproductivehealthjournal.com/content/2017/1/11).
- Kalo (2012) *Utilisation of Adolescent sexual and reproductive health services by young people in Vanuatu.*
- Kennedy et al (2013) *Barriers preventing adolescents from accessing sexual and reproductive Health services in Vanuatu.*
- Kesterton A.J (2011).*Generating Demand and Community Support for Sexual and Reproductive Health services Use by Young people.* Reports and publications in peer reviewed and grey literature through search engines.
- Christiana K. (2013). *Myths and Misinformation on healthcare services.* Health Science Journal.
- Laxmi Tamang & Camille. R Greenow(2015)*Knowledge Experience and Utilisation of Sexual and reproductive Health services amongst youths living in urban areas of Kathmandu valley.*

- Laffort Y, Greener R, Roy A (2017) *Sexual and reproductive health services utilization by female sex workers in India and Kenya*. health journal biomedcentral.com retrieved from google scholar.com 2018.7.11.
- Ludickle F, Stalberg A, Vassilakor P Major AL, Campana A(2001). *High and intermediate Risk* .Human Papilloma Virus infection in Sexually Active Adolescent females.
- Maly Christina (2017) *Perception of adolescents pregnancy among teenage girls in Rakai Uganda*.
- Manlove J Romano Papillo, & Ikramullah,E.(2004) *Not yet: Programs to delay First sex Among Teens* .Washington ,DC: National Campaign to Prevent Teen Pregnancy.
- Mapfurira,M.J.(2013).*Factors associated with utilization of adolescent sexual and reproductive Health services* offered at Harare youth friendly corner by the youths in Harare urban university of Zimbabwe.
- Ministry of Health (2006). *The national Policy Guidelines and Service Standards for sexual and Reproductive health and Rights*, Kampala, Uganda.
- Mwinga (2012).Factors contributing to unsafe sex among teenagers in secondary schools in Botswana.http// google.com retrieved 2018.08.15.
- Neema S, Ahmed FH, Kibombo R, Bankole A (2006). *Adolescent sexual and reproductive Health in Uganda: Results from the 2004 National Survey of Adolescents*.
- Neema S, Musisi N and Kibombo R (2004). *Adolescent sexual and reproductive health in Uganda: a synthesis of research evidence*, Occasional report, New York: The Alan Guttmacher Institute.
- Nilima (2017). *Online responses on treating non response in a study*. http://www.research gate.net retrieved 2018.07.13.Manipal University.
- N.Taffa, R.Haimanot, S. Desalegn, A. Testaye: *Do parents and young people communicate on sexual matters?* The Ethiopian Journal on sexual health 2017.
- Ngome E (2016). *Demographic, Socioeconomic and Psychological Determinants of current and Consistent condom use among adolescents in Botswana*. Scientific Research Publishing.
- Ngomi,K B (2008).*Utilization of Sexual and Reproductive Health services by secondary schools Mochudi –Botswana*. University of South Africa.
- Nwogi, U.B.(2011).*Factors Affecting Adolescent Sexual Risk Taking Behavior in Nigeria and Gaps for programming*.

- Ontiri (2015). *Factors influencing Utilisation of Reproductive health services among young people in the rift valley Provincial hospital Nakuru Kenya.*
- Polo (2011). *Sexual activity among students in United States of America.*
- Pozo KC and Chandramouli.V (2015). *Improving adolescent sexual and reproductive health in Latin America: Reflections from an international Congress on promoting ASRH services in Ecuador& Cuenca.*
- Santinelli JD, Kaiser J, Hirsch L, Rodosh A. Simkin L, Middle Stadt S(2004). *Initiation Of Sexual Intercourse among Middle School Adolescents: The influence of psychosocial factors.*
- San Rashid, Marisen Mwale (2016). *The Effect of Sex Education on the sexual behavior of School Going Adolescents.* Sage Journals
- Shi J (2012). *Content validity index in scale development.*
- Tilahun.M & Mengistie (2012). *Health workers' attitude towards seual and reproductive health services for unmarried adolescents in Ethiopia.* Retrieved 2018.08.16
- Talmang L (2017). *Knowledge, Experience and Use of Sexual and Reproductive Health Services Amongst Nepalese youths living in Kathmandu valley.*
- Taylor (2007). *The theories of behavior change: Health Belief Model theory.*
- Tolulope Monisola Ola (2003). *Factors Influencing Access and utilization of Adolescents – Friendly Preventive health services in Nigeria* University of Ado-Ekiti, Nigeria .E-mail: tolulopeola@yahoo.co.uk.
- Tux (2004). *Sexual and Reproductive Health Services Extension programme in China.*
- Warenius (2006). *Attitude of nurse midwives to provision of contraceptives to sexually active schoolgirls in Zambia.*
- Zakayo M O and Lwelamira J (2011). *Sexual Behaviors among Adolescents in community Secondary schools in Rural Areas of central Tanzania: A case of Bahi District in Dodoma Region.* Current Research Journal of Social Sciences 3(4):374-380.

APPENDICES

Appendix I: Consent Form for Respondents

Hello my name is Nandagala Rose Kajubi, currently pursuing a Master of public health at Bugema University. I am requesting for your participation in a study, the study is about the factors associated to utilization of Sexual and Reproductive Health (SRH) services among adolescents (15-19) in Luwero town council Luwero district. The study is focused on increasing our understanding of the factors that influence the Utilization of SRH services in Luwero town council, this will help in making recommendations regarding to helping the adolescent girls and boys with their sexual needs. The purpose of the study is to establish the factors that are associated with utilization of SRH services among adolescents in Luwero town council Luwero district.

Procedures: If you agree to take part in this study, you will be asked questions relating to sexual and reproductive health and services. The interview will take approximately 30 minutes. You can answer the questions asked or fill in the questionnaire and return it to the researcher or the representative.

Risks or Discomforts: Participating in this study has minimal risks or no risk. None of the questions you answer may affect you personally. But still, you can choose not to answer any question that you wish for any reason.

Benefits: By participating in this study you will help to build a pointer to the health sector in developing a critical model necessary for providing quality sexual health care to

the adolescents in the community. The study will further inform policy on how human resource for sexual health development can gain ground for increased improvement in order to meet the high demand in health care from the growing population of adolescents in the country at large.

Confidentiality: what you answer will be kept private, for confidentiality, you will be assigned a unique identifier such that your name will not appear anywhere in the research findings.

Cost or Payments: The only cost to you for being in the study is your time. There is no payment for being in the study.

Right to refuse or Withdraw: You are free to join the study or not. If you decide to join the study, you are also free to change your mind and refuse to be in the study at any time for any reason.

Feedback on the findings: As study participant you will get feedback on the progress and the findings of the study at the respective places like schools, religious centers within the community.

Persons to contact: If you have any questions for me, about the study or the consent document please ask before signing and I will do my best to answer them. You will receive a copy of this consent form after signing. If you have additional questions you need to discuss after this interview, you can call +256772630627(Kajubi Rose).

1. Signature of respondents.....thumb print.....date.....
2. Signature of researcher.....Date.....
3. Signature of parent (if Adolescent is under 18 years).....

Appendix II: Questionnaire Guide for Adolescents

“Factors Associated to Utilization of Sexual and Reproductive Health Services among Adolescents in Luwero Town Council Luwero district”.

Questionnaire serial number-----Date of interview: -----/-----/2017.

Dear respondent,

I am **Nandagala Rose Kajubi**, a Master of public health student at Bugema University.

Your participation is voluntary; the findings are purely for academic purposes and may benefit policy makers and health care providers. Your responses will be treated with utmost confidentiality. In your responses, there are alternatives choose what is appropriate to you. Thank you.

SECTION A: INDIVIDUAL FACTORS

No	Question	Coding category	Correct response
1	What is your sex?	Male.....1 Female.....2	
2	Have you ever heard about Adolescent Sexual and Reproductive Health services?	Yes.....1 No.....2	
3	Do you know where you can get youth friendly Sexual and Reproductive Health services?	Yes.....1 No.....2	
4	Mention the importance of Sexual and Reproductive Health services to the adolescent?	
5	Have you ever had sex?	Yes.....1 No2	
6	If yes, what was your age at first sex?		

	
--	--	-------

SECTION B: HEALTH FACILITY FACTORS

1	Health workers are friendly in giving Sexual and Reproductive Health services in hospitals/service centers!	Strongly agree.....1 Agree2 Disagree3 Strongly disagree.....4	
2	When you visit the service centre/hospitals is the availability of services satisfying?	Very satisfying.....1 Satisfying.....2 Unsatisfying.....3 Very unsatisfying4	
3	When you go to the hospital/service centre, how would you rate the time you take there?	Very short time.....1 short time.....2 long time.....3 Very long time.....4	

SECTION C: COMMUNITY FACTORS

1	Do you get any financial assistance from home in case you need health care?	Yes.....1 No.....2	
2	Do you ever talk to any of your parents/guardian about Sexual/Reproductive Health issues and make discussions.	Yes.....1 No.....2	
3	Can you disclose to your parents/guardians your HIV, STI, or Pregnancy status?	Yes.....1 No.....2	
4	If No to who would you wish to disclose your status above.	Peer/friend.....1 Teacher at school.....2 Teacher at church.....3 Health worker.....4	
5	Has your parent /guardian ever referred/advised you to go to a health facility for Sexual and reproductive Health issues?	Yes.....1 No2	
6	Do you get sexual and reproductive health	Yes.....1	

	education at school?	No.....2	
7	If Yes, who gives that Sexual education?	
8	Has the sexual health educator ever referred/advised you to go to a health centre for further help?	Yes1 No2	
9	How often do you get Sexual and reproductive health education in school?	Once a week.....1 Once a month.....2 Once a term.....3 Once a year.....4	
10	Do you have access to materials on sexual issues at school?	Yes.....1 No..... 2	
11	Is the statement true or false?		
A	A girl will get pregnant even on the first time of having sex!		
B	You can get STI s only if you have sex many times but not once		
C	It is indisciplin e to talk about sex and sexual issues		
D	Condoms are used by only adult people above 20 years		
E	Post abortion care is given by tradition healers		

SECTION D: UTILISATION OF ASRH SERVICES

1	<p>Have you gone to a health facility for any of the following services? Sexual health education; Condom acquisition, diagnosis and treatment of STIs; voluntary counseling, testing and treatment of HIV, Post abortion care.</p>	<p>Yes.....1 No.....</p>	
2	<p>Which one did you use when you went to the health facility?</p>	<p>1= diagnosis and treatment of STIs 2= voluntary counseling, testing and treatment of HIV 3= post abortion care 4= Sexual health education 5=condom acquisition/use</p>	
3	<p>When did you last use the services given above?</p>	<p>1=three months 2=six months, 3= one year 4= two years 5= above two years.</p>	

Thank you so much for your time!

Appendix III: Key informative Guide


Good day Sir/Madam, I am Nandagala Rose Kajubi, a Master of public health student at Bugema University. I am conducting a study about the factors associated to utilization of Sexual and Reproductive Health (SRH) services among adolescents in Luwero town council Luwero district. I would like to share with you some information about Adolescent sexual and reproductive health (ASRH) services. This will be a brief interview. Results from this interview will be purely for academic purposes and will remain confidential. Kindly respond to these questions and feel free.

1. What SRH services are offered to adolescents and where?
2. How do communities (school, religious forums, village members including families) influence the way services are done and how they are used by adolescents?
3. What do you think about teen pregnant girls; and Teens who use contraceptives?
4. How often do you experience stock outs for drugs and ASRH supplies? (For ASRH service providers).
5. What challenges have you come across as you help adolescents with their sexual needs?
6. What suggestions do you have in helping adolescents with their sexual and reproductive health needs?

Appendix IV: Introductory Letter to Institutional Review Board (IRB)

BUGEMA UNIVERSITY

Main Campus
32km, Gayaza - Zirobwe Road
P.O. Box 6529
KAMPALA - UGANDA
Tel: 256-312-351400
Fax: 256-312-351460
Website: www.bugemauniv.ac.ug



Kampala Campus
2 miles Bombo Road
Between Total Petrol Station
& Makerere Yellow Primary Sch.
Muganzi-Awongerera Rd
P.O. Box 6529 KAMPALA - (U)
Tel: +256 312 266 630
+256 312 266 631

SCHOOL OF POSTGRADUATE

June 21, 2018

To Whom It May Concern

RE: RECOMMENDATION TO INSTITUTIONAL REVIEW BOARD (IRB)

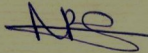
This is to certify that **Nandagala Rose** is a student of Bugema University pursuing a Masters degree in Public Health.

Rose has defended his/her proposal entitled **"COMMUNITY FACTORS ASSOCIATED TO UTILIZATION OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG ADOLESCENTS IN LUWEERO TOWN COUNCIL"** and it has been approved pending IRB ethics review.

The purpose of this letter is to request your IRB to assist him/her in securing ethics approval before going for data collection.

Any assistance extended to her is highly appreciated.

Sincerely,


Rosette Kabuye, PhD
Dean, School of Graduate Studies

A CHARTERED SEVENTH-DAY ADVENTIST INSTITUTION

MISSION: "To offer an excellent and distinctive holistic Christian education designed to prepare our students through training, research and scholarship for productive lives of useful service to God and to Society with uncompromising integrity, honesty and loyalty."

Appendix V: Introductory Letter for Data Collection

BUGEMA UNIVERSITY

Main Campus
32km, Gayaza - Zirabwe Road
P.O. Box 6529
KAMPALA - UGANDA
Tel: 256-312-351400
Fax: 256-312-351460



Kampala Campus
2 miles Bombo Road
Between Total Petrol Station
& Makerere Yellow Primary Sch.
Muganzi-Awongerera Rd
P.O. Box 6529 KAMPALA - (U)

Website: www.bugemauniv.ac.ug

Tel: +256 312 266 630
+256 312 266 631

SCHOOL OF POSTGRADUATE

June 21, 2018

To Whom It May Concern

RE: DATA COLLECTION

This is to certify that **Nandagala Rose Kabuye** is a student of Bugema University pursuing a Masters degree in Public Health.

The purpose of this letter is to request you permit her carry out data collection for her research entitled "**FACTORS ASSOCIATED TO UTILIZATION OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG ADOLESCENTS IN LUWERO TOWN COUNCIL.**"

The research will be based on utmost ethical considerations and the findings will be for academic purposes and of benefit to the Community.

Any assistance extended to her is highly appreciated.

Sincerely,




Rosette Kabuye, PhD
Dean, School of Graduate Studies

A CHARTERED SEVENTH-DAY ADVENTIST INSTITUTION

MISSION: "To offer an excellent and distinctive holistic Christian education designed to prepare our students through training, research and scholarship for productive lives of useful service to God and to Society with uncompromising integrity, honesty and loyalty."

Appendix VI: IRB/ REC Ethical Approval Letter



The AIDS Support Organisation (TASO) Uganda Ltd.

TASO Headquarters
Mulago Hospital Complex
P.O. Box 10443, Kampala-Uganda
Tel: +256 414 532 580/1
Fax: +256 414 541 288
E-mail: mail@tasouganda.org
Website: www.tasouganda.org

20th July, 2018

TASO TRAINING CENTRE
Kanyanya Off Gayaza-Road,
Alter Mwerwe
P.O. Box 10443, Kampala
Tel: +256 414 567 837
Fax: +256 414 568 704
E-mail: training@tasouganda.org

SERVICE CENTRES
TASO ENTEBBE
Plot 15-17 Lugard Avenue
P.O. Box 235, Entebbe
Tel: 0414 320 030/0752 774 135
E-mail: entebbe@tasouganda.org

TASO GULU
Plot 4 Mathew Lukwalya Road
P.O. Box 347, Gulu
Tel: 0471 432743/ 0752 774142
Fax: 0471 432599
E-mail: gulu@tasouganda.org

TASO JINJA
Jinja Referral Hospital
P. O. Box 577, Jinja
Tel: 0393 260 117/0752 774 147
Fax: 0434 120 362
E-mail: jinja@tasouganda.org

TASO MASAKA
Masaka Hospital
P.O. Box 1679, Masaka
Tel: 0392 749 998/0752 774 145
E-mail: masaka@tasouganda.org

TASO MASINDI
Masindi Hospital
P.O. Box 117, Masindi
Tel: 0465 420 638/0752 774 144
Fax: 0465 420 638
E-mail: masindi@tasouganda.org

TASO MBALE
Mbale Hospital
P.O. Box 2250, Mbale
Tel: 0454 433 507/0752 774 137
Fax: 0454 435 851
E-mail: mbale@tasouganda.org

TASO MBARARA
Plot 25 and 27 Hospital Road
P.O. Box 1010, Mbarara
Tel: 0485 421 323/0752 774 136
Fax: 0485 421 323
E-mail: mbarara@tasouganda.org

TASO MULAGO
Mulago Hospital
P.O. Box 11495, Kampala
Tel: 0414 530 034/0752 774 139
Fax: 0414 541 288
E-mail: mulago@tasouganda.org

TASO RUKUNGIRI
Ishasha Road
P.O. Box 350, Rukungiri
Tel: 0486 442 610/0752 774 141
Fax: 0486 442 613
E-mail: rukungiri@tasouganda.org

TASO SOROTI
Soroti Hospital
P.O. Box 422, Soroti
Tel: 0454 461 369/0752 774 143
Fax: 0454 461 042
E-mail: soroti@tasouganda.org

TASO TORORO
Plot 30, Cox Road
P.O. Box 777, Tororo
Tel: 0454 442 009/0752 774 140
Fax: 0454 445 334
E-mail: tororo@tasouganda.org

DISCRETE PROJECTS
**GRANTS MANAGEMENT UNIT /
GLOBAL FUND**
House of Hope, Plot 10,
Windfall Loop
P.O. Box 10443, Kampala
Tel: 0414 259 555/0752 774 109
E-mail: mail@tasouganda.org

TASO-KAROMOJA PROJECT
Plot 10, Independence Avenue
P.O. Box 131 Moroto
Tel: 0752 744 782
E-mail: mail@tasouganda.org

TORORO LABORATORY HUB
Tororo Hospital
P.O. Box 777, Tororo
Tel: 0454 442 009/0752 774 723
Fax: 0454 445 334
E-mail: hub@tasouganda.org

Our Ref: TASOREC/28/18-UG-REC-009

Nandagala Rose Kajubi
Bugema University, Kampala
rosekajubim@gmail.com

Dear Rose,

RE: RESEARCH APPROVAL "FACTORS INFLUENCING UTILIZATION OF SEXUAL AND REPRODUCTIVE HEALTH SERVICES AMONG ADOLESCENTS IN LUWERO TOWN COUNCIL, LUWERO DISTRICT UGANDA."

Thank you for submitting an application for initial ethics review of the above-referenced research study. Your protocol was reviewed under the regular review procedure at the full committee meeting held on 20th July 2018, for the feedback comments of your correspondence dated, 18th July 2018.

TASO REC is content to give a favorable ethical opinion of the research and annual approval has been granted, effective 20th July 2018, valid until 19th July 2019.

The review and approval includes the following:

Document Type	Date	Version
1. The Study Proposal.	18/07/2018	2.0
2. Informed Consent and Assent Forms.	20/07/2018	2.0
3. Data Collection Instruments.	21/06/2018	1.0
4. TASO REC Research Review Application and DOC of Interest Form.	21/06/2018	1.0
5. Letter of Introduction – Bugema University, Kampala.	21/06/2018	

Amendments: All proposed changes to the study (including personnel, procedures, or documents) must be approved by the REC in advance through the amendment process before implementation.

Adverse Events/Unanticipated Problems: You must inform the REC of all unanticipated problems and adverse events that occur during your research study.

Site Monitoring: TASO REC undertakes site monitoring visits to verify that the rights and welfare of participants are being protected; to ensure that data is accurate, complete and that the protocol is in compliance with the guidelines and SOPs.

Study Reports: It is a requirement by the TASO REC that you submit timely annual progress reports.

Continuing Review application due date (60 days prior to expiration date).

Sincerely,



Dr. Kagimu David
Vice Chairperson, TASO RESEARCH ETHICS COMMITTEE (REC)
CC: Executive Director, TASO (U) Limited
CC: Uganda National Council for Science & Technology (UNCST)

Appendix VII: Acceptance Letter for Data Collection

TELEPHONE: : 0393691149
: 0414610063 dho
E-mail: cao_luwero@gmail.com
cfo_luwero@gmail.com
dho_luwero@yahoo.com
Website: www.luwero-district.co.ug
IN ANY CORRESPONDENCE ON
THIS SUBJECT PLEASE QUOTE: *med*



**LUWERO DISTRICT
LOCAL GOVERNMENT**
P.O. Box 78,
Luwero.

OFFICE OF THE DISTRICT HEALTH OFFICER

26th July, 2018.

TO WHOM IT MAY CONCERN

RE: DATA COLLECTION:

This is to certify that **Nandagala Rose Kajubi** a student of Bugema University pursuing a Masters Degree in Public Health has reported to this office.

The purpose of this letter is to request you permit her carry out data collection for her research entitled "**Factors associated to utilization of sexual and reproductive health services among adolescents in Luwero Town Council**".

The research will be based on utmost ethical considerations and the findings will be for academic purposes and of benefit to community.

Any assistance extended to her is highly appreciated.

Yours sincerely,


DR. INNOCENT NKONWA
DISTRICT HEALTH OFFICER, LUWERO
Tel: 0414 610063/200907271

Appendix VIII: Tables for Descriptive Analysis

Descriptive Analysis for Sex of Respondents

Sex					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	88	44.9	44.9	44.9
	Female	108	55.1	55.1	100.0
	Total	196	100.0	100.0	

Descriptive Analysis for Knowledge Levels of Adolescents

Knowledge Level Index Score					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	66	33.7	33.7	33.7
	Low	130	66.3	66.3	100.0
	Total	196	100.0	100.0	

Descriptive Analysis for Sexual Engagement of Adolescents

Sexual Engagement					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	110	56.1	56.1	56.1
	No	86	43.9	43.9	100.0
	Total	196	100.0	100.0	

Descriptive Analysis for Health Worker's Attitude

HW Friendly (Attitude)					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	127	64.8	64.8	64.8
	No	69	35.2	35.2	100.0
	Total	196	100.0	100.0	

Descriptive Analysis for Availability of Services

Services Available Satisfying					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Yes	139	70.9	70.9	70.9
	No	57	29.1	29.1	100.0
	Total	196	100.0	100.0	

Descriptive Analysis for Waiting Time

Time Taken/ Spent					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Short Time	78	39.8	39.8	39.8
	Long Time	118	60.2	60.2	100.0
	Total	196	100.0	100.0	

Descriptive Analysis for Family Support

Family Support Index Score					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	70	35.7	35.7	35.7
	Low	126	64.3	64.3	100.0
	Total	196	100.0	100.0	

Descriptive Analysis for School Support

School Support Index					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	High	120	61.2	61.2	61.2
	Low	76	38.8	38.8	100.0
	Total	196	100.0	100.0	

Descriptive Analysis for Myths & Misconceptions

Myths Index Score					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Low level (all answered correct)	45	23.0	23.0	23.0
	High level (at least one answered wrong)	151	77.0	77.0	100.0
	Total	196	100.0	100.0	

Appendix IX: Bivariate Logistic Regression Analysis Tables

Logistic Regression Analysis for Knowledge Levels (Crude Odds Ratio)

Variables in the Equation									
								95.0% C.I. for EXP(B)	
		B	S.E.	Wald	Df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	AQN45INDEX	-.868	.369	5.548	1	.019	.420	.204	.864
	Constant	2.372	.664	12.749	1	.000	10.721		
a. Variable(s) entered on step 1: AQN45INDEX.									

Logistic Regression Analysis for Sexual Activity (Crude Odds Ratio)

Variables in the Equation									
								95.0% C.I. for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	AQN7	.730	.332	4.845	1	.028	2.075	1.083	3.975
	Constant	-.131	.479	.075	1	.785	.877		
a. Variable(s) entered on step 1: AQN7.									

Logistic Regression Analysis for Health Worker's Attitude (Crude Odds Ratio)

Variables in the Equation									
								95.0% C.I. for EXP(B)	
		B	S.E.	Wald	df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	BQN1	-.732	.323	5.124	1	.024	.481	.255	.907
	Constant	1.905	.485	15.418	1	.000	6.721		
a. Variable(s) entered on step 1: BQN1.									

Logistic Regression Analysis for Family Support (Crude Odds Ratio)

Variables in the Equation									
								95.0% C.I. for EXP(B)	
		B	S.E.	Wald	Df	Sig.	Exp(B)	Lower	Upper
Step 1 ^a	CQN1to5INDEX	-.988	.368	7.219	1	.007	.372	.181	.765
	Constant	2.563	.661	15.040	1	.000	12.978		
a. Variable(s) entered on step 1:									
CQN1to5INDEX.									

Appendix X: Multivariate Logistic Regression Analysis Table

Variables in the Equation									
		B	S.E.	Wald	Df	Sig.	Exp(B)	95.0% C.I.for EXP(B)	
								Lower	Upper
Step 1 ^a	AQN45INDEX	-.719	.383	3.529	1	.060	.487	.230	1.032
	AQN7	.746	.344	4.707	1	.030	2.109	1.075	4.139
	BQN1	-.510	.343	2.206	1	.138	.601	.307	1.177
	CQN1to5INDEX	-.769	.387	3.944	1	.047	.463	.217	.990
	Constant	3.083	1.040	8.782	1	.003	21.818		
a. Variable(s) entered on step 1: AQN45INDEX, AQN7, BQN1, CQN1to5INDEX.									