FACTORS INFLUENCING THE UTILIZATION OF REPRODUCTIVE HEALTH SERVICES AMONG ADOLESCENTS (14-19YEARS) IN MADDU SUBCOUNTY: GOMBA DISTRICT

BY

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DECLARATION

I Namakula Harriet declare that this research report under the title, "**Factors influencing the utilization of reproductive health services among adolescents (14-19years) in Maddu Sub County: Gomba District",** is original and has never been submitted to any institution of higher learning for any academic award.

Signature: …….. Date: ……

Namakula Harriet (Researcher)

APPROVAL

I confirm that the work reported in this research report under the title, "**Factors influencing the utilization of reproductive health services among adolescents (14-19years) in Maddu Sub County: Gomba District**", was carried out by the student under my supervision.

Signature: …….. Date: ……

Ms. Judith Apio (Supervisor)

DEDICATION

This study is dedicated to my beloved Mother, Deborah Nsonyi and the children James, Martin, Godfrey, Christine and Suubi. Also dedicate to my Husband and my children, Alisha and Adnan.

ACKNOWLEDGEMENT

I have the pleasure to acknowledge the contribution made by a number of persons that enabled me to complete my research report.

I am deeply grateful to my supervisor Ms Apio Judith for the patience as she guided me through the research, without her professional input this research would have been difficult to elevate to this level.

I also acknowledge with appreciation the contribution made by Mr. Saleh Ssenyonjo and cooperation made by the DHO Gomba District and his team that granted me the opportunity to navigate through the youths who willingly provided necessary information and support during data collection.

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LIST OF ABBREVIATIONS

ED	:	Emergency Department
FP	:	Family Planning
HPV	:	Human Immunodeficiency Virus
MOH	**:**	Ministry of Health
RHS	**:**	Reproductive Health Services
STDs	**:**	Sexually Transmitted Diseases
STIs	:	Sexually Transmitted Infections
WHO	**:**	World Health Organization

DEFINITION OF OPERATIONAL TERMS

Reproductive Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes.

Sexually Transmitted Diseases (STDs), or sexually transmitted infections (STIs), are infections that are passed from one person to another through sexual contact.

ABSTRACT

Introduction: It is important to note that adolescents and the youths form the backbone of economic development of any country their health is a worthwhile investment for the growth and development, yet they are highly vulnerable to conditions and issues which are reproductive health in nature and they are preventable, yet little is done. This attracted the researcher to carry out a study which was guided by specific objectives that included; determining the level of utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County, identifying demographic, socio-economic and health facility system factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

Methodology: The study used a cross sectional research design that employed quantitative methods for data collection and analysis. A sample size of 382 respondents who were adolescents was selected using simple random sampling technique. Data was collected using a questionnaire.

Results: Findings indicated that out of the 382 respondents, a few 118 (31%) utilized Reproductive Health Services. Social demographic factors were; primary education (AOR=63.24, 95% CI: 5.83-685.41, P=0.001), secondary education (AOR=38.40, 95% CI: 7.01-210.38, P=0.001), tertiary education (AOR=7.45, 95% CI: 1.70-32.71, P=0.008), widows (AOR=0.04 95% CI: 0.01-0.39, P=0.005) and being in school (AOR=99.81, 95% CI: 0.06-0.63, P=0.006). Social economic factors were; never felt stigmatized to seek RHS (AOR=23.16, 95% CI: 3.37-159.18, P=0.001), found accessing RHS unaffordable (AOR=0.11, 95% CI: 0.04-0.27, P=0.001) and not staying with their parents (AOR=13.88, 95% CI: 4.24-45.43, P=0.001). Health system factors included not having received information on RHS on a routine basis (AOR=30.36, 95% CI: 5.51-167.41, P=0.001) and not having mobile and flexible RHS in the area were less likely to utilize RHS (AOR=0.018, 95% CI: 0.003-0.096, P=0.001).

Conclusion: There was low utilization of Reproductive Health Services where a third of the adolescents utilized them. Utilization of RHS was associated with having low levels of education, being in single and being in school, not feeling stigmatized to seek RHS, affordability to RHS in terms of costs and distance to the facility and not staying with parents, having received information on RHS on a routine basis and having mobile and flexible RHS in the area were less likely to utilize RHS.

CHAPTER ONE: INTRODUCTION

1.1 Introduction

This chapter entails the background of the study, problem statement, objectives and research questions of the study, justification and conceptual framework.

1.2 Background

World over, there are 1.8 billion young people aged 10 to 24 years representing one quarter of the world's population with over 90% living in developing countries (Population References Bureau 2006). According to the 2014 National Population and Housing Census, the Ugandan population is projected to reach 43.5 million by 2021. About 50% of the population is estimated to be adolescent/youths (Uganda National Bureau of statistics census report, 2014). These young people have been largely neglected, leaving them vulnerable to reproductive health problems like sexually transmitted disease including HIV/AIDS, child pregnancy, unsafe abortion and harmful practices.

The International Conference on Population and Development (ICPD) 2010 identified and recommended that; Adolescent sexual and reproductive health issues can be addressed through the promotion of responsible and healthy reproductive and sexual behavior, including voluntary abstinence and the provision of appropriate services and counseling specifically suitable for that age group (WHO, 2012). Countries were encouraged to ensure that programs and attributes of health-care providers do not restrict youths' access to and utilization of the services and information they need. These services must safeguard the right of adolescent to privacy, confidentiality, respect and informed consent, while respecting cultural values and religious beliefs as well as the rights, duties and responsibilities of parents. (RHU annual Report. 2012).

In pursuit of reproductive health agenda which was deliberated in ICPD (2010) held in Cairo, the government adopted the Uganda Reproductive Health Policy and Practice (URHPP 2011), whose aim

was to identify reproductive health priority areas as; family planning, safe motherland, child survival initiatives, promotion of adolescent and youth reproductive health, Management of STIs including HIV/AIDs, management of infertility, harmful practices like early and forced marriages, female genital mutilation (FGM), drug and substance abuse (RHU annual Report. 2015).

Within the context of this Policy, standards for reproductive health service providers were released and implementation plans were developed into guide reproductive health needs in the country. Ministry of Health in Uganda formally approved the country's Reproductive Health Policy and Practice (URHPP) to provide a framework for equitable, efficient and effective delivery of quality reproductive health services to the population especially those considered vulnerable such as the adolescent / youths (The Health Digest 2016).

The primary objective of the policy is to guide planning, standardization, implementation and monitoring and evaluation of reproductive health care provided by various stakeholders. It focuses on; safe motherland, maternal and neonatal health, family planning adolescent / youth sexual and reproductive health. All these aims to improve maternal health and reducing neonatal and child mortality rate which contribute greatly towards realization of millennium development goals. The government of Uganda through the Ministry of Health together with the NGOs, FBOs, CBOs, and the private sectors has shown a tremendous commitment in providing a comprehensive and integrated system of reproductive health care that offers a full range of services in order to improve reproductive health status for all Ugandans (MOH, 2010).

Despite these initiatives, adolescents / youths still face a lot of challenges more especially issues related to sex and sexuality like; early pregnancy, unsafely performed abortion, and HIV and other sexually transmitted infections (STIs) which results in massive school dropout, early marriages increase in neonatal and child mortality.

The health care services given to adolescent/youths in schools mainly focus on services such as physical environment and sanitation, nutritional status, immunization and treatment of common child illnesses. No special program meant to address on reproductive health needs which are the core issue in this age bracket (Uganda Schools Health Policy, 2008).

The information gap on reproductive health issue amongst adolescent / youths is one of the factors resulting in premarital sex among adolescent leading to abortion, school dropouts, early marriages and maternal mortality.

It is important to note that adolescents and the youths form a critical national resource which is the backbone of economic development of any country their health is a worthwhile investment for the growth and development, yet they are highly vulnerable to conditions and issues which are reproductive health in nature and they are preventable, yet little is done. The aim of the study is therefore to explore all factors influencing utilization of reproductive health services among youths between 14-19 years in Maddu sub County, Gomba district.

1.2 Statement of the problem

Disparities exist in the utilization of Sexual and Reproductive Health (SRH) services by adolescents compared with other age groups. Yet, adolescents are particularly at risk of unplanned pregnancy and pregnancy risk factors (Leonardi, 2019). In addition, a negative perception exists among the community regarding a need to inform adolescents about SRH (Obach, Sadler & Jofre, 2017). Consequently, different studies have indicated that adolescents have inadequate utilization of SRH. For instance; Vongxay et al., (2019) showed that 65.5% of adolescents had inadequate SRH. Othman et al. (2019) revealed that only 6.9% of adolescents in their study visited a health facility for SRH services.

As a response to the reproductive health needs of youth in Uganda, the Ministry of Health integrated Youth Friendly Reproductive Health services into the health care service delivery system through the

Youth Friendly Services Program (YFSP) spearheaded by Naguru Teenage Information Center and other NGOs. The government further adopted the Adolescent reproductive Health and Development Policy (ARH&D) in 2010 with a commitment to address adolescent reproductive health issues raised by the National Population Policy for Sustainable Development and the Uganda Health Policy Framework (MOH, 2005). The target of this policy was to increase the proportion of facilities offering youth-friendly service to 85%, up from 11% (RHU annual Report. 2015). Non-Government Organizations (NGOs) have also tried to increase utilization to SRH among adolescents. For example, The Straight Talk Foundation and Nagulu Teenage and Health Information Center (NTHIC) have started various Youth Friendly Services in different parts of Uganda.

Despite the enormous effort from the Ministry of Health and other relevant partners, there is persistence of under-utilization SRH among adolescents. This is reflected in the enormousearly pregnancies and other reproductive health challenges such as; sexually transmitted infections including HIV/AIDS, teenage pregnancy, unsafe abortion. This in part could be related to the uptake of SRH yet, the extent of utilization of SRH among adolescents remains less studied. Thus, this study was set out to determine the factors affecting utilization of reproductive health services among adolescents aged 14-19 years.

1.3 Objectives of the study

1.3.1 General objective

To determine the factors affecting utilization of reproductive health services among adolescents aged 14-19 years in Maddu Sub County.

1.3.2 Specific objective

i. To determine the level of utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

ii. To identify demographic factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

iii. To identify socio-economic factors influencing utilization of Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

iv. To establish the health facility system factors that influence the utilization of Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

1.4 Researched questions

i. What is the level of utilization of reproductive health services among adolescents aged 14-19 years in Maddu Sub County?

ii. What are the socio demographic factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County?

iii. What are the socio-economic factors influencing utilization of Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County?

iv. What are the health-system resources influencing the provision of Reproductive health services among adolescents aged 14-19 years in Maddu Sub County?

1.5 Significance of the study

This study adds to the small, but growing knowledge on SRH in Uganda by highlighting the extent and determinants of utilization of SRH services among adolescents– such evidence can be utilized by policy makers and service providers in setting interventions to increase uptake of SRH in this age group.

This study will assess health-related factors to utilization of SRH among adolescents. This is a wonderful opportunity to meaningfully explore current practice and how it could influence uptake of SRH services. This has strong, direct implications for the development of the practice and science of

nursing by contributing to development of health services and clinical nursing that fosters health and wellbeing of adolescents. This is in line with the research strategy of School of Nursing Science ("promoting health and wellbeing of patients, families and communities"), and indeed the core of nursing science.

Furthermore, it is paramount to support scholarship in SRH and development of evidence-based interventions in this domain.

1.6 Conceptual framework

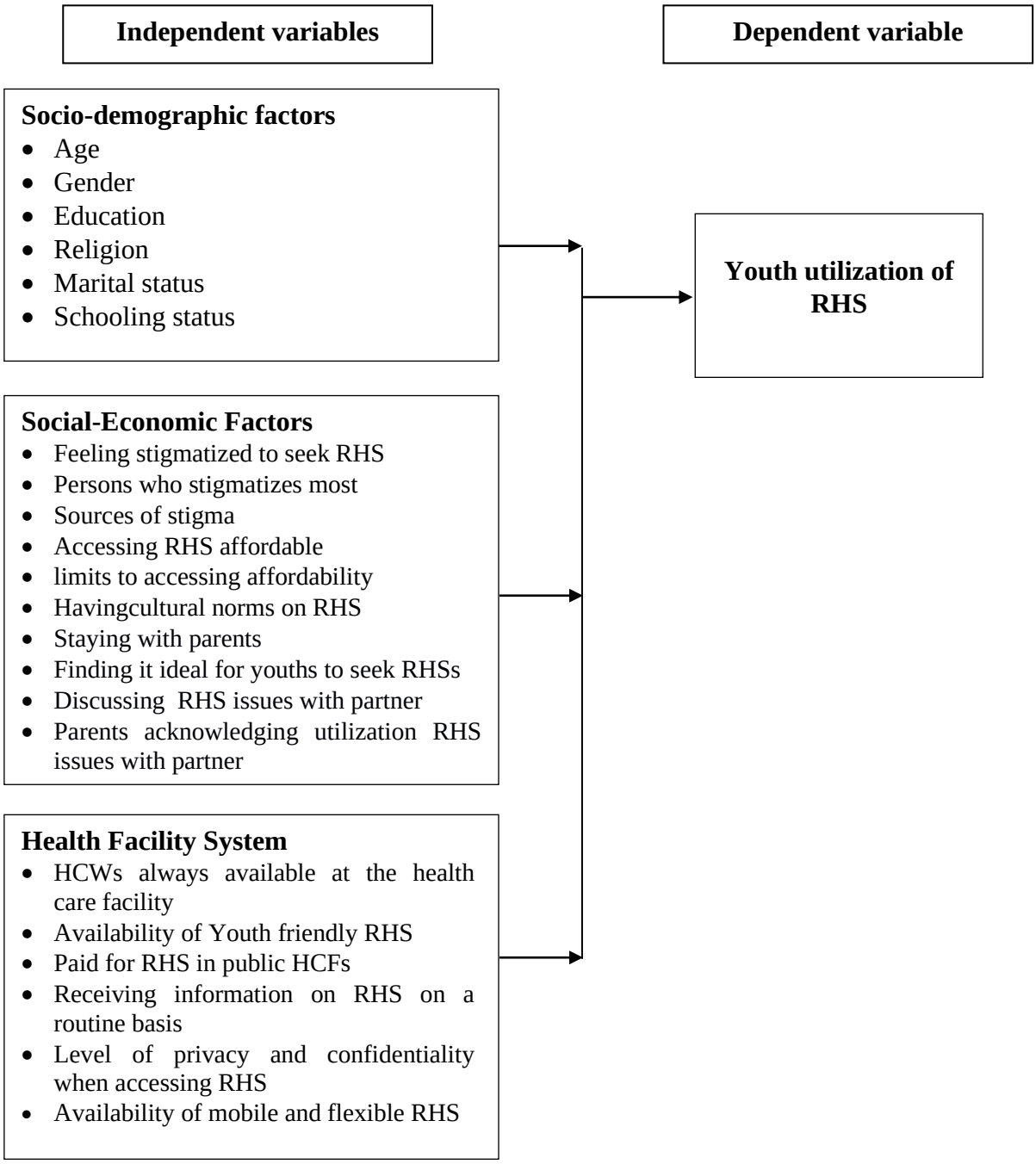


Figure 1: Conceptual framework of the study about factors affecting utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

Socio-demographic factors included; age, gender, education, Religion, marital status and schooling status

Social-Economic Factors included; feeling stigmatized to seek RHS, Persons who stigmatizes most, Sources of stigma, Accessing RHS affordable, limits to accessing affordability, Having cultural norms on RHS, Staying with parents, Finding it ideal for youths to seek RHSs, Discussing RHS issues with partner and Parents acknowledging utilization RHS issues with partner

Health Facility System included; HCWs always available at the health care facility, Availability of Youth friendly RHS, Paid for RHS in public HCFs, Receiving information on RHS on a routine basis, Level of privacy and confidentiality when accessing RHS and Availability of mobile and flexible RHS

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This section presents literature related to the objectives of the study. Findings after a database search on utilization of RHS among adolescents are presented as follows:

2.2 Utilization of RHS among adolescents

Findings on the prevalence of utilization of RHS among adolescents vary across studies, findings on this domain are presented in this subsection:

In the US, Flanagan *et al* (2019) conducted a study among 649 pregnant adolescents' access to sexual and reproductive health services in New York City. Their study adopted a longitudinal study design to examined access to, and factors associated with, receipt of sexual and reproductive health services deemed essential by the World Health Organization. Participants included 649 pregnant adolescents, ages 14-21 who were enrolled in a clustered randomized controlled trial from 2008 to 2012. Data were collected via medical record abstraction and structured surveys during the second and third trimesters of pregnancy and 12-months postpartum. Only 4% of participants received all four core aspects of sexual and reproductive health services.

In Ethiopia, Tlaye *et al* (2018) conducted a community-based cross-sectional study to assess the level of reproductive health services utilization and its associated factors among adolescents who live in Debre Berhan town. The authors used a multi-stage systematic sampling technique was applied to select a sample of 648 adolescents: their findings revealed that 33.8% of adolescents utilized RHS components.

In another study: Gebreyesus and colleagues (2019) evaluated the determinants of RHS utilization among rural female adolescents using a community-based cross-sectional study in Ethiopia in a sample of 844 female adolescents aged 15-19. 95.5% of heard about reproductive services from different sources and 69.7% of them utilized the reproductive health services within the last 12 months. Lower

RHS is reported in another study: Birhanu, Tushune& Jebena, (2018) conducted a cross sectional study among 1,262 adolescents in Ethiopia: findings revealed that 36.5% of them utilized RHS. Ansha et al., (2017) assessed RHS utilization and associatedfactors among adolescents in Anchar District, West Hararghe Zone, Oromia Region, East Ethiopia. A community based cross-sectional study using quantitative and qualitative method of data collection were adopted in their study. 402 completed their survey. 39.3% female adolescents have ever used family planning.

In Uganda, Nuwasiima *et al* (2019) assessed the acceptability and utilization of SRH among youth living in Kampala using a cross-sectional design in a sample of 280. 72% utilized the SRH. Short-term contraceptive users were more likely to discontinue use of SRH.

2.3 Factors associated with utilization of RHS among adolescents

Here, we report on factors associated to utilization of RHS, the findings informed the design of our study objectives, conceptual framework, and the methodology. The factors are presented as follows:

2.3.1 Socio-demographics factors influencing utilization of RHS among adolescents

Flanagan et al (2019) reported that adolescents <18 years old had lower odds of contraception use (OR = 0.46, CI 0.27-0.78), having had an HIV test (OR = 0.35, CI 0.16-0.78), and high sexual health knowledge (OR = 0. 59, CI 0.37-0.95), compared to those ≥18 years.

Odo *et al.,* (2018) investigated the availability and accessibility of RHS in Enugu State, Nigeria using a mixed methods design in 192 health facilities with a sample of 1447 adolescents (12-22 years). Their findings revealed that RHS access utilization among adolescents was associated with age, education and income ($p \leq .05$).

Gebreyesus and colleagues (2019) reported that age of 16-20 years (AOR = 1.85, 95%CI: 1.17-2.92), mother's educational status (being illiterate (AOR = .33, 95%CI:.14-.77)), discussion about

reproductive health services with their family (AOR = 8.02, 9%CI:5.52-11.66), being Merchant (AOR = 2.7995%CI:1.11-6.96), unemployed (AOR = 2.90, 95%CI:1.19-7.06) or student (AOR:2.38, 95%CI:1.04-5.42) in occupation, high perceived severity (AOR = 4.05, 95%CI:2.68-6.11), high perceived barriers (AOR = .44, 95%CI:.30-64) were independent predictors of RHS utilization among adolescents.

Ansha *et al.,* (2017) reported that males were more likely to use RHS than females and those that perceived themselves as high risk for HIV were also more likely to use RHS than their counterparts.

In Uganda, Nuwasiima *et al* (2019) revealed that participants in professional/managerial employment were more likely to discontinue compared to the unemployed. Participants of parity equal to two were 89% less likely to discontinue use of RHSs compared to those of parity equal to zero.

Knowledge related factors

Knowledge on RHS influences utilization of RHS among adolescents. There is a lower likelihood of utilization of RHS for adolescents with lower knowledge on RHS. Flanagan et al (2019) confirmed this notion, the authors noted that adolescents were significantly more likely to have high sexual health knowledge compared to other women (OR = 1.84, CI 1.05, 3.22) and contraception use (OR = 1.64, CI 1.07-2.53), but lower likelihood of high sexual health knowledge (OR = 0.52, CI 0.34-0.81), compared to US-born counterparts.

Self *et al.,* (2018) explored utilization of RHS among adolescents in Malawi using a qualitative approach: they performed 34 focus group discussions with youth aged 15-24 and parents or legal guardians of female youth Malawi. The authors revealed that adolescents were motivated to use family planning to protect themselves from sexually transmitted diseases and to prevent unwanted pregnancies. Females focused on the consequences of unplanned pregnancies and believed family

planning services were targeted primarily at them, while males thought family planning services targeted males and females equally. Misconceptions on contraception, the costs of services, and negative attitudes precluded the youth from utilizing RHS. They further report that while as parents acknowledged the role in supporting youth, most said they are reluctant to support youth using family planning.

Velonjara & colleagues (2018) examined knowledge, practices and factors influencing RHS use among Kenyan postpartum adolescents. The authors adopted a mixed methods study (cross-sectional design and four focus group discussions). The findings indicated that adolescent contraceptive decision-making and use were shaped by social norms of adolescent sexual behaviour. Lack of knowledge, community misinformation, and insufficient counseling correlated to lower RHS utilization.

2.3 Health system related factors associated with utilization of RHS

Onukwugha, (2019) review examines the literature on adolescents' and providers' views on access and use of RHS information and services using a systematic review of empirical studies. A total of 45 studies were included in the review. The review showed that adolescents and sexual health service providers had differing views on barriers and enablers to adolescent access to SRH services and often had contradictory views on youth-friendly services, service preferences, barriers and enablers of service use. While service providers perceived physical and financial barriers as fundamental, adolescents identified barriers emanating from providers' attitude as the key hindrance to their access and use of services. The review also revealed that the unprofessional attitudes of some service providers limit adolescents' access to RHS.

Boamah-Kaali (2018) assessed tailoring RHS to adolescents to align with their needs: their study highlighted the views of service providers using a qualitative approach with in-depth interviews among eight participants in Ghana. The authors reported that service providers perceived that it is a good idea

to tailor sexual and reproductive health services to the needs of adolescents. They admitted that very limited sexual and reproductive health programs targeting adolescent needs were available in the study area. Service providers also reported very low levels of health facilities use by adolescents for sexual and reproductive health information and services. Health professionals attributed the poor sexual and reproductive health services utilization by adolescents to stigma from the society and attitudes of service providers.

Odo *et al.,* (2018) investigated the availability and accessibility of RHS in Enugu State, Nigeria using a mixed methods design in 192 health facilities with a sample of 1447 adolescents (12-22 years). Their findings revealed that RHS were available but not financially accessible to adolescents. Adolescents' clinics were unavailable, and this could affect the access of RHS by adolescents.

Tlaye *et al.,* (2018) study in Ethiopia showed that adolescents who had discussed RHS with their sexual partner and peers were two times more likely to use RHS than their counter parts (AOR = 2.368, 95% CI: 1.168-4.802 and AOR = 2.360, 95% CI: 1.155-4.820 respectively). Adolescents who weren't co-resided with both their parents were also about two times more likely to utilize RHS than those who were living together (AOR = 2.570, 95% CI = 1.155-4.820). Positive perception on acquiring HPV urged the adolescents to use RHS twice than those who didn't perceive themselves as risky (AOR = 2.231, 95% CI: 1.001-4.975).

In South Africa, Müller *et al.,* (2018) analysed data from fifty in-depth qualitative interviews with representatives of organisations working with adolescents, sexual and gender minorities, and/or sexual and reproductive health and rights in Malawi, Mozambique, Namibia, Zambia and Zimbabwe. The authors reported that health policies in these settings double-marginalized in RHS for adolescents, LGBTs experience fear and are excluded from RHS due to real and perceived criminalization of consensual sexual behaviours between partners of the same.

Birhanu, Tushune& Jebena, (2018) indicated that advice on RHS is a major (67.2%) service sought followed by seeking-treatments (23.3%). Health centers were the major (65.0%) source of SRH services. Being married, being sexually active, father-child communication, religion and place of residence were significantly associated with use of sexual and reproductive health services. Lack of information about SRH, poor perceptions about SRH, feeling of shame, fear of being seen by others, restrictive cultural norms, lack of privacy, confidentiality and unavailability of services were deterring use of sexual and reproductive health services.

Ansha *et al.,* (2017) reported that lack of adolescent reproductive health services, harmful traditional Practices, lack of privacy and inconvenient service hour were reasons for not utilizing the service.

Furthermore, Ahmad *et al* (2019) characterized health system resources for providing adolescent RHS using an online survey of ED directors. They noted that ED directors are comfortable providing adolescent reproductive health care, and many individual- and ED-level opportunities exist to provide improved reproductive health care for adolescents in the ED.

Perceived barriers in accessing sexual and reproductive health services for youth in Lao People's Democratic Republic

Thongmixay`s (2019) qualitative study explored barriers perceived to RHS access among adolescents in Loa republic. The authors confirmed that the main barriers preventing young people from accessing RHS were related to cognitive accessibility and psychosocial accessibility. The cognitive accessibility barriers were a lack of sexual knowledge and a lack of awareness of services. Perceived barriers in psychosocial accessibility were the feelings of shyness and shame caused by negative cultural attitudes to premarital sex, and the fear of parents finding out about visits to public sexual and reproductive health services, due to lack of confidentiality in the services and among health providers. In addition,

the barriers of geographical accessibility, mainly insufficient availability of youth-friendly health clinics (Thongmixay *et al.,* 2019).

Among street adolescent, about 93% of street adolescents reported difficulty in accessing contraceptives. Behavioral change and sustainable access to SRH services are lacking among street adolescents. The Knowledge gap is more evident in early adolescents (10-13) period than the other classes. In general, street adolescents are deprived of access to SRH services. Mobile and flexible access to contraceptives should be designed targeting street adolescents (Ababor *et al.,* 2019).

CHAPTER THREE: METHODOLOGY

3.1 Introduction

The methods and materials that have been used in this study are presented in this section. These subsections include the design, study area, population, sample size, inclusion/exclusion criteria, variables, sampling technique, data collection, data management, data analysis, ethical considerations and the dissemination plan.

3.2 Study design

A descriptive cross-sectional design was adopted in this study. This design is chosen because it allows a researcher to estimate the proportion of a phenomenon under investigation within a specified time and its associated factors (Polit & Beck, 2017).

3.3 Study area

The study was conducted in Maddu sub County, Gomba. Maddu is one of the seven parishes in the Gomba district, central Uganda. The town is approximately 128 kilometers from Kampala capital city. The coordinates 0°12'58.0"N 31°40'02.0"E (Latitude: 0.216111; Longitude: 31.667222).

3.4 Study Population

Target Population: The study target population included adolescents between 14 to 19 years.

Accessible population: The accessible population was adolescents residing in Maddu-Gomba.

3.5 Inclusion and Exclusion Criteria

Inclusion criteria: Adolescents (14 to 19 years) were enrolled in the study. In addition, only those who personally accept to participate in the study with or without acceptance of their significant other were enrolled in the study.

Exclusion criteria: those who fulfil the above criteria but have limiting mental disorders that otherwise limit their capacity to respond to the survey questions were excluded from the study.

3.6 Sample size determination

The sample size was determined using the Krejcie and Morgan estimation (1970). Since there was no similar study on the phenomenon under study; this Krejcie& Morgan tables for determining sample size allowed the researchers all the provisions required to arrive at the sample size that is representative of the adolescents under study.

$s=X^2NP(1-P)+d^2(N-1)+ X^2P(1-P)$

s=required sample size

X^2=the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841)

N= the population

P=the population proportion (assumed to be 50 since this would provide the maximum sample size)

D= the degree of accuracy expressed as a proportion (0.05)

A sample size of 382 **(s)** that is representative of 75,000 adolescents **(N)** (Krejcie& Morgan, 1970) was considered in this study.

3.7 Variables and measures

Variables	Measure
Dependent variable	
Utilization of SRS services among Adolescents	Researcher-developed tool
Independent variables	
Demographic factors • Age • Education • Gender • Marital status	Researcher-developed socio-demographic form

• Schooling status	
Socio-economic & Socio-cultural factors • Felt stigmatized to seek RHS • Persons who stigmatizes most • Sources of stigma • Found accessing RHS affordable • limits to accessing affordability • Had cultural norms on RHS • Stayed with parents • Found it ideal for youths to seek RHSs • Discussed RHS issues with partner • Parents acknowledged utilized RHS issues with partner	Researcher-developed socio-demographic form
Health Facility System • HCWs always available at the health care facility • Availability of Youth friendly RHS • Paid for RHS in public HCFs • Receiving information on RHS on a routine basis • Level of privacy and confidentiality when accessing RHS • Availability of mobile and flexible RHS • Availability of supplies • Distance of the facility	

3.8 Sampling technique

Simple random sampling method was used in this study. This was chosen because it allows for selection of participants with each having equal chances of participation in the study. This enhanced the rigor of the study by minimizing selection bias (Polit & Beck, 2017). Out of the 75,000 adolescents in

the community, a sample of 382 respondents was selected using simple random sampling with the help of local leaders.

3.9 Data collection

Data outputs: The study generated quantitative data. This was generated from questionnaires that were administered to participants.

The student and research assistants conducted the data collection process using the tools in the table above (a demographic tool and the researcher-developed tool). Participants were recruited into the study at the setting.

The data collection process involved the following steps:

Information on participation in the study was sent to the participants through their respective local area chairpersons after obtaining ethical clearance and permission to conduct the study from relevant authorities. The chairperson was informed about the study through notifications during meetings, phone calls, Short Messaging Service (SMS).

Paper and pencil format were the form in which the documents and tools were administered.

The process of administering the paper document and tools for data collection was as follows:

i. The researcher and research assistants distributed the paper documents and tools in person to eligible participants. The tools were self-administered implying that the participants who could receive them could complete them without intervention of the researcher or research assistant (Polit & Beck. 2017).
ii. Initially, information about the study was given to eligible participants by the student. This was supplemented by clarifications on issues that required further explanation.
iii. Then, after having time enough to read those documents, they were asked if they are willing to participate in study and then signed the consent form.

Upon signing the consent form, the tools were given to the participants. The tools were completed immediately or within 48 hours. These were returned to the student.

3.10 Quality management

The tools were tested in this study and initially tested in a pilot study before use. This allowed correction of items that would not be clear to the participants before the tools were delivered in the main study.

3.11 Quality Control

Data collection instruments were checked for completeness, the dataset was cleaned before analysis and archiving.

3.12 Data analysis

3.12.1 Univariate Analysis

Data analysis was done using SPSS Version 27. Descriptive statistics including frequencies, means and standard deviations were done to reveal sample characteristics. To infer on the correlates between variables, inferential statistics using Pearson's test, analysis of variance and logistics regression analyses were done.

3.12.2 Bivariate Analysis

Bivariate analysis where chi-square test (χ^2) and correlation through cross tabulation was used to get the results. This showed the relationship between the independent variables (factors influencing utilization of RHS among adolescents) and dependent variable (utilization of RHS). The chi-square test established the level of association between each predictor variables and the dependent variable (utilization of RHS). The statistical significance of the values or p-value at 95% level of confidence where P-value equal or less than 0.05 was regarded as significant. This meant that categorical variable

had an association with the dependent variable or otherwise no significance existed if P-value was greater than 0.05, P-value < 0.05 was significant and P-value > 0.05 was insignificant.

3.12.3 Multivariate Analysis

The third section presents variables which assessed the utilization of RHS using binary logistic regression model. All the significant variables at bivariate analysis were used in the regression model and the results was reported using odds ratio with their corresponding confidence interval at 95%. Adjusted Odds Ratios greater that one (AOR> 1) meant a significant association between utilization of RHS and factors influencing utilization of RHS. Adjusted Odds Ratio less than one (AOR< 1) meant a negative association between utilization of RHS and individual predictor variables thus the association was protective. AOR=1 meant no association at all. In a nutshell the utilization of RHS was dependent on categorical predictor variables.

3.13 Ethical considerations

Ethical clearance was sought from the Research Ethics Committee of Clarke International University. The proposal was submitted to the authorities at the setting for approval. Clearance to collect data from the setting was also sought from the administration of the study settings to conduct the study.

Participants were given some time to reflect if they would wish to participate in the study. Upon voluntary acceptance to participate in the study, the participants were then asked to sign the consent form. Participation in the study was entirely voluntary. This followed clear explanation of the objectives of the study, explanation of what participation in the study involved, benefits and risks in the information sheet that was provided. The participants were allowed to withdraw from the study at any stage of the study.

The study involved minimal risks such discomfort that arose from the discussion and associated information. However, this was controlled by allowing the participant to highlight discussions that were found unpleasing or not willing to talk about at any time during the study.

3.13 Dissemination Plan

On completion of this research study, several copies are to be made and submitted to the following stakeholders as; three spiral bound copies are to be submitted to Clarke International University f y Publications from the study and a dissertation was available for sharing in journals and the university library respectively. The data will be saved for ten years for any further analysis that may arise thereafter.

CHAPTER FOUR: PRESENTATION OF RESULTS

4.0 Introduction

This chapter presents the results of the study in relation to the study specific objectives which included; determining the level of utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County, identifying demographic, socio-economic and health facility system factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

4.1 Level of utilization of the RHS among adolescents aged 14-19 years in Maddu Sub County

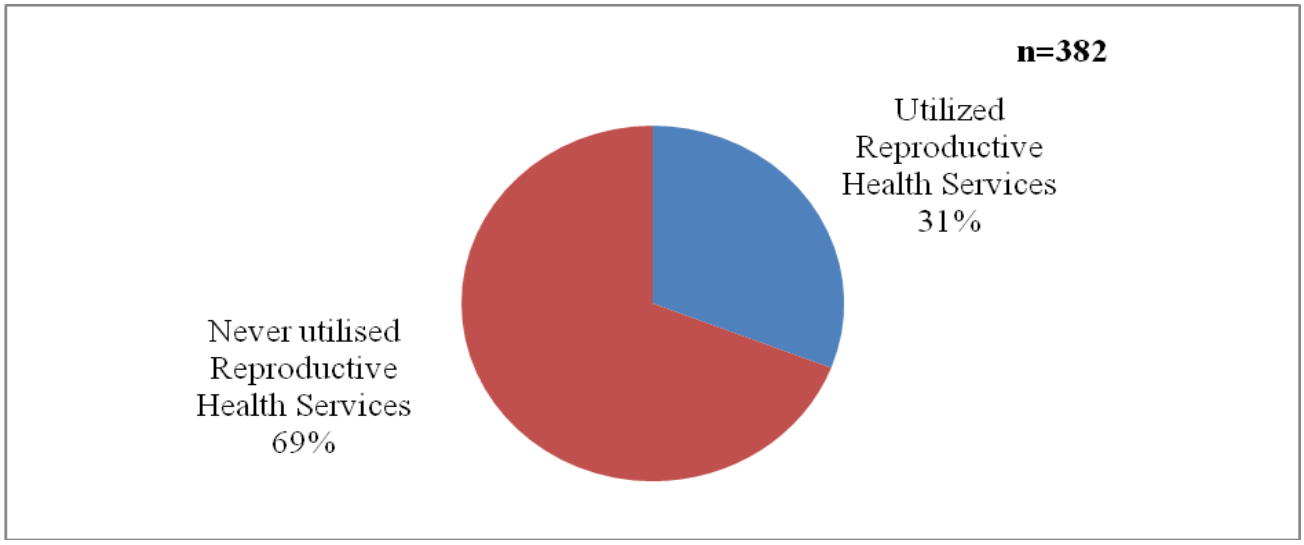
Table 1: Level of utilization of the RHS among adolescents aged 14-19 years n=382

	Reproductive Health Services	**Category**	**Frequency (n=382)**	**Percentage (%)**
1.	Family Planning	Utilized	117	31
		Not utilized	265	69
2.	HIV Testing and Counseling	Utilized	303	79
		Not utilized	79	21
3.	Screening and Treating STIs	Utilized	111	29
		Not utilized	271	71
4.	Menstrual Counseling	Utilized	91	24
		Not utilized	291	76
5.	Treatment of HIV/AIDS	Utilized	22	06
		Not utilized	370	94
6.	Adolescent Counseling	Utilized	56	15
		Not utilized	326	85
	Average utilization of Reproductive Health Services	**Utilized**	**118**	**31**
		Not utilized	**264**	**69**

Source: Primary Data

There were six parameters that were used to assess the utilization of RHS among adolescents in Maddu Sub County where out of the 382 respondents that participated in the study; majority 265 (69%) never utilized any modern family planning method, 303 (79%) utilized HIV Testing and Counseling services, 271 (71%) never utilized STIs screening and treatment services, 291 (76%) never utilized menstrual counseling services, 370 (94%) never utilized HIV/AIDS treatment services and 326 (85%) never utilized adolescent counseling services.

Figure 2: Level of utilization of the RHS among adolescents aged 14-19 years in Maddu Sub County n=382



Source: Primary Data 2021

Findings indicated that out of the 382 respondents that participated in the study, a few 118 (31%) utilized Reproductive Health Services while the most 264 (69%) never utilized Reproductive Health Services.

4.2 Demographic factors affecting the utilization of the RHS among adolescents aged 14-19 years in Maddu Sub County

4.2.1 Univariate analysis of demographic factors affecting the utilization of the RHS among adolescents aged 14-19 years in Maddu Sub County

Table 2: Univariate analysis of demographic factors affecting the utilization of the RHS among adolescents aged 14-19 years in Maddu Sub County n=382

Variables	Category	Frequency	Percentage
Age	14-16 years	102	26.7
	17-19 years	280	73.3
Gender	Females	236	61.8
	Males	146	38.2
Education	No formal education	24	6.3
	Primary education	136	35.6
	Secondary education	162	42.4
	Tertiary education	60	15.7
Religion	Catholics	148	38.7
	Muslims	46	12.0

	Protestants	128	33.5
	Others	60	15.7
Marital status	Single	286	74.9
	Married	53	13.9
	Widowed	6	1.6
	Separated	37	9.7
schooling status	Still in school	285	74.6
	Out of school	97	25.4

Source: Primary Data 2021

Table 2 about the univariate description of demographic factors affecting the utilization of the RHS among adolescents aged 14-19 years in Maddu Sub County revealed that, majority 280 (73%) were between 17-19 years, 236 (62%) were females, 162 (42%) had secondary education, 128 (34%) were protestants, 286 (75%) were married and 285 (75%) were still in school.

4.2.2 Bivariate analysis of demographic factors affecting the utilization of the RHS among adolescents aged 14-19 years in MadduSub County

Table 3: Bivariate analysis of demographic factors affecting the utilization of the RHS among adolescents aged 14-19 years in Maddu Sub County n=382

Variable	Category	Utilization of Reproductive Health Services		χ^2	P-value
		Utilized RHS	Never utilized RHS		
Age	14-16 years	23 (22.5%)	79 (77.5%)	4.54	0.033**
	17-19 years	95 (33.9%)	185 (66.1%)		
Gender	Females	92 (39.0%)	144 (61.0%)	18.94	0.001**
	Males	26 (17.8%)	120 (82.2%)		
Education	No formal	2 (8.3%)	22 (91.7%)	36.50	0.001**
	Primary	22 (16.2%)	114 (83.8%)		
	Secondary	63 (38.9%)	99 (61.1%)		
	Tertiary	31 (51.7%)	29 (48.3%)		
Religion	Catholics	22 (14.9%)	126 (85.1%)	47.70	0.001**
	Muslims	7 (15.2%)	39 (84.8%)		
	Protestants	58 (45.3%)	70 (54.7%)		
	Others	31(51.7%)	29 (48.3%)		
Marital status	Single	70 (24.5%)	216 (75.5%)	26.06	0.001**
	Married	31 (58.5%)	22 (41.5%)		
	Widowed	2 (33.3%)	4 (66.7%)		
	Separated	15 (40.5%)	22 (59.5%)		
Schooling status	Still in school	99 (34.7%)	186 (65.3%)	7.78	0.005**
	Out of school	19 (19.6%)	78 (80.4%)		

**** Denotes significance at 0.05 (95% CI)**

Social demographic factors that were statistically associated with the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County Age (χ^2=4.54, P=0.033), gender (χ^2=18.94, P=0.001), education (χ^2=36.50, P=0.001), religion (χ^2=47.70, P=0.001), marital status (χ^2=26.06, P=0.001) and schooling status (χ^2=7.78, P=0.005).

4.3 Socio-economic factors influencing utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

4.3.1 Univariate analysis of socio-economic factors influencing utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

Table 4: Univariate analysis of Socio-economic factors influencing utilization of RHS among adolescents aged 14-19 years in Maddu Sub County n=382

Variables	Category	Frequency	Percentage
Felt stigmatized to seek reproductive health services	Yes	208	54.5
	No	174	45.5
Persons who stigmatize most	Health care workers	11	05
	Peers	25	12
	Family Members	63	30
	Elders	31	15
	community members	79	38
Sources of stigma	Being infected with STIs	40	19
	Being promiscuous	101	48
	seeking abortion	68	33
Found accessing RHS	Yes	238	62.3
	No	144	37.7
limits to accessing affordability	Lack of money to pay for services	183	77
	Long distance	55	23
Had cultural norms that limit utilization of RHS	Yes	210	55.0
	No	172	45.0
Stayed with parents	Yes	292	76.4
	No	90	23.6
Found it ideal for youths to seek RHSs	Yes	158	41.4
	No	224	58.6
Discussed RHS issues with partner	Yes	251	65.7
	No	131	34.3
Parents acknowledged utilized RHS issues with partner	Yes	166	43.5
	No	216	56.5

Source: Primary Data 2021

Findings revealed that out of the 382 respondents that participated in the study; majority 208 (55%) were stigmatized to seek reproductive health services where 79 (38%) were stigmatized by community members for being promiscuous, 238 (62%) afforded RHS, 210 (55%) had cultural norms about RHS, 292 (76%) stayed with their parents, 224 (59%) never found it for youths to seek RHSs, 251 (665) discussed RHS issues with their partners while 216 (57%) their parents never acknowledged them to utilize RHS

4.3.2 Bivariate analysis of socio-economic factors influencing utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

Table 5: Bivariate analysis of socio-economic factors influencing utilization of RHS among adolescents aged 14-19 years in Maddu Sub County n=382

Variable	Category	Utilization of Reproductive Health Services		χ^2	P-value
		Utilized RHS	Never utilized RHS		
Felt stigmatized to seek RHS	Yes	28 (13.5%)	180 (86.5%)	64.97	0.001**
	No	90 (51.7%)	84 (48.3%)		
Persons who stigmatizes most	Healthcare workers	1 (9.1%)	10 (90.9%)	13.03	0.011**
	Peers	1 (4.0%)	24 (96.0%)		
	Family Members	9 (14.3%)	54 (85.7%)		
	Elders	10 (32.3%)	21 (67.7%)		
	community members	7 (8.9%)	72 (91.1%)		
sources of stigma	Being infected with STIs	4 (10.0%)	36 (90.0%)	3.33	0.189
	Being promiscuous	18 (17.8%)	83 (82.2%)		
	seeking abortion	6 (8.8%)	62 (91.2%)		
Found accessing RHS affordable	Yes	96 (40.3%)	142 (59.7%)	26.39	0.001**
	No	22 (15.3%)	122 (84.7%)		
Limits to accessing affordability	Lack of money for RHS	51 (27.9%)	132 (72.1%)	51.15	0.001**
	Long distance	45 (81.8%)	10 (18.2%)		
Had cultural norms that limit utilization	Yes	31 (14.8%)	179 (85.2%)	56.83	0.001**
	No	87 (50.6%)	85 (49.4%)		

of RHS					
Stayed with parents	Yes	52 (17.8%)	240 (82.2%)	99.35	0.001**
	No	66 (73.3%)	24 (26.7%)		
Found it ideal for youths to seek RHS	Yes	61 (38.6%)	97 (61.4%)	7.52	0.006**
	No	57 (25.4%)	167 (74.6%)		
Discussed RHS issues with partner	Yes	67 (26.7%)	184 (73.3%)	6.04	0.014**
	No	51 (38.9%)	80 (61.1%)		
Parents acknowledged respondent's utilizing RHS	Yes	43 (25.9%)	123 (74.1%)	3.42	0.064
	No	75 (34.7%)	141 (65.3%)		

**** Denotes significance at 0.05 (95% CI)**

Findings in the table above revealed that socio-economic factors were statistically and significantly associated with utilization of RHS among adolescents aged 14-19 years in Maddu Sub County included; feeling stigmatized to seek RHS (χ^2=64.97, P=0.001), persons who stigmatizes most (χ^2=13.03, P=0.011), finding access to RHS affordable (χ^2=26.39, P=0.001), limits to accessing affordability (χ^2=51.15, P=0.001), having cultural norms that limit utilization of RHS (χ^2=56.83, P=0.001), staying with parents (χ^2=99.35, P=0.001), finding it ideal to seek RHS (χ^2=7.52, P=0.006) and discussing RHS issues with the partner (χ^2=6.04, P=0.014). However, parents acknowledging respondent's utilizing RHS wasn't statistically significantly associated with utilization of RHS among the youths (χ^2=3.42, P=0.064).

4.4 Health system factors that influence the utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

Table 6: Univariate analysis of health system factors that influence the utilization of RHS among adolescents aged 14-19 years in Maddu Sub County n=382

Variables	Category	Frequency	Percentage
HCWs always available at the health care facility	Yes	274	71.7
	No	108	28.3
Youth friendly RHS available in the village	Yes	133	34.8
	No	249	65.2
Paid for RHS in public HCFs	Yes	134	35.1
	No	248	64.9
Received information on RHS on a routine basis	Yes	146	38.2
	No	236	61.8
Rating the level of privacy and confidentiality received when accessing RHS	Very satisfying	127	33.2
	Satisfying	226	59.2
	Fairly Satisfying	12	3.1
	Totally unsatisfying	17	4.5
There were mobile and flexible RHS in the area	Yes	171	44.8
	No	211	55.2

Source: Primary Data 2021

Findings in the table above revealed that majority 274 (72%) always found health care workers at the health facility, 249 (65%) never had youth friendly services in their communities, 248 (65%) never paid for RHS in public health care facilities, 236 (62%) never received information about RHS on routine basis, 226 (59%) were satisfied with privacy and confidentiality when receiving RHS and 211 (55%) never had mobile and flexible RHS in the area

4.4.2 Bivariate analysis of health system factors that influence the utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

Table 7: Bivariate analysis of health system factors that influence the utilization of RHS among adolescents aged 14-19 years in Maddu Sub County n=382

Variable	Category	Utilization of Reproductive Health Services		χ^2	P-value
		Utilized RHS	Never utilized RHS		
HCWs always available at the health care facility	Yes	93 (33.9%)	181 (66.1%)	4.23	0.040**
	No	25 (23.1%)	83 (76.9%)		
Youth friendly RHS available in the village	Yes	52 (39.1%)	81 (60.9%)	6.44	0.011**
	No	66 (26.5%)	183 (73.5%)		
Paid for RHS in public HCFs	Yes	19 (14.2%)	115 (85.8%)	27.00	0.001**
	No	99 (39.9%)	149 (60.1%)		
Received information on RHS on a routine basis	Yes	58 (39.7%)	88 (60.3%)	8.64	0.003**
	No	60 (25.4%)	176 (74.6%)		
Rating the level of privacy and confidentiality received when accessing RHS	Very satisfying	54 (42.5%)	73 (57.5%)	12.53	0.006**
	Satisfying	58 (25.7%)	168 (74.3%)		
	Fairly satisfying	3 (25.0%)	9 (75.0%)		
	Totally unsatisfying	3 (17.6%)	14 (82.4%)		
There were mobile and flexible RHS in the area	Yes	92 (53.8%)	79 (46.2%)	76.12	0.001**
	No	26 (12.3%)	185 (87.7%)		

**** Denotes significance at 0.05 (95% CI)**

Findings from table 7 are as follows; availability of health care workers (χ^2=4.23, P=0.040), availability of youth friendly RHS in the area (χ^2=6.44, P=0.011), paying for RHS public HCFs (χ^2=27.00, P=0.001), Receiving information on RHS on a routine basis (χ^2=8.64, P=0.003), rating the level of privacy and confidentiality received when accessing RHS (χ^2=12.53, P=0.006), and availability of mobile and flexible RHS in the area (χ^2=76.12, P=0.001).

4.6 Multivariate analysis of the factors that influence the utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

Table 8: Multivariate analysis of the factors that influence the utilization of RHS among adolescents aged 14-19 years in Maddu Sub County n=382

Variable	Category	AOR 95% (CI)	P-value
Education	No formal	1	0.001**
	Primary	63.24 (5.83-685.41)	0.001**
	Secondary	38.40 (7.01-210.38)	0.001**
	Tertiary	7.45 (1.70-32.71)	0.008**
Marital status	Single	1	0.002**
	Married	0.62 (0.12-3.21)	0.565
	Widowed	0.04 (0.01-0.39)	0.005**
	Separated	0.12 (0.01-3.20)	0.207
schooling status	Still in school	1	
	Out of school	0.19 (0.06-0.63)	0.006**
Felt stigmatized to seek RHS	Yes	1	
	No	23.16 (3.37-159.18)	0.001**
Found accessing RHS affordable	Yes	1	
	No	0.11 (0.04-0.27)	0.001**
Stayed with their parents(1)	Yes	1	
	No	13.88 (4.24-45.43)	0.001**
Received information on RHS on a routine basis	Yes	1	
	No	30.36 (5.51-167.41)	0.001**
There were mobile and flexible RHS in the area	Yes	1	
	No	0.018 (0.003-0.096)	0.001**

**** Denotes significance at 0.05 (95% CI)**

All variables that were statistically and significantly associated with utilization of Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County at bivariate analysis were fitted into a regression model and analyzed using binary logistic regression.

Regarding education of the respondents; having primary education was sixty three times (AOR=63.24, 95% CI: 5.83-685.41, P=0.001), having thirty eight times more likely to utilize RHS (AOR=38.40, 95% CI: 7.01-210.38, P=0.001), having tertiary education were seven times more likely to utilize RHS (AOR=7.45, 95% CI: 1.70-32.71, P=0.008) as compared to respondents who had no formal education.

Regarding the marital status of the respondents, respondents who were widows were less likely to utilize RHS (AOR=0.04 95% CI: 0.01-0.39, P=0.005) as compared to respondents who were singles. However being married (AOR=0.62, 95% CI: 0.12-3.21, P=0.565) and separated (AOR=0.12, 95% CI: 0.01-3.20, P=0.207) were statistically significantly associated with utilization of Reproductive Health Services among adolescents aged 14-19 years.

About schooling status, respondents were out of school were less likely to utilize RHS (AOR=0.19, 95% CI: 0.06-0.63, P=0.006) as compared to respondents who were still in school.

Respondents who never felt stigmatized to seek RHS were twenty times more likely to utilize RHS (AOR=23.16, 95% CI: 3.37-159.18, P=0.001) as compared to respondents who were stigmatized.

Respondents who found accessing RHS unaffordable were less likely to utilize RHS (AOR=0.11, 95% CI: 0.04-0.27, P=0.001) as compared to respondents who found RHS affordable.

Respondents who never stayed with their parents were fourteen times more likely to utilize RHS (AOR=13.88, 95% CI: 4.24-45.43, P=0.001) as compared to respondents who stayed with their parents

Respondents who never received information on RHS on a routine basis were thirty times more likely to utilize RHS (AOR=30.36, 95% CI: 5.51-167.41, P=0.001) as compared to respondents who received information on RHS on a routine basis

Respondents who never had mobile and flexible RHS in the area were less likely to utilize RHS (AOR=0.018, 95% CI: 0.003-0.096, P=0.001) as compared to respondents who received mobile and flexible RHS in the area.

CHAPTER FIVE: DISCUSSION OF RESULTS

5.0 Introduction

This chapter presents the discussion of results of the study in relation to the study specific objectives which included; determining the level of utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County, identifying demographic, socio-economic and health facility system factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

5.1 Discussion of Results

5.1.1 Level of utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub Count

Findings indicated that a third of the respondents utilized Reproductive Health Services while two thirds never utilized Reproductive Health Services. The most utilized RHS were HIV testing and counseling. Similarly much lower statistics showed that utilization of RHS in the US where only 4% of participants received all four core aspects of sexual and reproductive health services despite being a developed country (Flanagan et. al., 2019) which could be explained by the complacency by some youths as they were always exposed to reproductive health information over the media. A community-based cross-sectional study carried in Debre Berhan Town in Ethiopia, revealed 33.8% of adolescents utilized RHS components (Tlaye et al., 2018). Other services that included; modern family planning methods, STIs screening and treatment, menstrual counseling, treatment of HIV/AIDS, and adolescent counseling were rarely utilized by the adolescents. This could be attributed to unsatisfying health care systems in Uganda and Ethiopia plus the inadequate health care information targeting the adolescents and youths.

5.1.2 Social demographic factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County

Regarding education of the respondents; having primary education was sixty-three times, having thirty-eight times more likely to utilize RHS, having tertiary education were seven times more likely to utilize RHS as compared to respondents who had no formal education. This implied that RHS were more utilized by adolescents with low levels of education which could be attributed to being easy to accept any health care services given unlike the highly educated adolescents who were complacent and believed that they knew more yet it wasn't the case. Similar results were reported by Flanagan et al (2019) reported that adolescents who had low levels of education had higher odds of utilizing RHS due to fear of HIV contraction and pregnancies. The low educated such as primary children thought the moment they get pregnant they drop out of school unlike those at tertiary institutions

Regarding the marital status of the respondents, respondents who were widows were less likely to utilize RHS as compared to respondents who were singles. This could be attributed to the fact that widowed didn't have support to afford the costs and lacked spousal support which wasn't the case with married respondents. Similar results were reported in a study carried out in Enugu State, Nigeria by Odo et al., (2018) who investigated the availability and accessibility of RHS and found that married adolescents had high utilization of RHS because they had collective decision making.

About schooling status, respondents were out of school were less likely to utilize RHS as compared to respondents who were still in school which could be attributed to much exposure to premarital sex and little parental control which want the case with adolescents in schools who lived by rules and regulations. Similar results were reported in Ethiopia by Gebreyesus and colleagues (2019)

5.1.3 Socio-economic factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County

Respondents who never felt stigmatized to seek RHS were twenty times more likely to utilize RHS as compared to respondents who were stigmatized because they had less fear to ask any question, they what about their reproductive health. Such youth lived in awareness and could hardly make mistakes. Similar results were ported in Uganda by Nuwasiima et al (2019).

Respondents who found accessing RHS unaffordable were less likely to utilize RHS as compared to respondents who found RHS affordable probably because they were unemployed and didn't have money. Similalrly, Ansha et al., (2017) reported that lack of adolescent reproductive health services, harmful traditional Practices, lack of privacy and inconvenient service hour were reasons for not utilizing the service.

Respondents who never stayed with their parents were fourteen times more likely to utilize RHS as compared to respondents who stayed with their parents which could be explained by the fact that parents didn't want to discuss sex life with their children which led them to engage in poor sex practices due to ignorance, similar results were reported byOdo et al., (2018) investigated the availability and accessibility of RHS in Enugu State, Nigeria

5.1.3 Health facility system factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County

Respondents who received information on RHS on a routine basis were thirty times more likely to utilize RHS as compared to respondents who received information on RHS on a routine basis which could be explained by having awareness about the right sex practices. Similarly, Thongmixay`s (2019) qualitative study explored barriers perceived to RHS access among adolescents in Loa republic. The authors confirmed that the main barriers preventing young people from accessing RHS were related to

cognitive accessibility and psychosocial accessibility. The cognitive accessibility barriers were a lack of sexual knowledge and a lack of awareness of services. Perceived barriers in psychosocial accessibility were the feelings of shyness and shame caused by negative cultural attitudes to premarital sex, and the fear of parents finding out about visits to public sexual and reproductive health services, due to lack of confidentiality in the services and among health providers.

Respondents who never had mobile and flexible RHS in the area were less likely to utilize RHS as compared to respondents who received mobile and flexible RHS in the area because they could not get services in their proximity given the fact that most of them, had poor health care seeking behavior to access clinics. Similarly, a study among street adolescent, about 93% of street adolescents reported difficulty in accessing contraceptives. Behavioral change and sustainable access to SRH services are lacking among street adolescents. The Knowledge gap is more evident in early adolescents (10-13) period than the other classes. In general, street adolescents are deprived of access to SRH services. Mobile and flexible access to contraceptives should be designed targeting street adolescents (Ababor et al., 2019).

CHAPTER SIX: CONCLUSION AND RECOMMENDATION

6.0 Introduction

This chapter presents the conclusion and recommendation of the study in relation to the study specific objectives which included; determining the level of utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County, identifying demographic, socio-economic and health facility system factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

6.1 Conclusion

6.1.1 Level of utilization of the RHS among adolescents aged 14-19 years in Maddu Sub County

There was low utilization of Reproductive Health Services where out of 382 adolescents that participated in the study; a third 118 (31%) of the adolescents utilized RHS.

6.1.2 Social Demographic factors affecting the utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

Social demographic factors that were associated with utilization of RHS were; having low levels of education, being in single and being in school.

6.1.3 Socio-economic factors influencing utilization of RHS among adolescents aged 14-19 years in Maddu Sub County

Social economic factors that were associated with utilization of RHS were; not feelingstigmatized to seek RHS, affordability to RHS in terms of costs and distance to the facility and not staying with parents.

Health facility system factors that influence the utilization of RHS among adolescents aged 14-19 years inMaddu Sub county

Health system factors that were associated with utilization of RHS included having received information on RHS on a routine basisand having mobile and flexible RHS in the area were less likely to utilize RHS.

6.2 Recommendations

The study recommends the following strategies to be adopted

- Mobile and flexible RHS should be widely offered at community level through community outreaches so that even adolescents with poor health seeking behavior get chance to utilize them
- Information on RHS should be given to adolescents on a routine basis through different media platforms such as whatsapp, you tube, face book, radios, televisions among others,
- Community members and other people should not stigmatize adolescents who seek reproductive health information or services from them because they would instill fear in them and ignorantly engage in unsafe sexual practices such as abortion.
- Parents should spearhead encouraging adolescents about utilizing RHS instead of rebuking them
- Adolescents with high levels of education should be complacent about utilization of RHS disguisedly basing on the knowledge they assume that they have about reproductive health.
- Married adolescents should share views with their spouses about RHS and make collective decision to seek them
- Adolescents should be maintained in schools so that they get chance to be health educated about RHS and at the same time restrict their odds of engaging in premarital sex.

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APPENDICES

APPENDIX I: INFORMED CONSENT FORM

Title: **Factors influencing the utilization of reproductive health services among adolescents (14-19years) in maddu subcounty**

Introduction

My name is _____. I am a Research Assistant conducting a study on the"factors influencing the utilization of reproductive health services among adolescents (14-19years) in maddu Sub County"

The research is conducted on behalf of **Namakula Harriet**, a student pursuing a Bachelor's Degree in Nursing Sciences of Clarke International University, Kampala, Uganda.

I am requesting for your participation in the study titled "factors influencing the utilization of reproductive health services among adolescents (15-19years) in maddu subcounty''

You have been selected to participate in this study because your participation in this study will give valuable insight into the subject area. You are requested to give an honest response/opinion to the questions of the study. No reward will be given to you for your participation, but yourparticipation will be valuable for information on the uptake of reproductive health services. The study will only take approximately 10 to 15 minutes of your time to complete it.

Study procedure:

Before you take part in this research study, the study will be explained to you and you will be given the chance to ask questions. You must read and sign this informed consent form. You will not be given a copy of this consent to take home with you.

Possible Risks and Benefits expected to take part in this study.

There are no possible risks that will be caused by this study.

There are no direct benefits to you for participating in this study. However, your participation in the study may enable the researcher to get adequate information regarding the Factors associated with utilization of reproductive health services among youths in Maddu sub county, and come up with possible solutions to improve the utilization.

About participating in this study

Your participation in the study is voluntary. You may stop participating in this study at any time. Your decision not to take part in this study or to stop your participation will not affect you in any way or any benefits to which you are entitled. If you decide to stop taking part in this study, you should tell the investigator.

The investigator may stop your participation in this study at any time if she decides that it is in your best interest. She may do this if you do not follow instructions. If you have other medical illness, the investigator will decide if you may continue in the research study.

Confidentiality of study records and medical records

Information collected for this study is confidential. However, the Research Ethics Committeemay see parts of your medical records related to this study. In the event of any publicationregarding this study, your identity will not be disclosed.

Name of contact for questions about the study:

If you have any questions about taking part in this study, or if you think you may have been injured because of this study, call Namakula Harriet on 0751247344. If you have any questions about your rights as a research subject, you can call the Chairman Institutional Review Board at Clarke International University.

Volunteer's Statement

I certify that I have or they have read to me the above document describing the benefits, risks and procedures for the study titled “factors influencing the utilization of reproductive health services among adolescents (15-19years) in maddu subcounty” or that it has been read and explained to me, and that I understand it. I have been given an opportunity to have any questions about the study answered to my satisfaction. I agree to participate voluntarily.

…… ……

Date Signature or mark of participant

……

Name of participant (print)

I certify that the nature and purpose, the potential benefits, and possible risks associated with participating in this study have been explained to the above individual.

…… ……

Date Signature of person who obtained consent

……

Name of person who obtained consent (print)

APPENDIX II: QUESTIONNAIRE

My name is…..... a student at Clarke international University, collecting. I am carrying out a study about the **factors influencing the utilization of reproductive health services among adolescents (14-19years) in Maddu Sub County**. The purpose of this study is to generate academic knowledge and possibly guide decision makers in the field of reproductive health.

I hereby request you to voluntarily participate in this study and all information you give will be kept confidential and only used for academic purposes.

A brief explanation about the study: Reproductive health explores the health of an individual's reproductive system and sexual wellbeing during all stages of life. It also includes sexual health, the purpose of which is the enhancement of personal relations.

Reproductive health issues may involve; sexually transmitted diseases, un wanted/ early pregnancies, family planning, HIV screening, among others.

Instructions: Please endeavor to respond honestly and accurately to all questions asked

SECTION A:

Level of utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County

The following six items indicate the basic Reproductive Health Services that will be assessed in this study. The finery binary utilization of Reproductive Health Services will be obtained by dividing the sum utilization by sum none utilization of Reproductive Health Services then multiplied by 100%.

	Reproductive Health Services	Category	Frequency (n=382)	Percentage (%)
1.	Family Planning	Utilized		
		Not utilized		
2.	HIV Testing and Counseling	Utilized		
		Not utilized		
3.	Screening and Treating STIs	Utilized		
		Not utilized		
4.	Menstrual Counseling	Utilized		
		Not utilized		
5.	Treatment of HIV/AIDS	Utilized		
		Not utilized		
6.	Adolescent Counseling	Utilized		
		Not utilized		
	Average utilization of Reproductive Health Services	**Utilized**		
		Not utilized		

SECTION B:

Demographic factors affecting the utilization of the Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County.

2. Age

a) 14-16 years ☐ b) 17-19 years ☐

3. Gender

a) Female ☐ b) Male ☐

4. Highest levels of education attained

a) No formal education ☐ b) Primary Education ☐

c) Secondary education ☐ d) Tertiary education ☐

5. Religion

a) Catholics ☐ b) Muslim ☐

c) Protestant ☐ d) Others ☐

6. Marital status

a) Single ☐ b) Married ☐

c) Widow ☐ d) Separated ☐

7. Schooling status

a) Still in school ☐ b) Out of school ☐

SECTION C:

Socio-economic factors influencing utilization of Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County

8. i) Do you feel stigmatized to seek reproductive health services?

a) Yes ☐ b) No ☐

ii) If yes, who stigmatizes you most?

a) Health care workers ☐ b) Peers ☐

c) Family members ☐ d) Elders ☐

e) Community members ☐ f) Others (specify)……

ii) If yes, what are you stigmatized about?

a) Being infected with STIs ☐ b) Being promiscuous ☐

c) Others (specify)……..

9. i) Do you find accessing reproductive Health services affordable?

a) Yes ☐ b) No ☐

ii) If no, what limits your affordability?

a) Lack of money to pay for services ☐ b) Long distance ☐

c) Others……..

10. Do you have cultural norms that limit your utilization of Reproductive Health Services?

a) Yes ☐ b) No ☐

11. Do you stay with your parents?

a) Yes ☐ b) No ☐

12. Do you find it ideal for youths to seek Reproductive Health Services?

a) Yes ☐ b) No ☐

13. Do you discuss Reproductive Health Services issues with your partner?

a) Yes ☐ b) No ☐

14. Do your parents acknowledge you to utilize Health Services issues with your partner?

a) Yes ☐ b) No ☐

SECTION C:

Health facility system factors that influence the utilization of Reproductive Health Services among adolescents aged 14-19 years in Maddu Sub County

15. Are health care workers always available at the health care facility?

a) Yes ☐ b) No ☐

16. Are youth friendly Reproductive Health Services available in your village?

a) Yes ☐ b) No ☐

17. When you visit public health care facilities, are Reproductive Health Services paid for?

a) Yes ☐ b) No ☐

18. Do you receive information on Reproductive Health Services on a routine basis?

a) Yes ☐ b) No ☐

19. Rate the level of privacy and confidentiality you receive when accessing Reproductive Health Care services?

a) Very satisfying ☐ b) Satisfying ☐

c) Fairly satisfying ☐ d) Totally unsatisfying ☐

20. i) Are there mobile and flexible services for contraceptives in your area Reproductive Health Care services?

a) Yes ☐ b) No ☐

ii) If yes, mention them?

a) Contraception ☐ b) HIV counseling and Testing ☐

c) Marital counseling ☐ d) Menstrual counseling ☐

e) Treatment of RTIs ☐ f) Others specify ……

Thanks for your cooperation

APPENDIX III: STUDY WORK PLAN

Activity	**Person(s) Responsible**	May-Dec.20	Oct 2021	Nov 2021						Dec021
Proposal development	Student and Supervisor									
Ethical clearance	Student and supervisor									
Sample selection	Student									
Recruitment and training of research Assistants	Student									
Data collection	Student									
Data analysis,	Student and Supervisor									
Dissertation writing	student and Supervisors									
Monitoring and Evaluation	Student and supervisors									

APPENDIX IV: RESEARCH BUDGET

Resource	Unit cost (in Uganda shillings)	Total Cost
University research fees for the Study	500,000	500,000
Administrative Clearance from Setting	200,000	200,000
Research assistance compensation	50,000 per day for 20 days for 10 research assistants	400,000
Copy and print (Questionnaires, proposal and dissertation),	200,000	200,000
Consultation on data analysis	500,000	500,000
communication (phone, web etc),	100,000	100,000
Miscellaneous	500,000	500,000
Total		2,400,000

APPENDIX V: REC APPROVAL

CLARKE INTERNATIONAL UNIVERSITY
LEAD - INNOVATE - TRANSFORM
RESEARCH ETHICS COMMITTEE

(+256) 0312 307400
rec@ciu.ac.ug
www.rec.ciu.ac.ug

02/03/2022

To: HARRIET NAMAKULA

clarke international university
0751247344

Type: Initial Review

Re: CLARKE-2022-330: FACTORS INFLUENCING THE UTILIZATION OF REPRODUCTIVE HEALTH SERVICES AMONG ADOLESCENTS (15-19YEARS) IN MADDU SUBCOUNTY, 2.0, 2022-03-01

I am pleased to inform you that at the **27th** convened meeting on **02/03/2022**, the Clarke International University REC, committee meeting, etc voted to approve the above referenced application.
Approval of the research is for the period of **02/03/2022** to **02/03/2023.**

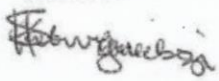
As Principal Investigator of the research, you are responsible for fulfilling the following requirements of approval:

1. All co-investigators must be kept informed of the status of the research.
2. Changes, amendments, and addenda to the protocol or the consent form must be submitted to the REC for re-review and approval **prior** to the activation of the changes.
3. Reports of unanticipated problems involving risks to participants or any new information which could change the risk benefit: ratio must be submitted to the REC.
4. Only approved consent forms are to be used in the enrollment of participants. All consent forms signed by participants and/or witnesses should be retained on file. The REC may conduct audits of all study records, and consent documentation may be part of such audits.
5. Continuing review application must be submitted to the REC **eight weeks** prior to the expiration date of **02/03/2023** in order to continue the study beyond the approved period. Failure to submit a continuing review application in a timely fashion may result in suspension or termination of the study.
6. The REC application number assigned to the research should be cited in any correspondence with the REC of record.
7. You are required to register the research protocol with the Uganda National Council for Science and Technology (UNCST) for final clearance to undertake the study in Uganda.

The following is the list of all documents approved in this application by Clarke International University REC:

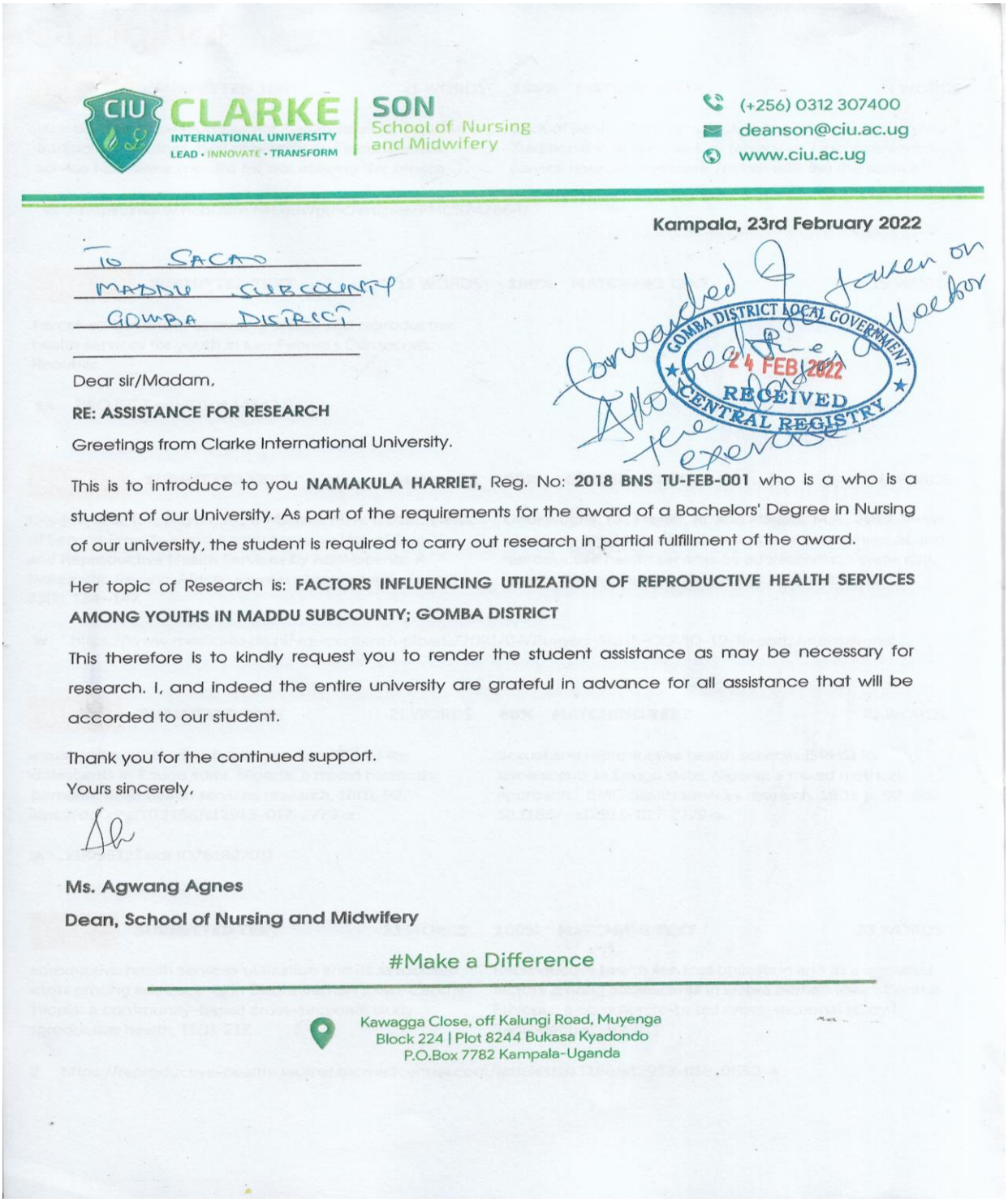
No.	Document Title	Language	Version Number	Version Date
1	Protocol	English	2.0	2022-03-01
2	Protocol	English	1.0	2022-01-13
3	Informed Consent forms	English	1.0	2022-01-13
4	Risk Management Plan	English	1.0	2021-11-16
5	Informed Consent forms	Luganda	1.0	2022-01-13
6	Data collection tools	English	1.0	2021-12-10

Yours Sincerely



Samuel Kabwigu
For: Clarke International University REC

APPENDIX VI: INTRODUCTORY LETTER



CLARKE INTERNATIONAL UNIVERSITY
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SON
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Kampala, 23rd February 2022

TO SACAO
MADDU SUBCOUNTY
GOMBA DISTRICT

GOMBA DISTRICT LOCAL GOVERNMENT
24 FEB 2022
RECEIVED
CENTRAL REGISTRY

Dear sir/Madam,

RE: ASSISTANCE FOR RESEARCH

Greetings from Clarke International University.

This is to introduce to you **NAMAKULA HARRIET,** Reg. No: **2018 BNS TU-FEB-001** who is a who is a student of our University. As part of the requirements for the award of a Bachelors' Degree in Nursing of our university, the student is required to carry out research in partial fulfillment of the award.

Her topic of Research is: **FACTORS INFLUENCING UTILIZATION OF REPRODUCTIVE HEALTH SERVICES AMONG YOUTHS IN MADDU SUBCOUNTY; GOMBA DISTRICT**

This therefore is to kindly request you to render the student assistance as may be necessary for research. I, and indeed the entire university are grateful in advance for all assistance that will be accorded to our student.

Thank you for the continued support.

Yours sincerely,

Ms. Agwang Agnes

Dean, School of Nursing and Midwifery

#Make a Difference

Kawagga Close, off Kalungi Road, Muyenga
Block 224 | Plot 8244 Bukasa Kyadondo
P.O.Box 7782 Kampala-Uganda

APPENDIX VII: MAP OF THE STUDY AREA