

**THE PREVALENCE OF AND FACTORS ASSOCIATED WITH TEENAGE
PREGNANCIES AMONG MOTHERS ATTENDING HOIMA
REGIONAL REFERRAL HOSPITAL**

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DECLARATION

I, **AJAYI ELIZABETH IFEOLUWA**, do hereby declare that the work submitted in this dissertation has been done by me and has not been submitted for award of a degree in any university.

Signed_____

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APPROVAL

This dissertation has been submitted for examination with the approval of the following supervisor;

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DEDICATION

This research is dedicated to my family, my parents, Pastor and Pastor Mrs. Lawrence Oladipo Ajayi for their immeasurable support financially, emotionally and spiritually through my academic journey.

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DEFINITION OF TERMS

Alcoholism: is defined as history of alcohol consumption per day in that a man should not consume more than 4 drinks per day or 14 drinks per week. Also, women not more than 3 drinks per day or not more than 7 drinks per week (where 1 drink=12 ounces of beer and 1.5 ounces of spirit; with 1 ounce =29.574mls)

Sexual defilement: Sexual defilement is any sexual activity that is undesired by one participant but forced on them nonetheless, especially when considered to be more sustained or frequent than an incident of sexual assault (Biere and Elliot, 2012)

Early sexual activity: defined as having had sexual intercourse on or before age 14 (Geary *et al*, 2008)

Early teenagers: defined as teenagers aged between 13-17 years.

Late teenagers: defined as teenagers aged 18-19 years.

Incest: is defined as the practice of sexual intercourse between persons with degrees of kinship, which may be a short or long-term relationship, with or without generation of children (Tidefors, *et al*, 2010; Read, 2014).

Rape: An unlawful sexual assault involving some type of penetration (i.e. vaginal, oral, or anal) due to force or threat of force; lack of consent; or inability of the victim to provide consent due to age, intoxication, or mental status (Olusanya, 2012).

Poverty: defined as a daily income of less than 1.25 USD/day (Ravallion, *et al*, 2013)

LIST OF ABBREVIATIONS AND ACRONYMS

aOR : Adjusted odds ratio

AIDS: Acquired Immunodeficiency Syndrome

CI: Confidence interval

COR: Crude odds ratio

HIV: Human Immunodeficiency Virus

HIRC: Hoima Institutional Research Committee

HRRH: Hoima Regional Referral Hospital

UBOS: Uganda Bureau of Statistics

USA: United States of America

UMOH: Uganda Ministry of Health

U-SHAPE: Uganda Sexual Health and Pastoral Education

UNFPA: United Nations Fund for Population Activities

UNICEF: United Nations Children Fund

KNBS: Kenya National Bureau of Statistics

WHO: World Health Organization

ABSTRACT

Introduction: Worldwide, approximately 16 million mothers aged 15-19 years give birth annually; 95% of these births occur in low and middle income countries (WHO, 2016). In Uganda, a slight increase in the number of teenage mothers from 24% in 2011 to 25% in 2016 was observed (UBOS, 2016). Bunyoro region has a high level of teenage pregnancy of 29% (Uganda Population Secretariat, 2013). The prevalence and possible factors associated with teenage pregnancies have not been systematically studied in HRRH.

Objective: This study is set to determine the prevalence of and possible factors associated with teenage pregnancy among mothers attending HRRH.

Methodology: this was a cross sectional study where a sample size of 369 teenage mothers seeking care at HRRH over a 3 month period. A consecutive sampling technique with structured questionnaire was used to identify the prevalence of and factors associated with teenage pregnancy among mothers attending HRRH. Univariate, bivariate and multivariate analyses were done to determine the factors associated with teenage pregnancies.

Results: This study has shown that the prevalence of teenage pregnancy is 23% among mothers attending HRRH. The age-risk group for teenage pregnancy was 15-17 age groups. The major factors associated with teenage pregnancy included being unmarried (aOR =4.15; CI= 2.47-6.99; p-value= 0.000), early sexual activity (aOR= 0.10; CI= 0.06-0.19; p-value=0.000) and more than 1 sexual partner (aOR 0.36; CI=0.20-0.66; p-value= 0.000).

Conclusion: The study concluded that the prevalence of teenage pregnancy among teenage mothers accessing HRRH is high. Factors associated with teenage pregnancy were un-married status, early sexual activity; however having more than 1 sexual partner was found to be protective.

Recommendation: Government, health workers, stakeholders, community leaders, teachers and parents have more efforts such as sensitization, monitoring, and counseling, etc. to put an end to adolescent pregnancy in Hoima. A bigger study is recommended in this hospital so as to influence policy makers about this high prevalence.

CHAPTER ONE: INTRODUCTION

1.1 BACKGROUND

Teenage pregnancy, also known as adolescent pregnancy (WHO,2004) is defined as a teenage girl, usually within the ages of 13-19, becoming pregnant; UNICEF (2008) states that the term in everyday speech usually refers to girls who have not reached legal adulthood, which varies across the world, who become pregnant.

Worldwide, approximately 16 million mothers aged 15-19 years give birth annually; 95% of these births occur in low and middle income countries (WHO, 2016). Sedgh *et al.* (2015) stated that in the developed world outside the former Soviet bloc, the highest teen pregnancy rate is still in the United States, and the highest rates in Europe outside the former Soviet bloc are in England, Wales and Scotland; and the lowest teen pregnancy rate in Switzerland, followed by the Netherlands, Singapore, and Slovenia. Lule *et al* (2015) stated that Africa's adolescent pregnancy rate is highest in the world with 12% of African teens giving birth every year as compared to 3% in developed countries. Ramaiya *et al* (2014) reported that the incidence of adolescent pregnancy is highest in Sub Saharan Africa -143 per 1,000 girls aged between 15-19 years.

In East Africa, Neal *et al* (2015) stated almost 10% of young women give birth by age 16. Uganda has the highest teenage pregnancy rate of 25% (UBOS, 2016). However, teen pregnancy and motherhood rates in Kenya stand at 18% (KNBS, 2014) and a low rate of 0.3% Rwanda (WHO, 2016)

In Uganda, reports indicate that Teso sub region has the most numbers of childbearing adolescent girls, standing at 31%, Kampala city 17% and Kigezi sub region with the lowest at 16% (Uganda Population Secretariat, 2013).

Sedgh *et al* (2015) reported teenage pregnancy to be commonly associated with adverse psychosocial, socioeconomic, and health outcomes compared with older mothers. Women who become pregnant in adolescence tend to have lower levels of educational attainment and socioeconomic status, and children of adolescent mothers are more likely to have low birth weight and developmental and behavioral difficulties (Case *et al*, 2015; Kawakita *et al*, 2016; Timura *et al*, 2016).

1.2 PROBLEM STATEMENT

The number of adolescent girls who get pregnant before attaining the age of consent has slightly increased from 24% in 2011 to 25% in 2016 (UBOS, 2016). Bunyoro region has a high level of teenage pregnancy of 29% (Uganda Population Secretariat, 2013). In HRRH, July 2016 and June 2017 a total of 7346 deliveries were recorded out of which 1846 belonged to teenage mothers giving a 25.1% of teenage deliveries. During the same period a total of 4166 mothers attended antenatal clinic out of which 830 were teenage mothers giving a 19.9% of teenage pregnancies (Records office, HRRH; unpublished data).

Studies have been conducted on the prevalence and possible factors associated with teenage pregnancies (Amoran, 2012; Lule *et al*, 2015; Hillis *et al*, 2010) but to the best knowledge of the researcher, none has been done in HRRH.

Therefore this study seeks to identify the prevalence and find out possible factors associated with teenage pregnancy among mothers attending HRRH.

1.3 RESEARCH JUSTIFICATION

Despite the establishment of national teenage pregnancy programs and strategies, teenage births have increased globally (Amoran, 2012). The number of adolescent girls in Uganda who get pregnant before attaining the age of consent has slightly increased to 25% in the last 7 years (UBOS, 2016). Ugandan adolescents conceive as early as 13 years and more than 50% engage in sexual relationships by the age of 15 years (Lule *et al*, 2015).

This study aims at determining the prevalence and identifying the factors associated with teenage pregnancies among mothers attending HRRH. The information generated by this study will make a first step to improved planning, advocacy and preparedness for prevention of teenage pregnancy in this region, in Uganda and other developing countries. In the long run, this will contribute to a decrease in maternal mortality and morbidity from teenage pregnancy related complications, as

well as a basis for planning, resource allocation and improved care. Yet, such a study has not been done before in HRRH.

1.4 RESEARCH QUESTIONS

1.4.1. GENERAL QUESTION:

- What is the prevalence of and factors associated with teenage pregnancies in HRRH?

1.4.2. SPECIFIC QUESTIONS:

- What is the prevalence of teenage pregnancies among mothers attending HRRH?
- What is the age-risk group for teenage pregnancies among mothers attending HRRH?
- What are the factors associated with teenage pregnancies among mothers attending HRRH?

1.5 RESEARCH OBJECTIVES

1.5.1. GENERAL OBJECTIVE:

To determine the prevalence of and factors associated with teenage pregnancies in HRRH.

1.5.2.SPECIFIC OBJECTIVES:

- To determine the prevalence of teenage pregnancies among mothers attending HRRH.
- To identify the age-risk group for teenage pregnancies among mothers attending HRRH.
- To identify the factors associated with teenage pregnancies among mothers attending HRRH.

1.6 CONCEPTUAL FRAMEWORK

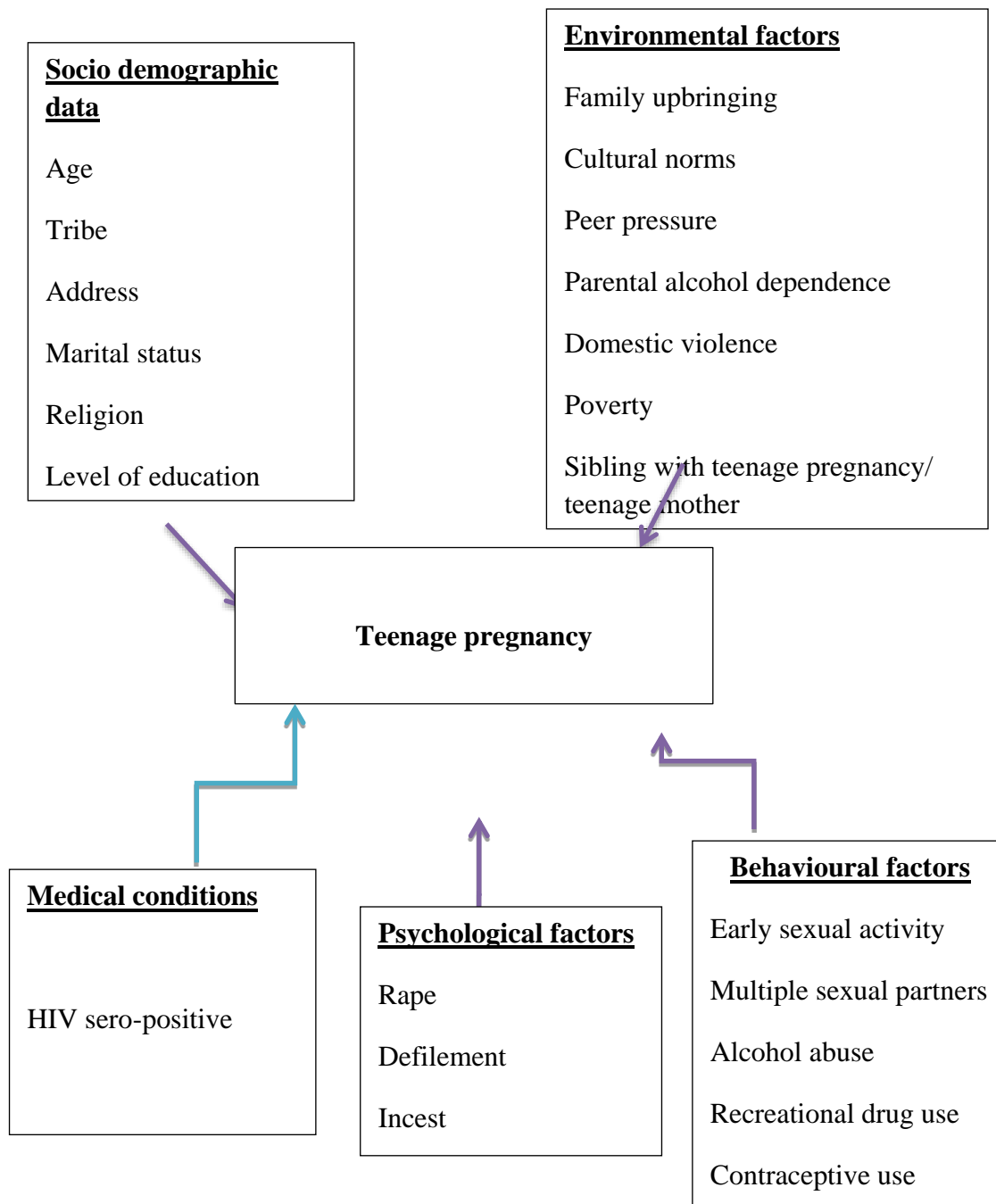


Figure 1. 1: Conceptual framework (Source: Self formulated)

CHAPTER TWO: LITERATURE REVIEW

2.0. Epidemiology of teenage pregnancy

About 16 million women 15–19 years old give birth each year, 95% of these occur in low and middle income countries; about 11% of all births worldwide and the average adolescent birthrate in middle income countries is twice as high as that in high income countries, with the rate in low income countries being 5 times as high (World Health Organization, 2016). In the developed world outside the former Soviet bloc, the highest teen pregnancy rate is still in the United States, and the highest rates in Europe outside the former Soviet bloc are in England, Wales and Scotland; Adolescent pregnancy rates far higher in Mexico and the Sub-Saharan African countries than in any other countries (Sedgh *et al*, 2015). In 2010, roughly 625,000 women younger than 20 became pregnant in the USA of which 614,000 pregnancies were among teenagers (women aged 15–19), and another 11,000 were among those aged 14 and younger (Kost *et al*, 2014). The pregnancy rate among teenagers was 57.4 pregnancies per 1,000 women; this means that about 6% of teens became pregnant in 2010 (Kost *et al*, 2014). There are high repeat pregnancy rates, low contraception use, and high HIV prevalence among teenagers in South Africa (Mphatswe *et al*, 2016).

Africa's adolescent pregnancy rate is highest in the world with 12% of African teens giving birth every year as compared to 3% in developed countries (Lule *et al*, 2015).

Sub-Saharan Africa has one of the highest levels of teenage pregnancies in the world (Were, 2007). The proportion of women who become pregnant before age 15 years varies enormously even within regions – in sub-Saharan Africa, for example, the rate in Rwanda is 0.3% versus 12.2% in Mozambique (WHO, 2016). In Kenya, 15% of all adolescent women have already given birth, and 3% are pregnant with their first child (UNFPA, 2017). Uganda has one of the highest teenage pregnancy rates in Sub-Saharan Africa (Rukundo *et al*, 2015).

In East Africa, almost 10% of young women give birth by age 16 (Neal *et al*, 2015). In particular, Uganda has the highest proportion of women giving birth before the age of 20 (63%), and the highest total fertility rate (6.2) (Uganda Bureau of Statistics (UBOS); ICF International, 2012;

UBOS, 2014). A total of 41% of births among 15 to 19-year-old women in Uganda are reported to be either mistimed or completely unwanted (UBOS & ICF International, 2012).

2.1 Risk factors associated with teenage pregnancy

The determinants of adolescent pregnancy and childbirth globally and in sub-Saharan African settings such as Uganda have been identified by different researches (Brahmbhatt *et al*, 2014; WHO, 2014; Sedgh *et al*, 2015). Some of which include lack of education, lack of policies or laws enforced to support young people (Umar, 2015). Although the most important antecedents of teen pregnancy and childbearing relate directly to sexual attitudes, beliefs, and skills, many influential family, community, cultural, and individual factors closely associated with teen pregnancy actually have little to do directly with sex such as growing up in a poor community, having little attachment to one's parents, failing at school, and being depressed (Atekyereza and Mubiru, 2014). Surveys from 40 countries show that more than half their young people have misconceptions about how HIV is transmitted (UNICEF, 2008). The well-recognized factors of socioeconomic disadvantage-disrupted family structure and low educational level and aspiration appear consistently associated with teenage pregnancy (Mamura *et al*, 2007).

2.1.0 Education level

Teenage pregnancy was statistically associated with primary and secondary level education when compared with post-secondary education (Amaran, 2012). The pregnancy rate in girls aged younger than 16 was three times as high, and in all girls under 20 six times as high in the most deprived areas as in the most affluent areas (Brahmbhatt *et al*, 2014).

2.1.1 Socio-economic status

A study revealed that the higher the income of the parent, the fewer the pregnancies (Macleod, 1999). Those from the low socio-economic background were about 4 times more likely to be pregnant as a teenager compared to those from high socio-economic background (Amaran, 2012).

2.1.2 Family upbringing

Woodward *et al*(2001) stated that the profile of those at greatest risk of a teenage pregnancy (<20 years) was that of an early-maturing girl with conduct problems who had been reared in a family

environment characterized by parental instability and maternal role models of young single motherhood; As young adolescents, these girls were characterized by high rates of sexual risk-taking and deviant peer involvement. Greater exposure to father absence was strongly associated with elevated risk for early sexual activity and adolescent pregnancy (Ellis *et al*, 2003).

Female orphans are widely cited as being at risk for early marriage, early childbearing, and risky sexual behavior; however, to date no studies have examined these linkages using population-level data across multiple countries (Palermo *et al*, 2009). Orphan hood status alone may not be a sufficient targeting mechanism for addressing these outcomes in many countries; a broader, multidimensional targeting scheme including orphan type, schooling, and poverty measures would be more robust in identifying and aiding young women at risk (Brahmbhatt *et al*, 2014).

2.1.3 Cultural beliefs

A study by Uwaezuoke *et al* (2004) supported that teenage pregnancy was significantly associated with age, occupation, no education, early marriage, religion and practice of “Osucaste” system. Some young girls are forced into marriage at a very early age (Amoran, 2012).

2.1.4 Psychological factors

Coerced sex, reported by 10% of girls who first had sex before age 15 years, contributes to unwanted adolescent pregnancies (WHO, 2016). Koenig *et al* (2004) states coerced first intercourse is an important social and public health problem that has potentially serious repercussions for young women's reproductive health and well-being; Interventions to improve adolescent women's reproductive health should directly address the issue of sexual coercion. Although there is increasing recognition of the scope and significance of sexual coercion experienced by adolescent women in developing countries, evidence on its consequences for reproductive health remains limited.

2.2 Consequences of teenage pregnancy

Hillis *et al* (2010) reports demonstrate strong and graded associations between cumulative exposure to categories of Adverse childhood experiences and many unfavorable reproductive health outcomes, including early onset of sexual activity, adolescent pregnancy, sexually

transmitted diseases, increased risk of HIV infection, violence perpetration, unintended pregnancy in adulthood, and fetal death.

2.2.1 Socio-economic complications

According to qualitative research in Uganda, pregnant teenagers face serious socioeconomic, domestic, and relational hardships (Atuyambe *et al*, 2005). When a girl becomes pregnant, her life can change radically. Her education may end, and her job prospects diminish. She becomes more vulnerable to poverty and exclusion, and her health often suffers (UNFPA, 2017).

Research indicates that teen pregnancy and motherhood can have detrimental socio economic and psychological outcomes for the teen mother, her child, and her young siblings (UNICEF, 2008). Students drop out due to unplanned pregnancies, economic constraints and inadequate support, both financial and social, to remain in school (Almeida and Aquino, 2011). A teen mother is more likely to drop out of school, have no or low qualifications, be unemployed or low-paid, live in poor housing conditions and live on welfare (UNICEF, 2008). Concerns about teen pregnancies have centered on the disruption that childbearing causes to the educational and occupational trajectories of young women, consequently maintaining and exacerbating poverty (Lewin *et al*, 2014).

2.2.2 Medical complications

Many health problems are particularly associated with negative outcomes of pregnancy during adolescence. These include anaemia, malaria, HIV and other sexually transmitted infections, postpartum haemorrhage and mental disorders, such as depression (WHO, 2016). As a result of unprotected sex, young people are also at risk of sexually transmitted diseases and HIV infection; the highest rates of STIs worldwide are among young people aged 15 to 24 (UNICEF, 2008). The teenage pregnant girl is exposed to torture, abuse, and the risks of the deadly HIV/AIDS infection (Amoran, 2012). Married adolescent girls generally are unable to negotiate condom use or to refuse sexual relations; they are often married to older men with more sexual experience, which puts them at risk of contracting STIs, including HIV (UNICEF, 2008).

2.2.3 Obstetric complications

Complications during pregnancy are the second cause of death for 15 to 19 year-old girls globally (WHO, 2014). Maternal age is an important factor in determinant of obstetric outcome; In Latin

America, the risk of maternal death is four times higher among adolescents younger than 16 years than among women in their twenties (WHO, 2016). Reproductive health stakeholders generally considered teenage pregnancy to be among the high risk pregnancies that need to be handled with care (Rukundo *et al*, 2015).

Pregnant teenagers are at higher obstetric risk than their non-teenage counterparts (Grabowski *et al*, 2014, Krugu *et al*, 2016). Pregnancy induced hypertension, eclampsia, intrauterine fetal death, anaemia, cephalopelvic disproportion and preterm labour were the main complications observed and were significantly higher in this group than in non- teenage mothers; similarly the caesarean section and perinatal mortality rates were significantly higher in the former than latter (Nwobodo *et al*, 2009).

Fourteen percent of all unsafe abortions in low- and middle-income countries are among women aged 15–19 years; About 2.5 million adolescents have unsafe abortions every year, and adolescents are more seriously affected by complications than are older women (WHO, 2016). Up to 65% of women with obstetric fistula develop this as adolescents, with dire consequences for their lives, physically and socially (WHO, 2016). Teenagers younger than 15 are 5 times more likely to die during pregnancy or childbirth than women in their twenties and mortality rates for their infants are higher as well (Amaran, 2012).

2.2.4 Pediatric complications

Adolescent pregnancy is dangerous for the child; deaths during the first month of life are 50–100% more frequent if the mother is an adolescent versus older and the younger the mother, the higher the risk. Results indicate that the major risk associated with teenage pregnancies is preterm labor (Chen *et al*, 2007). Stillbirths and death in the first week of life are 50% higher among babies born to mothers younger than 20 years than among babies born to mothers 20–29 years old (WHO, 2016).

2.3. Protective factors associated with teenage pregnancy

Research in prevention since 1990 has identified a variety of factors, including individual, family, peer, and community influences that protect against early sexual debut and adolescent pregnancy (Hillis *et al*, 2010). Because the reasons behind teen pregnancy vary, so do the types of programs adults design to combat the problem. When most people think of preventing teen pregnancy, they

probably conjure images of sex or abstinence education classes or clinics that offer contraceptive services (Lewin *et al*, 2014).

Differences in the number of teenage pregnancies between industrialized countries are mainly caused by the availability of effective contraception for adolescents and not by differences in sexual behavior (Treffers, 2003). In the USA, there was a substantial drop in the teen pregnancy rate for both 15–17- and 18–19-year-olds between 2008 and 2010, yet pregnancies among 18–19-year-olds made up the majority of all teen pregnancies (69%); Changes in contraceptive use are likely driving this trend. There is evidence that contraceptive practices are improving among older teens (Kost *et al*, 2014).

Childhood family strengths are strongly protective against adolescent pregnancy, early initiation of sexual activity, and long-term psychosocial consequences; Adolescents reporting higher family assets have been significantly less likely to report early sexual debut or adolescent pregnancy (Hillis *et al*, 2010). Additionally, targeted sexual health education may greatly benefit younger female adolescents (Akoh *et al*, 2016).

Cynthia (2003) stated that there is no question, however, that increased abstinence—meaning delayed vaginal intercourse among young people—has played a role in reducing both teen pregnancy rates in the United States and HIV rates in at least one developing country. Research is beginning to suggest how difficult abstinence can be to use consistently over time. For example, a study presented at the 2003 annual meeting of the American Psychological Society (APS) found that over 60% of college students who had pledged virginity during their middle or high school years had broken their vow to remain abstinent until marriage. Several reports have examined the role of adolescents' family context in building resilience and in providing protection against unfavorable reproductive outcomes (Hillis *et al*, 2010).

CHAPTER THREE: METHODOLOGY

3.1 Study Design

This study was a cross-sectional study carried out from December 2017 to February 2018 to determine the prevalence of and factors associated with teenage pregnancies among mothers attending HRRH.

3.2 Study Area

Hoima is a municipal town in the western region of Uganda. It is the main municipal, administrative and commercial center of Hoima district (UBOS, 2014). According to the 2014 national population census, Hoima's population is 100,625(UBOS, 2014).

Hoima regional referral hospital (HRRH) is located in Hoima municipal council approximately 230 kilometers by road, northwest of Kampala, opposite Hoima Boma grounds adjacent to Hoima main police station; The hospital post office box number is 5 Hoima(UMOH, 2016). The coordinates of HRRH are 01°25'41.0"N, 31°21'16.0"E (Latitude: 1.428051; Longitude: 31.354451)(UMOH, 2016). HRRH is one of the oldest hospitals in Uganda initially started by Bunyoro- Kitara Kingdom as early as 1910 as a health center, it was elevated to a hospital status in 1935. In 1994, it was given a status of becoming a regional referral hospital. HRRH caters for a population of approximately 3 million (3,000,000) people in Bunyoro region which covers districts of Hoima, Masindi, Kibaale, Buliisa, Kiryandongo, Kiboga, Kyankwanzi, Kagadi, Kakumiro, and some parts of the eastern democratic republic of Congo (DRC) (UMOH, 2016). It is one of the thirteen regional referral hospitals in Uganda (Michael *et al.*, 2012). The present bed capacity is 300(UMOH, 2016). HRRH is a public hospital, funded by the Ugandan Ministry of health (UMOH) and general care in the hospital is free (UMOH, 2016).

The specialized services offered include general medicine and surgery, obstetrics and gynecology, pediatrics, E.N.T service, Dental, Eye, Orthopedics, X-ray and Ultra sound. The special clinics in this Hospital are: ART, Dental, Eye, diabetic, adolescent health, hypertensive clinic and TB clinic. HRRH wards include: Maternity ward, Female ward, Male ward, Children ward, TB ward, Eye ward, surgical ward, mental ward, gynecological, post natal, labor ward and nutrition ward (health.go.ug/docs/hoima.pdf).

3.3 Target Population

The target population for this study were teenage mothers (13-19years) attending Hoima regional referral hospital, specifically the antenatal clinic, labor ward and the post natal wards. An average population of 180 teenage mothers is seen every month.

3.4 Sampling Procedure

For the purpose of this study, a consecutive sampling method was adopted. Teenage mothers who attended HRRH were the participants until the desired sample size is achieved.

3.4.1 Study Procedure

Research assistants were trained by the principal investigator to ensure uniformity of data collection. The research was carried out on the labour, antenatal and post natal wards. Teenage mothers who fit the inclusion criteria were selected and informed about the ongoing research after admission and stabilization on the labour ward and postnatal wards; and after antenatal services have been offered on the antenatal wards. Those who accept to join the study, were consented, and then taken to a side room on the wards where a semi structured questionnaire was administered seeking information about socio-demographic, medical, behavioral, environmental and psychological history.

3.5 Eligibility Criteria:

3.5.1 Inclusion Criteria

- A. Pregnant / puerperium Patients from 13 to 19 years.
- B. Patient's willingness to participate.

3.5.2 Exclusion Criteria Patients

- A. All patients less than 13 years and greater than 19 years
- B. Patients who were critically ill (example; eclampsia)

3.6 Sample Size

Using kesh/leslie formula $n = \frac{(Z_{1-\alpha})^2(P(1-P))}{\delta^2}$

Confidence interval= $1-\alpha = 95\%$

$Z(0.95)=1.96$ (normal distribution table)

P= prevalence from Naguru teenage health center study (Akanbi *et al.*, 2016)= 39.7% ~ **0.4**

δ = Degree of accuracy=5%= **0.05**

Sample size (n) = $1.96*1.96(0.4(1-0.4)/0.05*0.05) = 368.79 \sim \mathbf{369}$

Sample size= 369 participants

3.7 Data Collection And Instruments

Data from the records department as well as the use of semi-structured questionnaires was used in data collection. The questionnaire was administered to the study participants in the language they best understand by the principal investigator or trained research assistants. Before the interview, the nature of the study was explained to each mother and her consent to participate in the study was obtained. Each participant was assured of the confidentiality of her report and anonymity.

Interviews were conducted as privately as possible, as each respondent was taken to the postnatal, ANC and labor ward side room for an interview. The questionnaire captured information on patient's socio-demographic characteristics, medical variables, behavioral, psychological factors and environmental factors.

3.8. Study Variables

3.8.1. Dependent Variable

The dependent variable is teenage pregnancy prevalence

3.8.2. Independent Variables

These constituted information collected on:

1. Demographic characteristics; Age, tribe, address, district, marital status, level of education, religion.
2. Medical factors: HIV sero-status
3. Behavioral factors; age of 1st sexual activity, age of 1st pregnancy, multiple sexual partners, alcohol consumption, substance abuse and contraceptive use.
4. Environmental factors: family upbringing, history of domestic violence, family pressures, cultural norms, history of sibling with teenage pregnancy, family income per day.
5. Psychological factors such as rape/defilement/incest.

3.9 Quality Control

Research assistants were trained on the objectives of this study and the definition of variables will be properly explained to them. Weekly updates on filling of forms and proper monitoring was done by the team leader of the research assistants. Selected Nurses at the ANC and delivery wards of HRRH were the research assistants for this study.

3.10 Data Management And Statistical Analysis

Questionnaires filled in were assessed by the principal investigator at the end of the day to assess for completeness before keeping them in a locked room. The collected data was entered into a password protected computer using Epidata and exported into STATA 11 software, where it was analyzed. The prevalence of teenage pregnancy among mothers attending HRRH was determined using the formula:

$$\text{Prevalence} = (n/N \times 100),$$

Where n, the total number of teenage mothers in ANC and labour ward = 699;

N, the total number of mothers in ANC and labour ward= 3040;

So the prevalence of teenage pregnancy among mothers attending HRRH = $(699/337) = 23\%$

Pie charts were used to display the results in regards. Younger teenagers' results were analyzed against results of older teenagers. A bivariate analysis was done to establish all factors that had a significant relationship with teenage pregnancy, based on a significance level of 5% and using two-way tables with measures of association and logistic regression. Their crude odds ratios with 95% confidence intervals were generated. All statistically significant factors ($p < 0.05$) were used in a multiple logistic regression to control for confounders.

3.11 Ethical considerations

- Approval letter from the university, administration of HRRH and HIRC were procured for the purpose of the research.
- Informed consent was received from the participants and duly documented; translations in the local language for clear understanding for those who do not understand English.
- Confidentiality was upheld during and after the course of the research.
- Serial numbers were used to ensure privacy of participants
- Records obtained was kept under lock and key during the purpose of the research and destroyed afterwards to ensure privacy of all the participants.
- Computer containing the participants' information was password protected.

3.12 Work Plan

Data was collected between December 2017 and February 2018 from the labor, antenatal and post natal wards and afterwards data collected were analyzed appropriately.

3.13 Budget

Printing and photocopying of questionnaires:	120,000ugx
Research assistants	: 150,000ugx
Printing/ binding of proposal	: 15,000ugx
Data analysis	: 100,000ugx
Research printing and binding	: 100,000ugx
Miscellaneous	: <u>20,000ugx</u>
Total	: <u>500,000ugx</u>

3.14. Limitations:

Considering the sampling technique used (consecutive sampling), the respondents were interviewed based on availability and not randomized. Hence, the degree of generalizability is questionable as only mothers who attend HRRH are participants.

The reliability and validity of the results obtained was subject to the responses of patients to questions that will be administered. The study design cannot be used to analyze behavior change over a period of time as data will be collected at once. The results will be considered significant for other hospitals within the area and in the catchment areas.

3.15. Dissemination of results:

The results of the study will be availed to:

- a) The faculty of Medicine and dentistry at Kampala international university.
- b) The research committee at Hoima regional referral hospital (HRRH)
- c) Results will be shared with the scientific community by publishing it in peer-reviewed journals.

CHAPTER FOUR: RESULTS

4.1 BASELINE CHARACTERISTICS

This chapter is presented in four main sub-sections; the first sub-section presents data on baseline characteristics of participants (Socio-demographic, behavioral, environmental, medical and psychological characteristics), the second sub-section shows results of prevalence of teenage pregnancy, the third sub section shows bivariate analysis, while the fourth sub-section presents findings on the effect of a combination of various selected variables on the dependent variable obtained using multivariate logistic regression analysis.

Table 4.1. 1: Socio-demographic characteristics of participants

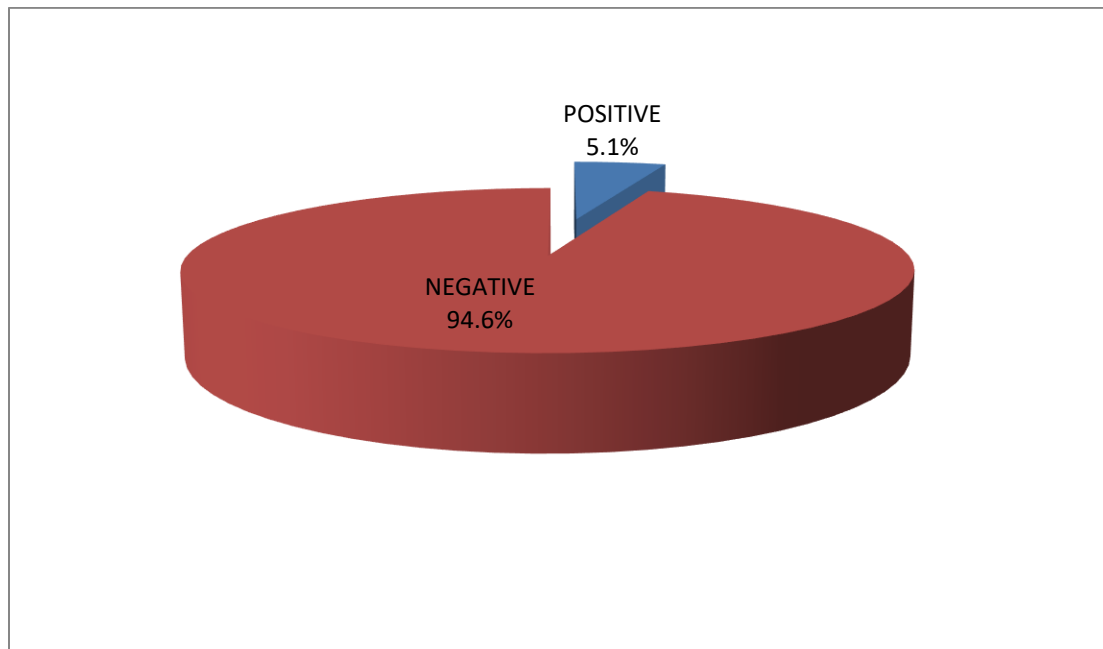
Characteristic	n (%)
Age Categories in Years of respondents	
13-14	6(1.63)
15-17	130(35.2)
18-19	233(63.1)
District	
Hoima	
Others	349 (94.6)
	20(5.42)
Tribe	
Banyoro	241(65.3)
Bakiga	30(8.1)
Baganda	24(6.5)
Alulu	17(4.6)
Bayankole	12(3.2)
Others	45(12.1)
Marital Status	
Married	225(61)
Single	67(18.2)
Separated	2(0.5)
Cohabiting	75(20.3)
Religion	
Catholic	142(38.5)
Protestant	141(38.2)
Born again	42(11.4)
Muslim	27(7.3)
Others	17(4.6)
Educational Status	
Primary	185(50.1)
Secondary	162(43.9)
Tertiary	4(1.1)
None	18(4.9)
Stopped school before pregnancy	
Yes	133(36.0)
No	236(64.0)

The mean age of respondents was 17.5, majority (65.3%) were Bunyoro, married (61%), catholics (37.4 %). Half (50.1%) of the respondents had attained primary school education, but a large percentage (64%) got pregnant while in school thus becoming school dropouts.

Table 4.1. 2: : Medical characteristics of participants

HIV Status	N (%)
Positive	20(5.4)
Negative	349(94.6)

Figure 2. 1: PIE CHART I: HIV sero-status among the respondents



Majority of the mothers were HIV sero- Negative (94.6%)

Table 4.1. 3: Behavioral characteristics of participants

Characteristic	N (%)
1STsexual activity	
13-14	42(11.4)
15-17	252(68.3)
18-19	75(20.3)
1ST pregnancy	
13-14	11(3.0)
15-17	206(55.9)
18-19	152(41.2)
Contraceptive use	
Yes	48(13.0)
no	321(87.0)
Number of sexual partners	
1	240(65.0)
>1	129(35.0)
Alcohol use	
Yes	43 (11.7)
No	326(88.3)
Recreational drug use	
Yes	0(0)
No	369(100)

Majority (68.3%) had their coitarche between 15-17years. Only 12.5% had used some form of contraception before, 37.7% had more than one sexual partner, and only 10.8% had a positive history of alcohol use before pregnancy.

Table 4.1. 4 Environmental factors of participants

Characteristic	N (%)
Domestic violence	
Yes	38(6.5)
No	331(93.5)
Family upbringing	
Monogamous	128(34.7)
Polygamous	83(22.5)
Extended	69(18.7)
Single	70(19)
Orphan	19(5.1)
Possible reasons	
Cultural norms	8(2.2)
Family pressures	39(10.6)
Others	322(87.3)
Alcoholic parents	
Yes	86(23.3)
No	283(76.7)
Sibling with teenage pregnancy	
Yes	77(20.9)
No	292(79.1)
Family income	
<1.25USD (4500ugx)	175(47.4)
>1.25USD (4500ugx)	194(52.6)

Majority (93.5%) of the respondents had no history of domestic violence, most belonged in monogamous (37.7%), 87.3% of the respondents had other reasons for getting pregnant aside family pressures or cultural norms; majority (76.4%) had non-alcoholic parents, however 57.5% of those with alcoholic parent experienced negative effects of alcohol on family provision. 75.6% of the respondents had no sibling with teenage pregnancy and 50.7% of the respondents were living in poverty.

Table 4.1. 5: Psychological factors

Characteristic	N (%)
Positive history of rape /defilement/ incest	
Yes	4(1.1)
No	365(98.9)

1.4% of the teenage mothers had a positive history of sexual abuse.

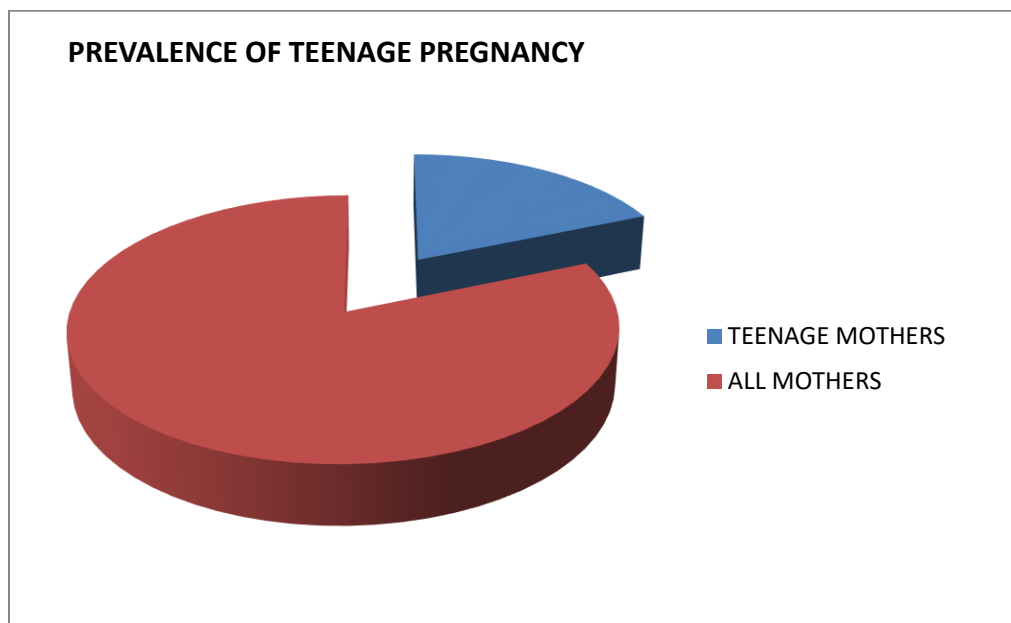
4.2 PREVALENCE OF TEENAGE PREGNANCY IN HRRH

Table 4.2 1Prevalence of teenage pregnancy

FACTOR	December N (%)	January N (%)	February N (%)	Total N (%)
Teenage mothers	212(21.1)	288(33.2)	199(22.6)	699(23)
All mothers	792(78.9)	868(75.1)	681(77.4)	2341(77)
Total	1004	1156	880	3040

The prevalence of teenage mothers was 23% represented by a total number of 699 among 3040 mothers that attended HRRH.

Figure 2. 2: PIE CHARTII: Prevalence of teenage pregnancy



4.3 FACTORS ASSOCIATED WITH TEENAGE PREGNANCY

Table 4.3. 1: : .socio-demographic and Behavioural factors at bivariate analysis

Variable		COR (95% CI)	P- value
Address	Other District	1	0.860
	Hoima	1.1 (0.42 - 2.79)	
Marital Status	Married	1	0.000**
	Single	4.6 (2.73 - 7.63)	
	Separated	1.67 (0.15 - 18.84)	
	Cohabiting	2.22 (1.25) - 3.95)	
Education level			0.009**
	Secondary /Tertiary	1	
	None / Primary	1.8 (1.16 - 2.76)	
Age of 1st sexual activity	18-19	1	0.000**
	15-17	55.5(7.59-405.55)	
	13-14	133.2(16.78-1057.33)	
Contraceptive use		1.49(0.77-2.88)	0.239
Number of sexual partners		0.57(0.36-0.91)	0.018**

**p value<0.05

Factors found to be significantly associated with teenage pregnancy include being single or cohabiting, early age of 1st sexual activity, low education level and more than 1 number of sexual partners among mothers attending HRRH.

Table 4.3. 2: Environmental factors at Bi-variate analysis

Variable	COR (95% CI)	P- value
Domestic violence	1.44(0.73-2.84)	0.29
Family upbringing	1	0.182
Monogamous Others	1.37(0.86-2.18)	
Alcoholic parents	1.24(0.75-2.03)	0.4
Sibling with teenage pregnancy	1.04(0.62-1.75)	0.869
Family income	0.81(0.53-1.24)	0.331

There were no significant associations between the environmental factors and teenage pregnancy among mothers attending HRRH

Table 4.3. 3: Factors at multivariate analysis

Variable	COR (95% CI)	AOR (95% CI)	P-value
Marital status		4.15(2.47-6.99)	0.000***
Age of 1st sexual activity		0.10(0.06-0.19)	0.000***
Number of sexual partners	0.57(0.36-0.91)	0.36(0.20-0.66)	0.000***

***P-value<0.05

Multivariate logistic regression was used to assess the possible association between the independent variables and teenage pregnancy after adjusting for co-founders and being unmarried, early age of 1st sexual activity and more than 1 sexual partner was found to be significantly associated with teenage pregnancy among mothers attending HRRH.

CHAPTER FIVE: DISCUSSION

5.1. Prevalence of teenage pregnancy

Teenage pregnancy is a reality among mothers attending HRRH. In our study, the prevalence of teenage pregnancy among mothers attending HRRH was found to be 23%, which is high. In a multi-country cross-sectional study (Odimegwu, et al, 2016) which assessed the factors associated with teenage pregnancy in Sub-saharan Africa, the prevalence value for teenage pregnancy in East Africa, West Africa and South Africa were 15%, 26% and 30%. This is way higher than the regional prevalence.

The national prevalence of adolescent pregnancy in Uganda is 25% (UBOS, 2016); however a teenage pregnancy prevalence of 29% was reported in the Bunyoro region (Uganda Population Secretariat, 2013) which is higher than the prevalence recorded in this study. Also, a cross sectional study among teenagers assessing Naguru teenage Centre (Akanbi et al, 2016) recorded teenage pregnancy prevalence of 40% which is higher than the prevalence in this study.

5.2. Age-risk group of teenage pregnancy

In this study 51.5% of the teenage mothers were pregnant for the first time when they were in the age-group of 15-17. 46.1% were between ages 18-19 while only 2.4% were aged between 13-14 years. Hence, the highest rates were between the 15-17 age groups. This is most likely due to the fact that 249 of the 369 mothers interviewed, accounting for 67.9% had their first sexual activity between the ages 15-17. Hence, the age of first sexual activity had a significant effect on the number of teenage pregnancy. This is in agreement with the study done by (Akanbi et al, 2016) where most teenagers who were ever pregnant ranked highest among the 15-16 and 17-18 age groups with 29.1% and 42.2% respectively. This result can further be explained by the fact that 10% of the sexually active adolescents aged 15-19 years had their first sexual encounter before age 15 (UNICEF fact sheet, 2008).

5.3. FACTORS ASSOCIATED WITH TEENAGE PREGNANCY

5.3.1 Marital status

In this study, majority of the respondents were married or co-habiting and a lower proportion were single parents or separated from their partners. In this study, marital status (p -value= 0.000) had a significant association with teenage pregnancy. This may be explained by the cultural practices in this region where younger girls are married off earlier. This is further in agreement with a study done (Rutaremwa, 2013) by which discovered that many women in the developing world and in Uganda are subject to marriage at an early age.

5.3.2 Age of 1st sexual activity and 1st pregnancy

In this study, mothers who had early sexual contact (p -value= 0.00) were more likely to have teenage pregnancy compared to their counterparts who had their first sexual encounter late. Mchunu et al (2013) reports in a cross-sectional study in South Africa an early sexual activity among teenagers predisposing them to teenage pregnancy. This is further in agreement with a retrospective study by Sedgh et al (2015) carried out in New York on Adolescent Pregnancy, Birth, and Abortion Rates Across countries using vital statistics reports and the United Nations Statistics Division for most countries where sexual activity as one of the two most important determinants of teenage pregnancy.

5.3.3 Number of sexual partners

In this study, teenagers with more than one sexual partner were less likely to get pregnant compared to their counterparts who were committed to one sexual partner (p -value=0.018). This may be explained by the lack of commitment by these teenagers in their unstable relationships thus finding means of not getting pregnant. This is not in agreement with a cohort study done in Rakai community, Uganda by Nanlesta et al (2015) where having multiple sexual partners was more likely to lead to teenage pregnancy. A retrospective study by Neema et al (2004) in Uganda also stated the likelihood of multiple sexual partners to lead to teenage pregnancy. Furthermore, another retrospective study by Mamura et al, (2007) to identify factors associated with teenage pregnancy in 25 European Union countries using electronic bibliographic databases and bibliographies of selected articles identified risk-taking behaviors and lifestyle to increase the likelihood of teenage

pregnancy. This may be explained by the frequent claims, although less often substantiated, that adolescent girls are often involved sexually with older men in relationships where gifts of money, clothes, school fees and other goods are exchanged for sexual favours (Jolly, et al, 2000).

CHAPTER SIX: CONCLUSIONS AND RECOMMENDATIONS

6.1 CONCLUSION

1. The prevalence of teenage pregnancy among mothers attending HRRH is high.
2. The age-risk group for teenage pregnancy among mothers attending HRRH is 15-17 age-group.
3. The major factors associated with teenage pregnancy included unmarried status, early sexual activity and more than 1 sexual partner.

6.2 RECOMMENDATIONS

The task to reduce the prevalence of teenage pregnancy cuts across all levels.

1. There is need for sexual education and empowerment for the Male and Female teenagers as well as Parents about their role in preventing teenage pregnancy.
2. Teachers, community leaders and Religious leaders can be sensitized about their role in preventing teenage pregnancy.
3. A big study is recommended in this hospital that will be a basis for policy making in the future.

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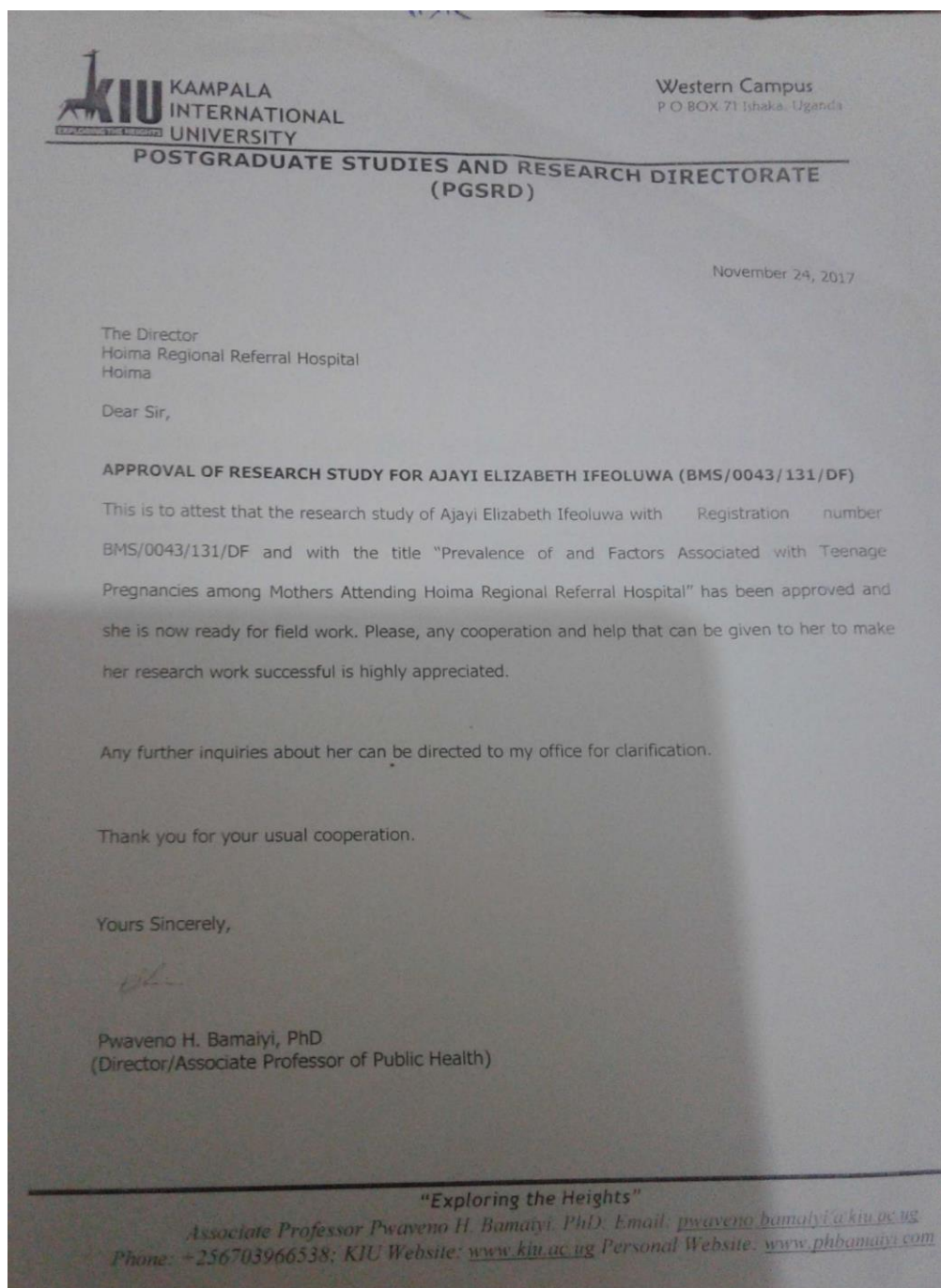
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APPENDICES:

APPENDIX I: APPROVAL LETTER FROM THE UNIVERSITY



APPENDIX II: APPROVAL LETTER FROM HRRH

Telegrams :
Telephone : 0465 - 40005 / 0465 - 40412/
0465 - 40122
Fax Line : 0465 - 40005

In any correspondence on
this matter please quote Ref. No.



THE REPUBLIC OF UGANDA

Ministry of Health
HOIMA REGIONAL REFERRAL HOSPITAL
P.O. Box 5, Hoima - Uganda

6th December 2017

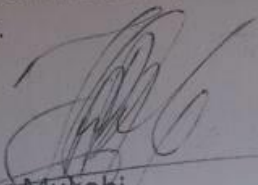
To Pwaveno H. Bamaayi PhD
Kampala International University
Western campus
P.O Box 71
Ishaka – Uganda

**RE: APPROVAL OF RESEARCH STUDY BY AJAYI ELIZABETH (IFELOWA
MS/0043/131/DF)**

Request is made to your letter dated 24/11/2017 about the above subject.

This is to inform you that approval for proposed leading to the study entitled prevalence and factors associated with teenager pregnancies among mothers attending Hoima Regional Referral Hospital has been approved by Hoima Hospital Management.

By copy of this letter, Ms. Ajayi Elizabeth Ifelowa is hereby request to start the process.


Dr. Peter Mukobi
HOSPITAL DIRECTOR

C.C Ajayi Elizabeth Ifelowa
C.C The Chairperson Institution Review Committee

APPENDIX I1I: APPROVAL LETTER FROM HIRC

Telegrams :
Telephones : 0465-40005/0465-40412/
Fax Line : 0465-40122
0465-40005


THE REPUBLIC OF UGANDA

Ministry of Health
HOIMA REGIONAL REFERRAL HOSPITAL
P. O. Box 5, Hoima- Uganda

In any correspondence on
this matter please quote Ref. No.

24.04.2018
Ms. Ajayi Elizabeth Ifeoluwa
Principal Investigator
Kampala International University.

In the matter concerning the review of a research project entitled, "The PREVALENCE OF And Factors Associated With Teen Pregnancies Among Mothers Attending Hoima Regional Referral Hospital".
The review was expedited by the Hoima hospital Institutional Review Committee, HIRC and approved that you can conduct the above research project and furnish the Secretary with a progress report as stated in Annex XVI.
In this respect, the HIRC's Approval of the study is granted and shall be valid until 23.10.2018. The approval granted includes all materials submitted to the HIRC for review.

Please note that the annual report and the request for renewal where applicable, should be submitted two months before expiry date of approval.

Also note that any problems of a serious nature related to the execution of the research protocol should be promptly reported to the HIRC, and any changes to the research protocol should not be implemented without HIRC's approval except when necessary to eliminate apparent immediate hazards to the research participant(s).

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.

Signed 
Dr. Mulwooza Michael
Ag. Chairman HIRC
c.c: Executive Secretary, UNCST



APPENDIX IV: INFORMED CONSENT FORM IN ENGLISH

KAMPALA INTERNATIONAL UNIVERSITY, WESTERN CAMPUS

P.O. BOX 71

ISHAKA- UGANDA.

INFORMED CONSENT DOCUMENT

Study title:

**PREVALENCE OF AND FACTORS ASSOCIATED WITH TEENAGE PREGNANCIES
AMONG MOTHERS ATTENDING HOIMA REGIONAL REFERRAL HOSPITAL**

Principal investigator: AJAYI ELIZABETH IFEOLUWA BMS/0043/131/DF

INTRODUCTION

What you should know about this study:

- You are being asked to join a research study
- This consent form explains the research study and your part in the study
- Please read it carefully and take as much time as you need.
- You are a volunteer. You can choose not to take part and if you join, you may quit at any time.

There will be no penalty if you decide to quit the study.

BACKGROUND

Despite the establishment of national teenage pregnancy programs and strategies, teenage births have increased globally. Ugandan adolescents conceive as early as 13 years and more than 50% engage in sexual relationships by the age of 15 years. In HRRH, About 19% of mothers attending the antenatal clinic monthly are teenagers and about 26% of monthly deliveries are teenage mothers. This study will help to ascertain the prevalence of teenage pregnancy and possible factors

associated with this, thereby helping in more efficient ways of reducing the prevalence of teenage pregnancy.

Procedures

You will be counseled about your pregnancy and other concerns that you may have. Information about the research will be given in detail. Then a semi-structured questionnaire will be administered to you.

Purpose of the research project

In this study we intended to investigate and determine the prevalence of and factors associated with teenage pregnancies among mothers attending HRRH. This information will help in formulation of strategies to reduce the prevalence of teenage pregnancies and inform policy makers on areas of focus in the fight to reduce teenage pregnancies.

Protecting data confidentiality

Confidentiality of the information collected will be ensured by using numbers and not the names of the participants and access to data will be limited to those directly involved in the study. This consent form and questionnaire will be stored in a locked cabinet by the researcher and eventually destroyed. The university ethics board may review your records to ensure your rights are protected, but they will not be able to link your responses to your name. Information from this interview will only be used for research purposes.

Protecting subject privacy during data collection:

Data collection will be done in the hospital antenatal clinic, maternity or labor ward in a private room.

What happens if you leave the study?

Your decision not to participate or leave the study will not affect the care you receive at the hospital.

Who do I ask/call if I have questions or a problem?

In case of any queries or matters arising, please contact: AJAYI ELIZABETH IFEOLUWA:
Kampala International University, Western Campus, Ishaka- Bushenyi, Tel: 0757935133

What does your signature (or thumbprint/mark) on this consent form mean?

Your signature on this form means

- You have been informed about this study's purpose, procedure, possible benefits and risks.
- You have been the chance to ask questions before you sign.
- You have voluntarily agreed to be in this study.

.....
Name of participant	Signature/thumbprint	Date
.....
Name of parent/guardian	Signature/thumbprint	Date

APPENDIX V: INFORMED CONSENT FORM IN LUYONRO

EBBARUHA Y'OKWIKIRIZA

OMUTWE: OBWINGI NEBIKULETEREZA ABAANA BAISIKI ABATAKAHIKIRE OKUTWARA ENDA OMU BA MAMA ABAGENDA HA IRWARO LYA HOIMA REFERRAL

KWANJURA:

Ebyoina kumanya ha kusoma kunu;

- Nosabwa okweteraniza ha kuseruliriza kunu.
- Ebbaruha y'okwikiriza enu nesoboora haisomo erikuserulirizibwaho nahakicweka kyawe mukusoma kunu.
- Giisome nobwegendereza bwingi kandioyeyambise obwire obukukumara.
- Olimuyambi kandi oliwobugabe okubwetabamu nokuburugamu bwire obwona.

ENDUGHIRO

Nobubaraba bateireho entekaniza nyingi harulengo rw'Ihanga, ezikulemesa abaana abato okutwara enda, okuzara kwekika kinu kweyongaireho omunsi yona.

Omu Uganda abaisiki batwara enda ha mwaka 13 kandio bucweka 50 batandika kuterana na basaija ha mwaka 15 y'obuto .Hairwaro iya Hoima referral obucweka 19 bwabakyara abaija mumateneti buli mwezi baba abaana abatakahikire okutwara enda, kandi obucweka 26 bwa baana aba zarwabulimwezi, bazarwa aba mama abato.

Nahabweki okusoma kunu kwija kuyamba okwetegereza obwingi bwa abaisiki abatwara enda batakahikire hamu n'ebiretereza, nukwo kituyambe okuzora emiringo ekukendeza ekizibu kinu.

EMITENDERO

Oija okubudabudibwa handa yawa hamu nobwetago bwawe obundi nukwo hanyuma orahebwa ebikaguzo ebikukwata haisomo linu.

EKIGENDERWA KYOKUSERULIRIZA

Ekgenderwa kyokuseruliriza kiri kuzora obwingi bwa abaana abaisiki abatwara enda batahiikire hamu nebiretereza ekizibu kinu nukwo kiyambe ha kuzora emiringo y'okukimaraho.

OKULINDA ENSITA ZA EBIKHEREZEZWAYO OMU KUSERULIRIZA KUNU

Ebikuherezewayo omukuseruliriza kunu biija kulindwa kuraba omukukuha enamba mukikaro ky'okukozesa amabara gaawe. Kandi nebikuruga mukuseruliriza kunu biija kuhebwa abo bonka abakukwatwaho nukwo hampero yabyona empapura zohebwe.

OKULINDA EBIKUKWATA HALI AKUSERULIZIBWAHO

Ebikuruga mukuserulizibwaho biija kukolerwa ha Kiliniki y'Abakazi abenda, ekisika kyokuzaliramuhamu nekisiika kyabakazi abenda.

Kiki kirabaho obworaruga mu kuseruliriza kunu?

- Encwamu mu yawe okuruga mukuseruliriza kunu tikwija kutalibaniza okujanjaba kwawe omu irwaro linu.

Ohandakaguza/kuterera esimu kakusangwa mba nekikaguzo rundi ekizibu hakukaguzibwa kunu?

Orahiikira AJAYI ELIZABETH IFEOLUWA ha 0757935133

owa Kampala International University Western Campus, Ishaka – Bushenyi.

Okutekaho omukono rundi kinkumu kyawe ha kuseruliriza kunu kikumanyisa ki?

- ✓ Okamanyisibwa hakuseruliriza kunu hamu nebikurugamu.
- ✓ Okahebwa omugisa okukaguza ebikaguzo otakateire ho omukono.
- ✓ Oyegondereize okuba mukuseruliza kunu.

.....
Ibaralyawe Omukono / Kyekumu Ebiro

.....
Omuzaire / Ow'oruganda Omukono / Kinkumo Ebir

APPENDIX VI: QUESTIONNAIRE IN ENGLISH

Questionnaire Tick the appropriate option in the square bracket.

Section A: Socio-demographic factors

1. Age group (a) 13-14 [] (b) 15-17 [] (c) 18- 19 []
2. Tribe
3. Address
4. District.....
5. Marital status (a) married [] (b) single [] (c) separated []
6. Religion(a)catholic[] (b)protestant[] (c)born-again[] (d)Muslim[]
(e)other[].....specify
7. Level of Education (a) Primary [] (b) Secondary [] (c) Tertiary [] (d) None []
8. Did you stop schooling before the pregnancy? (a) Yes [] (b) No []

Section B: medical factors

1. HIV sero-status (a) Positive[] (b) Negative []
2. If positive, how was it contracted? (a) At birth [] (b) sexual activity [] (c) unknown (d) other.....[]

Section C: Behavioral factors

1. Age of 1st sexual activity (a) 10-14 [] (b) 15-17 [] (c) 18-19 []
2. Age of 1st pregnancy (a) 10-14 [] (b) 15-17 [] (c) 18-19 []
3. Contraceptive use before 1st pregnancy (a) Yes [] (b) No []
4. Number of sexual partners (a) 1 [] (b) >1 []
5. Positive history of alcohol use before pregnancy (a) Yes [] (b) No []
6. Positive history of recreational drugs before pregnancy (a) Yes [] (b) No []

Section D: Environmental factors

1. Positive history of domestic violence? (a) Yes [] (b) No []
2. Family upbringing (a) monogamous family [] (b) polygamous family [] (c) single parent []
(c) Extended family [] (e) orphan []
3. What led to the pregnancy (a) cultural norms[] (b) family pressures [] (c) others[]

4. Is any of your parent/ guardian an alcoholic? (a) Yes [] (b) No [] If yes, specify.....
5. Has the drinking affected his/her ability to provide for the family? (a) Yes [] (b) No []
6. Positive history of sibling with teenage pregnancy (a) Yes [] (b) No []
7. Family Income per day (a) <1.25USD (4500ugx) [] (b) >1.25USD (4500ugx) []

Section E: Other factors

1. Positive history of rape /defilement/ incest (a) Yes [] (b) No []
2. If yes, specify.....

APPENDIX VII: QUESTIONNAIRE IN LUYONRO

EBIKAKUZO

GORORA EKIHIKIRE OMUKABOXI.

SECTION A:

(A) EBYENYIKARA

1. Okugwa mumyakaki (a) 13-14 ☐ (b) 15-17 ☐ (c) 18-19 ☐
2. Oli warulimi ki
3. Endagiyo yawe
4. Enyamasaza yawe

5. Ebyobuswezi bwawe;

- (a) Osweirwe ☐ (b) Oli mu wenka ☐ (c) Mukahukana ☐

6. Ediini yawe;

- (a) Mukatuliki ☐ (b) Mu Protestant ☐ (c) Musiramu ☐
(d) Murokole ☐ (e) ebindi nebindi ☐

7. Orulengo rwokusoma

- (a) Primare ☐ (b) Siniya ☐ (c) Univasite ☐ (d) Busaho ☐

B. EBYOBWOMEEZI

- (a) Oina Silimu; (i) Ego ☐ (ii) Nangwa ☐

(b) Obworaba oina, okagifuna ota;

- (i) Tomanyire ☐ Okaraba mukuterana ☐ (iii) Ebindi nebindi ☐

(C) ENPINDUKA HINDUKA OMU BYENYIKARA

1. Emyakay'okuterananomusaijaomurundigwokubanza

- (a) 10-14 ☐ (b) 15-17 ☐ (c) 18-19 ☐

2. Emyaka y'okutwara enda yokubanza

- (a) 10-14 ☐ (b) 15-17 ☐ (c) 18-19 ☐

3. Okakozesaha emiringo yokwerinda okutwara enda yokubanza otakahikire

- (a) Ego ☐ (b) Nangwa ☐

4. Wakaterana nabasaija baingaha

(a) Omu ☐ (b) haiguru y'omu ☐

5. Oka nywaho omwenge otakatwaire enda yokubanza;

(a) Ego (b) kwaha

6. Okeyambisaho ebiibazibazi otakatwaire enda yokubanza;

(a) Ego ☐ (b) Nangwa ☐

(D) EBIRETWA EBITWEHIIGULIRIZE

1. Obutetegerezangana omumaka.

2. Okakuzibwa mu;

(a) Maka g'omusaijan'omukaziomu ☐

(b) Amaka g'abakazibaingi ☐ (c) Omuzaire omu ☐

3. Kiki kyakuhambirize okutwara enda;

(a) Enyikiriza y'obuhangwa ☐ (b) okuhambirizibwa ☐ (c) ebindi nebindi

4. Haroho omutami zimubazaire babwe;

(a) Ego ☐ (b) Nangwa ☐

5. Omwenge gutalibanizeho eka yanyu ;

(a) Ego ☐ (b) Nangwa ☐

6. Haroho omugenzi wawe ayatwaire enda atakahikire;

(a) Ego ☐ (b) Nangwa ☐

7. Entahya nyanyu bulikiro;

(a) haiguru 1.25 USdollars (4,500) ☐ (b) hansi 1.25 US dollars (4,500) ☐

(E) EBIKULETERAZA EBINDI

1. Okuhabibwa / okusiswa / okuteranan'oworuganda rwawe;

(a) Ego ☐ (b) Nangwa ☐

2. Kiraba ego kikaijakita

.....