Addressing the Complexities of Teenage Pregnancy: Insights from a Study in Lira District, Uganda

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ABSTRACT

Teenage pregnancy persists as a global public health challenge with profound implications for maternal and child well-being, particularly in low-resource settings. This study investigates the prevalence, determinants, and implications of teenage pregnancies in Lira District, Uganda. Employing a cross-sectional quantitative approach, data was collected from 106 pregnant mothers aged 12-19 attending antenatal care services. Findings reveal that a majority of respondents fall within the 12-19 age range, with significant proportions having attained only primary education and being married. Factors contributing to early pregnancies include peer pressure and financial constraints. Moreover, respondents express awareness of risks such as vaginal tears and maternal mortality during delivery. These findings underscore the urgent need for comprehensive interventions addressing socio-economic disparities, enhancing access to education and healthcare, and promoting reproductive health education. By elucidating the complexities surrounding teenage pregnancies in a resource-constrained context, this study contributes valuable insights to inform targeted strategies aimed at reducing the burden of teenage pregnancies and improving the health outcomes of adolescent mothers and their offspring.

Keywords: Prevalence, Teenage Pregnancy, Mothers, Antenatal Care, Regional Hospital

INTRODUCTION

Adolescents and teenagers are two distinct groups with distinct technical differences. Adolescents are more formal or academic, while teenagers are between the ages of 13-19. Adolescence is a time of opportunity for healthy adulthood, while teenagers are between the ages of 13-19 [1, 2]. Globally, around 15% of young women give birth before age 18, and early childbearing can negatively impact girls' education, livelihoods, and health [3]. Pregnant girls may face pressure or dropout from school, impacting their educational and employment prospects [4]. Early pregnancy and childbearing can also have social consequences, including reduced status in the home and community, stigmatization, rejection and violence by family members, peers, and partners, and early and forced marriage [5]. Adolescent girls, particularly early adolescents, are at high risk for serious health issues during pregnancy and delivery, including obstetric fistula, eclampsia, puerperal endometritis, and systemic infections, which are among the top causes of

disability-adjusted life years and death among girls aged 15-19 globally [6] [7]. Teenage pregnancy is a global health and social concern affecting young women and their children, with unique medical and psychosocial consequences for adolescents and society [8]. According to the United Nations Children Fund (UNICEF), teenage pregnancy is defined as a pregnancy in girls within the ages of 13–19 [9]. It is a global problem and creates issues for all those concerned about young women and their children's health and well-being. Annually, about 21 million girls aged 15 to 19 in developing regions become pregnant. Around half of these pregnancies were unintended, and more than half ended in abortion, often in unsafe conditions. Sub-Saharan Africa recorded the highest prevalence of teenage pregnancy in the world in 2013. 5.6 Teenage mothers accounted for more than half of all the births in this region. It is estimated that there are 101 births per 1000 women aged from 15 to 19. This almost doubles the global average. From 15

countries that identified more than 30% of women giving birth before the age of 18 worldwide, 14 of them were found in Sub-Saharan Africa, including Niger, Mozambique, Malawi, Uganda, and Cameroon. The continent accounts for half of the world's burden of maternal, newborn, and child deaths [10] [11].

Adolescent pregnancy remains a major contributor to maternal and child mortality and to intergenerational cycles of ill health and poverty. Pregnancy and childbirth complications are the leading cause of death among 15- to 19-year-old girls globally, with low and middle-income countries accounting for 99% of global maternal deaths of women ages 15 to 49 years [12]. Adolescent mothers (ages 10 to 19 years) face higher risks of eclampsia, puerperal endometritis, and systemic infections than women aged 20 to 24 years [13]. Additionally, some 3.9 million unsafe abortions occur annually among girls aged 15 to 19 years, contributing to maternal mortality and long-term health problems (Levine Coley et al., 1997). Furthermore, the emotional, psychological, and social needs of pregnant adolescent girls can be greater than those of other women [14]. Early childbearing can increase risks for newborns as well as young mothers. In low- and middle-income countries, babies born to mothers under 20 years of age face higher risks of low birth weight, preterm delivery, and severe neonatal conditions [15]. The purpose of the study was to ascertain the prevalence of mothers who become pregnant for the first time before turning 20, to ascertain the causes behind these mothers' first pregnancies occurring before the age of 20, to assess the level of information regarding the hazards and difficulties that women who give birth before the age of 20 are likely to encounter.

METHODOLOGY

Study design
The design of this study was cross sectional and quantitative approach.

Study area
Lira District is bordered by Pader District to the north, Otuke District to the northeast, Alebtong District to the east, Dokolo District to the southeast, Apac District to the southwest and Kole District to the west. The main municipal, administrative and commercial center in the district, Lira, is located 110 kilometres (68 mi), by road, southeast of Gulu, the largest city in Northern Uganda. The coordinates of the district are: 2° 16' 26" N / 32° 57' 11" E.[3] and 124 kilometres northwest of Soroti.

Study population
Our study population was teenage mothers aged between 12 and 20.

Inclusion criteria
We included pregnant mothers aged between 12 and 19.

Exclusion criteria
Severely sick mothers were not to be included in the study since they required immediate attention and need to go home early and have rest and those who mothers who did not consent.

Sample size determination
Sample size was determined by adopting Fisher formula [16]; -

$$n = \frac{Z^2 PQ}{d^2}$$

n= sample size

Z= standard deviation at the desired degree of accuracy which is usually set at 90% which gives 1.96.

P= proportion of target population estimated to have the same characteristics;

therefore, p was 50% (constant) in decimal form it will be 0.5

Q=1-P

d= Degree of error we are ready to accept or to tolerate and I put it at 0.095.

$$n= \frac{(1.96)^2 \times (0.5) \times (0.5)}{(0.095)^2}$$

n=106.42.

From this formula, the minimum sample size that was required was 106 respondents, I used cross sectional approach, however, I had to get permission from each mother who came for antenatal care services and I got their consent and then they were enrolled in the study that I conducted during that session.

Sampling method
In this study, I used consecutive sampling approach because the study was to be done among mothers attending antenatal care unit, until the number reached 106 mothers.

Data collection methods
The data was collected using closed ended questionnaires and this was done by the principal investigator.

Data quality control
In order to reduce errors, the researcher was assisted by an assistant who was trained. He helped in translation process and the research was monitored by the principal researcher and supervised by consultant who is the staff of the university.

Data analysis
The data was raw at the time of collection. Then the processing and analysis was done by computing

manually and editing was done by the help of a supervisor. This was done to correct all the errors and irrelevancies during data collection. Processing of the data was done before presentation.

Data presentation

The data collected was presented in form of pie charts, frequency tables, graphs, which helped us to show different aspects of interest.

Ethical consideration

The study was approved by KIU institute review board on the behalf of national council of science and technology. Permission was sought from the administrators of Lira Regional Referral Hospital where the research was conducted. Participants were properly informed about the subject and neither forced nor influenced to answer any questionnaire as per the researcher interest. Participants had a right to withdraw at any stage of the study.

RESULTS

The research findings below illustrate the respondent demography, age of first pregnancy, factors that led teenage mothers to getting pregnant too early in their reproductive and evaluation of the knowledge on the complications these young mothers are likely to face during delivery.

Respondent's demographic data
Table 1 Age distribution of respondents

Age limit	Frequency	Percentage (%)
12 −19	65	61.31
>20	41	38.68
TOTAL	**106**	**99.99**

The study included mothers aged 12 years and above as demonstrated above. The highest number of respondents were in the age limit 12 − 19 accounting for 65 respondents representing 61.31%, and age limit greater than 20 limit, accounting for 41 respondents representing 38.68%.
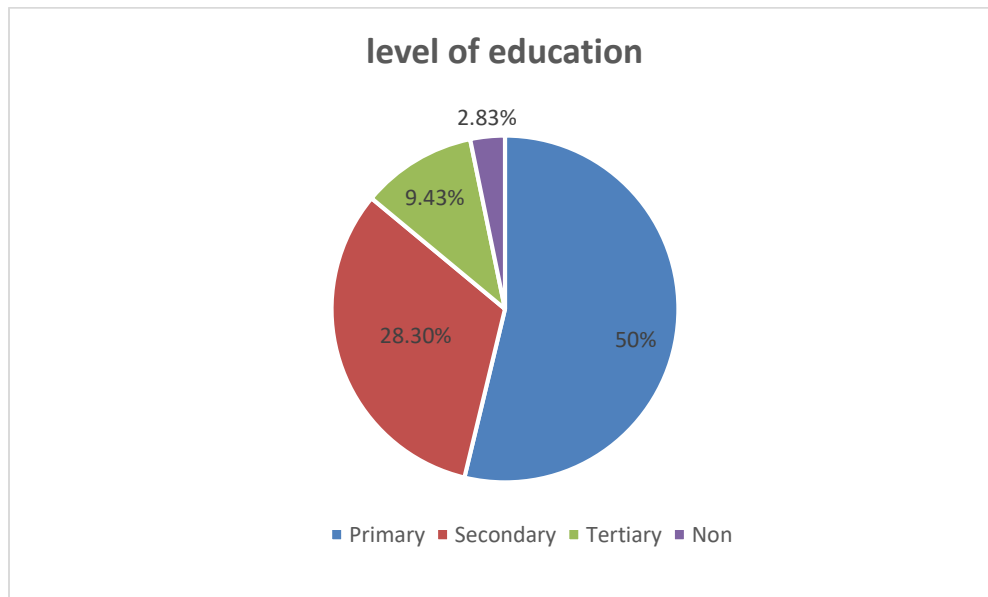
N=100.

Figure 1: A pie chart showing education level of respondents in percentages

Majority of respondents were educated up to primary accounting for 50%, which is not good enough for someone to end in primary level of education, then 28.30%) of the respondents had ended secondary level that is to say ordinary level which is a fair level of education at least someone can have some knowledge to reason out some issues in life. And 9.43% respondents had reached tertiary level that was a very good level because someone can do something for a living and lastly, 2.83% respondents had not gone to school which is a poor indicator of life because the person will not be able

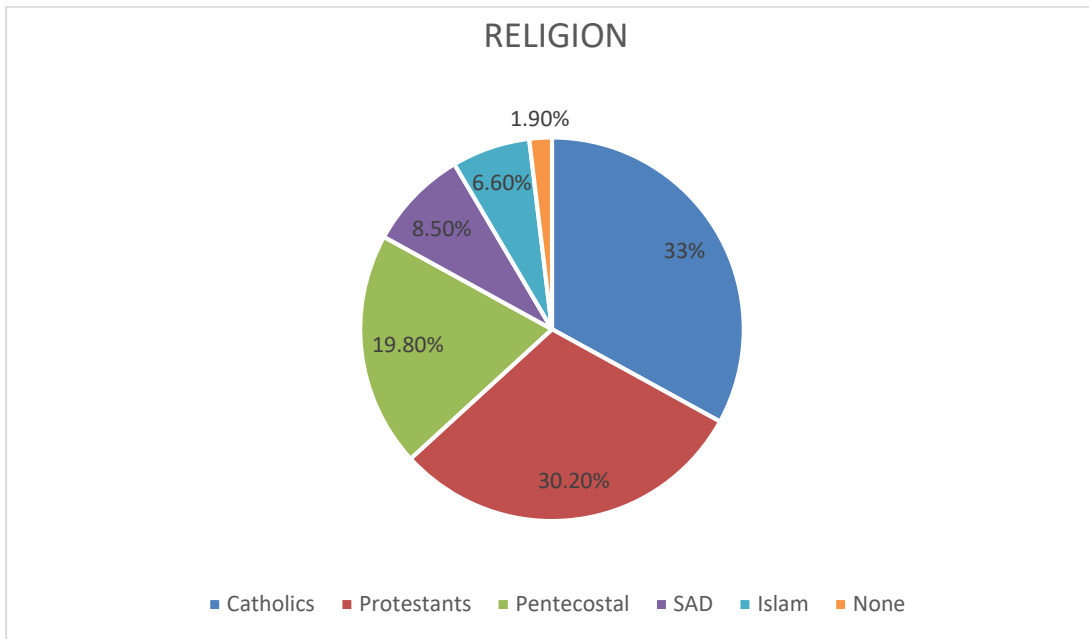to make better informed decisions in life leading to   poor standard of living.

Figure 2: Pie Chart Showing Religion of the Respondents

According to the pie chart above showing religion of the respondents, the Catholic religion was the dominating with a 33%, followed by Protestants with a 30.20%, next to that was Pentecostal with 19.80% followed by Sevens Day Advents with a 8.5%, next to that is Islam with 6.6% and lastly those who did not have religion with a 1.90%.
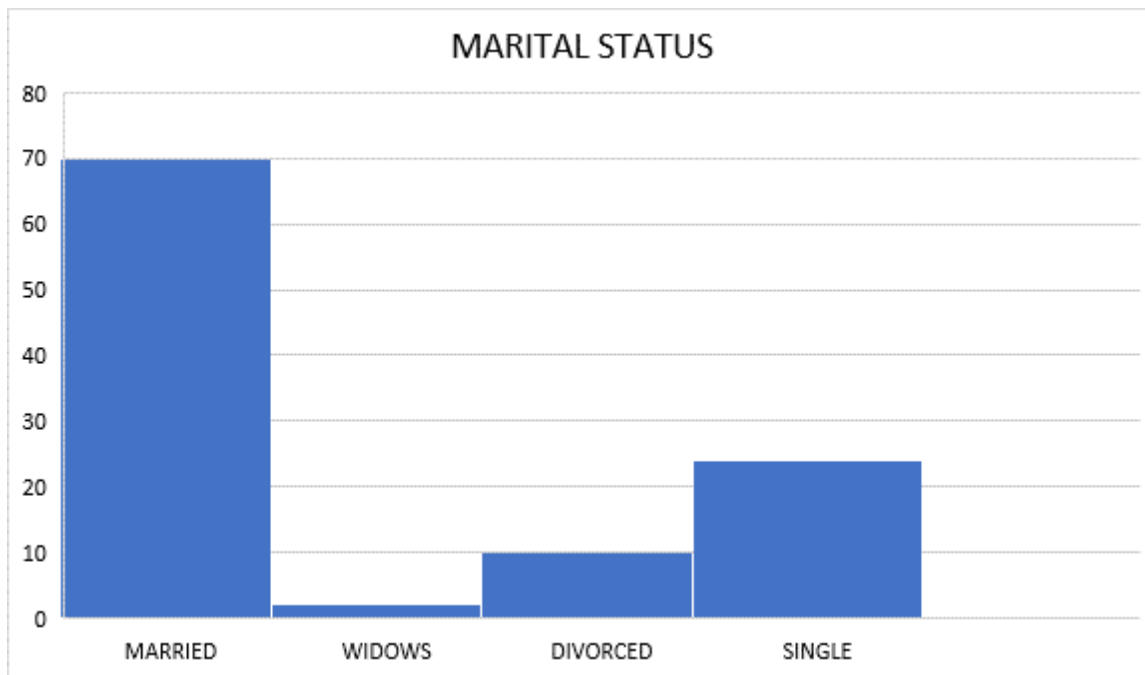

Figure 3: Bar Graph Showing Marital Status of Respondents

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Majority of the respondent accounting for 70 were married, followed by 24 respondents were single, next to that 10 respondents were divorced and lastly 2 respondents were widows.

Table 2: Table showing age of first pregnancy of the respondents

AGE	FREQUENCY	PERCENTAGE (%)
12 − 19	65	61.31
>20	41	38.68

According to the table above many of the mothers got their first pregnancy in the limit 12 − 19 years with a count of 65 mothers in that range, and the rest of the mothers got their first pregnancy at the age greater than 20 years with account of 41 mothers.

Table 3: Table showing factors that led mothers to getting first pregnancy too early

Factors	frequency	Percentage (%)
Pressure from parents	4	4.69
Peer pressure	15	23.44
Lack of money	30	46.88
Age factor	10	15.63
Step parents' mistreatment	6	9.38
Others	0	0.00
Total	**65**	**99.90**

According to the study objective, I was to establish prevalence of teenage mothers who got their first pregnancy below the age of 20 years and they were the ones to give me the factors that led them to getting their first pregnancy too early. I took the limits 12 − 19 and total of 65 mothers out of the 106 mothers participated in the study. And factors that led these mothers to getting their first pregnancy too early were as per the table above.
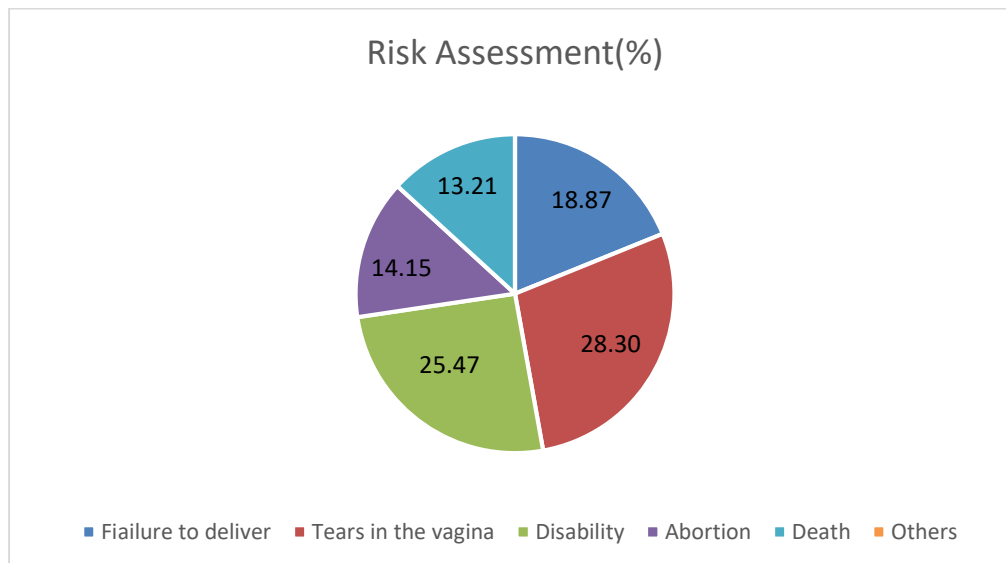

Figure 4: Pie Chart Showing Evaluation on Knowledge About Risks and Complication Young Mothers Are Like to Face During Delivery Time.

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The evaluation of knowledge on the risks and complication the teenage mothers are likely to face during delivery time was conducted among all mothers who attended the antenatal care unit and findings are presented on pie chart and results are in percentage form as shown above.

DISCUSSION

Demographic characteristics

The research basically covered mothers from the age of twelve years and older as long as they attended the antenatal care services at Lira Regional Referral Hospital. The dominant age group was 12–19, accounting for 61.31%, and 38.68% for ages greater than 20 years. The distribution of participants in the above various age groups showed that most of the participants were teenagers and accounted for 65 mothers, taking the range 12–19. When we look at the religion of the participants, we find that the majority of the participants were Catholics, accounting for 33% of the mothers who participated in the study, followed by Protestants, accounting for 30.2% of the participants, followed by Pentecostals with 19.8% of the participants, Seven's Day Adventists with 8.5% of the participants, Islam accounting for 6.6%, and lastly, mothers who did not belong to any religion accounted for 3% of the mothers who participated in the study.

In regards to education level, the largest percentage of mothers who attended the antenatal services had reached primary but did not complete this level, accounting for 50.00% of the mothers who participated in the study. Then the next category of mothers had at least reached secondary, and this accounted for 28.30% of the mothers; the third group of mothers had reached tertiary, and this also accounted for 9.43% of the mothers; and 2.83% of the mothers had not attended any level of school.

As regards marital status, the majority of the mothers were married, and this accounted for 66.04% of the mothers who participated in the study; 22.64% were single; 9.43% had divorced; and 1.89% accounted for the widow category. Age of first pregnancy among mothers who participated in the study

According to the findings on the age of first pregnancy, I found out that the majority of the mothers who attended the antenatal care services got their first pregnancy between 12 and 19 years old, accounting for 61.31% of the mothers who participated in the study, followed by those aged greater than 20 accounting for 38.68%. These findings were in line with the findings from the Ugandan Demographic and Health Surveys[17], which showed that girls ages 15–19 had begun childbearing, accounting for 43% in 1995. This shows from the study that teenage pregnancies are increasing.

Factors that led the mothers to get pregnant too early

On the factors that led mothers to getting pregnant too early, the young mothers were the ones to answer this part and young mothers gave us a total of 65 out of the mothers who participated in the study, and findings were as follows the first group of the mothers got their first pregnancy to early was due to Poverty because their parents could no longer take care of their basics and pay their school fees and this led them to fine an alternative to take care for their basics needs and this resulted them conceiving early, this accounted for 46.15%, the next group got their first pregnancy due to peer pressure at school because they wanted to fit in the group this also resulted into early pregnancy and this accounted for 23.08%, the next group got their first pregnancy due to growth rate and their body appearance, they looked at their bodies as if they have over gown this forced them to leave school early, young girls looked at themselves as being too big for certain class so they had to stop going to school because they assumed to be growing old yet age wise they were still very young but they were looking at their body mass and not age and got married early and this accounted for 15.38%, next to that is 9.23% of young girls conceived early due to mistreatment from step parents who were looking after them after they lost their parents, lastly 6.15% got their first pregnancy due to pressure from their original parents because they wanted to get wealth from wealthy men who wanted their daughters for marriage with aim of getting reach early. According to the above results, the main causes of pregnancy among teenage girls are a lack of money (poverty) and peer pressure from classmates or friends from the same locality where these young girls stay. These findings were in line with the findings by Garwood et al. [18], which state that poverty is associated with increased rates of teenage pregnancy.

Evaluation of knowledge on the risks and complications these young mothers are likely to face during delivery

Concerning the knowledge of the risks the young mothers are likely to face during delivery, as I was interacting with the mothers who participated in the study about the risks and complications young girls are likely to face during delivery, the following were the results mothers gave: 28.30% of the mothers said that these young girls are most likely to get tears

during delivery because their birth canal is not well developed to allow the passage of the fetus. 25.47% of the mothers said that some young girls, if they survive during delivery by using instruments, sometimes get injured, and this can lead to disability. 18.87% of the mothers also said that some young mothers may not be able to deliver, that is, failure to deliver. 14.15% of mothers also added that some of these young girls, due to stress on how to take care of the fetus, may not be able to carry the fetus to term, which can lead to abortion. 13.21% of the mothers said that some young mothers, because they are far from the health center and complications occur, are dead by the time they reach the health center.

CONCLUSION

Based on the findings of the study, it can be concluded that demographically, the dominant age group was 12–19, the dominant level of education was primarily, the majority of the participants were married, accounting for 66.04%, and the dominant religion was protestant. The age of first pregnancy in dominance was 12–19. Peer pressure, which was generally the leading cause of early pregnancy among teenage girls, came in second place when it came to the causes of early pregnancy. According to an evaluation of the risks and complications that young mothers are likely to experience during delivery, vaginal tears were the most common complication, then failure to deliver, abortion, death, and disability.

Recommendations

As indicated by the findings of the study, the following recommendations were made:

- The government should provide means for most families that were affected by the war to get loans and start income-generating activities so as to help look after their families, thereby preventing parents from forcing their children to get married in order to get wealth.
- The government should also find a way to package sex education before it is introduced in schools and education against peer pressure, self-esteem, and how to overcome peer pressure if one is faced with pressure from peers.
- The government should also make strict laws against parents who force their children to get married before the right time and stepparents who mistreat orphans, leading them to get married before maturity.
- The government should also check on schools that do not have a good study environment for their students and how they are organized to protect their students from escaping from school because some schools, in their actual sense, are profit-makers but do not care about their students so long as they have paid school fees. That is what most schools care about, yet the lives of the students are in danger.
- Lastly, schools should strengthen their career guidance and counseling sections and try to help mostly the girl child, who is the most affected in any society, so girls should be looked after with care and strict laws in order for the girl child to come up as an important person in the community. As the saying goes, educating a girl child is educating the nation.

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