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Knowledge on birth preparedness among teenage mothers at Entebbe Regional Referral Hospital, Wakiso District. A descriptive cross-sectional study.

Sandra Mary Atimango*, Barbara Akankunda, Jane frances Namuddu, Donatus Kimera
St. Michael Lubaga Hospital Health Training Institute.

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Corresponding author: Sandra Mary Atimango
Affiliation: St. Michael Lubaga Hospital Health Training Institute.

Abstract

Background: The purpose of this study is to assess knowledge on birth preparedness among teenage mothers at Entebbe Regional Referral Hospital, Wakiso District.

Methodology: The study employed a descriptive cross-sectional design with quantitative methods of data collection. A convenient sampling technique was used to select 32 respondents. Data were collected using structured questionnaires, checked for completeness, and entered into Microsoft Excel 22 for cleaning and analysis. Results were presented in tables and graphs.

Results: The majority of the respondents, 22(68.7%), were 19 years old. 27(84.4%) of the participants completed primary education; 21(65.6%) were not married; 26(81.2%) were Christians and 18(56.2%) were living with parents. 90.6% of the participants were giving birth for the first time. Respondents acquired information from family members and friends (62.5%), media (21.9%) and health workers (15.6%). Participants knew birth preparedness to be a sign of responsibility (75%) and that it could reduce delays at the time of birth (18.8). 6.2% of the participants didn't know its importance. Participants identified components of birth preparedness to be saving money for transport (100%), buying delivery items (71.9%).

Conclusion: Teenage mothers had inadequate knowledge about the importance of birth preparedness and the need to buy the baby's clothes. They were aware of the need to save money for transport and delivery.

Recommendations: Entebbe regional referral hospital should arrange an independent antenatal care unit for teenage mothers to teach them about components of birth preparedness, like its importance and buying baby clothes. Health workers should conduct in-depth explanations about birth preparedness, its components and counselling about existing myths about birth preparedness.

Keywords: Knowledge, Birth preparedness, Teenage mothers**,** Entebbe Regional Referral Hospital.

Background of the study.

Birth preparedness refers to the arrangements made for normal childbirth and readiness to take emergency actions when complications arise during pregnancy, labour, delivery and the postpartum period (Ademuyiwa et al., 2022). Adequate birth preparedness involves identifying a skilled birth attendant, selecting a health facility for delivery, saving money for transport and emergencies, preparing delivery materials, identifying a birth companion and arranging for a possible blood donor (Silwal et al., 2020). Proper knowledge about these components is important because it promotes timely utilisation of maternal health services and reduces delays that contribute to maternal and neonatal complications.

Globally, teenage pregnancy remains a major public health challenge with approximately 21 million adolescent pregnancies occurring every year, yet nearly half of these mothers lack proper birth preparedness plans (WHO, 2024). Poor knowledge on birth preparedness among teenage mothers has been associated with increased risks of complications such as maternal sepsis, pre-eclampsia, obstetric fistulas and neonatal complications (UNICEF, 2024). Although some countries, such as Iran, have reported better preparedness among teenage mothers due to strong cultural and family support systems (Taha & Abdulla, 2022), many developing countries continue to experience inadequate awareness regarding preparation for childbirth.

In Sub-Saharan Africa, teenage pregnancy is highly prevalent, especially in economically disadvantaged communities where access to health information is limited (Asmamaw et al., 2023). Studies conducted in countries such as Tanzania have shown that many teenage mothers possess inadequate knowledge on birth preparedness because they rely mainly on traditional teachings rather than professional health education (Masai et al., 2020). Similarly, in Ghana, poor attendance of antenatal care and low literacy levels have contributed to insufficient knowledge about childbirth preparation among adolescent mothers (Oduro et al., 2023).

In Uganda, teenage pregnancy remains high, with approximately 25% of teenagers becoming pregnant annually (UNFPA, 2021). Studies conducted in Eastern Uganda revealed that many teenage mothers lacked adequate birth preparedness plans due to limited awareness and poor access to maternal health information (Komugisha et al., 2024). Uwiduhaye (2022) further reported that low education status, financial hardships and socio-cultural barriers negatively affect awareness and preparedness among adolescent mothers. Inadequate knowledge on birth preparedness contributes to delays in seeking skilled delivery care and increases the risk of complications such as prolonged labour, puerperal sepsis and postpartum haemorrhage (Nkabura, 2020).

Several studies have emphasised the importance of health education in improving mothers' knowledge regarding birth preparedness. Silwal et al. (2020) found that most mothers who received information from health workers demonstrated better understanding of birth preparedness compared to those relying on informal sources. Similarly, Tony-Igwe et al. (2024) reported that mothers who understood the components of birth preparedness were more likely to save money, organise transport and prepare delivery items early. Therefore, the aim of this study was to assess the knowledge on birth preparedness among teenage mothers at Entebbe Regional Referral Hospital, Wakiso District.

Methodology

Study design and rationale

The study used a descriptive cross-sectional design with quantitative data collection methods.

Study setting and rationale

The study was carried out at Entebbe Regional Referral Hospital, Entebbe town, Entebbe Municipality, Wakiso District, approximately 44 kilometres by road from Kampala city centre. The hospital offers various services, including pediatric, surgical and medical, emergency medicine, isolation units and intensive care. The health facility receives approximately 135 teenage mothers attending antenatal care and 112 teenage deliveries per month. The study area was selected due to poor birth preparedness practices among teenage mothers.

Study population

The study population were pregnant teenagers attending antenatal care at Entebbe Regional Referral Hospital.

Sample size determination

A study population of 32 respondents was selected from the average of 35 pregnant teenagers who attend antenatal care at the facility weekly. This was based on Krejcie Morgan's table.

Sampling procedure

The study used a convenience sampling method to select study participants. This involved identifying pregnant teenage mothers at the antenatal care clinic who were asked to consent and then enrolled in the study. Enrollment of participants was done until a sample size of 32 respondents was attained.

Inclusion criteria

All participants were pregnant women aged 14–19 years attending antenatal care at Entebbe Regional Referral Hospital and voluntarily consented to participate in the study.

Dependent variable

Birth preparedness among teenage mothers.

Independent variables

Knowledge of birth preparedness among teenage mothers.

Research instruments

Structured questionnaires were used to collect data from the respondents. These were designed using closed-ended questions about socio-demographic characteristics and knowledge of teenage mothers.

Data collection procedure

The data collection procedure began with the researcher explaining the procedure to the respondents, and then those who participated voluntarily signed a consent form. Following consent, the researcher asked respondents questions that were written on the questionnaires while she wrote down the answers they gave. The procedure involved at least four respondents, and the entire process took a period of eight days.

Data management and analysis

The information collected was edited, coded and reviewed on a daily basis for the purpose of accuracy, consistency, and completeness, and this was done immediately before the respondent disappeared. The questionnaires were kept in a lockable shelf, only accessible to the researcher, with soft copies protected using a private personal password. The collected data were manually tallied and analysed; the results were processed using Microsoft Word and Excel programs.

Quality control

The validity of the tool was ensured by developing it based on a literature review and study objectives with close supervision by the research supervisor.

The tool's reliability was established through pretesting with 5 teenage mothers at Kisenyi Health Centre IV, and all errors identified were rectified immediately.

Ethical considerations

Approval was obtained from the research supervisor, and permission was sought and granted from the research committee of Lubaga Hospital Training School by obtaining an introductory letter. The letter was taken and presented to the director of Entebbe Regional Referral Hospital.

Each study respondent was informed of the title of the study, its objectives and the aim. They were also informed of voluntary participation and freedom to withdraw at any stage of the study. Then the respondents' consent was sought, and once obtained, the questionnaires were given. Confidentiality of collected information was ensured through numbering of the questionnaire, other than indicating the names of the respondents.

Results

Demographic characteristics of respondents

Table 1: Demographic characteristics n = 32

Variable	Responses	Frequency (f)	Percentage (%)
Age	17	03	9.3
	18	07	22.0
	19	22	68.7
Education level	No formal education	4	12.5
	Primary	27	21.9
	Secondary and above	1	3.1
Marital status	Not married	21	65.6
	Married	11	34.4
Religion	Christian	26	81.2
	Muslim	6	18.8
The person who stays with the teenage mother	Husband	11	34.4
	Parents	18	56.2
	Alone	3	9.4

Table 1 shows that most of the respondents 22(68.7%) were 19 years, 7(22%) respondents were 18years and 3(9.3%) respondents 17years. Most of the respondents, 27(84.4%), completed primary education, while the least, 1(3.1%), had attended secondary education and above. Most of the respondents, 21(65.6%), were not married, while the least, 11(34.4%), were married. The majority of the respondents, 26(81.2%), were Christians, while the minority, 6(18.8%), were Muslims. Most of the respondents, 18(56.2%), were living with parents, while the least, 3(9.4%), lived alone.

Knowledge of teenage mothers on birth preparedness, n = 32

Figure 1: A graph showing the source of information about birth preparedness, n = 32

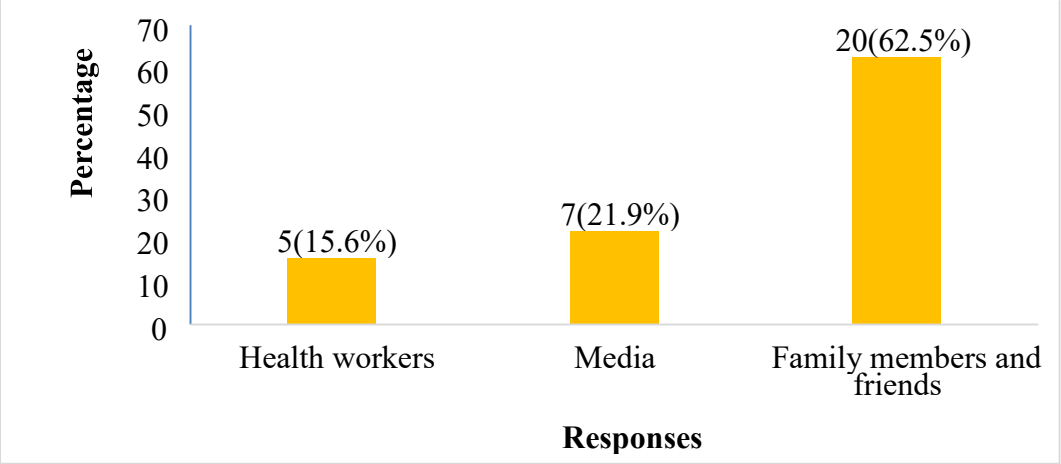

Figure 1 shows that most of the respondents, 20(62.5%), had acquired information from family members and friends, while the least, 5(15.6%), had received information from health workers.

Table 2: Importance, components and materials needed for birth preparedness (n= 32)

Variable	Responses	Frequency (f)	Percentage (%)
Importance of birth preparedness	Sign of responsibility	24	75
	Reduce delays at the time of birth	6	18.8
	Do not know	2	6.2
Components of birth preparedness			
Saving money for transport	Yes	32	100
	No	0	0
Buying delivery items	Yes	23	71.9
	No	9	28.1
Buying babies' clothe	Yes	10	31.2
	No	22	68.8
Identifying blood donors	Yes	0	0
	No	32	100
Saving money for delivery	Yes	27	84.4
	No	5	15.6
Identifying birth companion	Yes	15	46.9
	No	17	53.1

Table 2 shows that the majority of the respondents, 24(75%), mentioned that birth preparedness was important as a sign of responsibility, while a minority, 2(6.2%), did not know its importance. On components of birth preparedness, all respondents 32(100%) knew saving money for transport, 23(71.9%) knew buying delivery items, 22(68.8%) did not know about buying baby's clothe, 32(100%) did not know about identifying a blood donor, 27(84.4%) knew about saving money for delivery and 17(53.1%) did not know about identifying birth companion.

Discussion

Demographic characteristics

Most of the respondents, 20(62.5%), did not complete secondary education. This could be due to school dropout upon conception, which affects the attainment of appropriate information on child birth and preparedness, leading to poor practices. Similarly, a study by Komugisha et al. (2024) done in Uganda found that the low education status of teenage mothers was contributing to poor birth preparedness among teenage mothers.

Most of the respondents, 21(65.6%), were not married, which could be due to constitutional limitations that do not allow girls under 18 years to get married; thus, many after conceiving stay at their parents homes, which could lead to insufficient partners support regarding birth preparedness. This is contrary to a study by Asefa et al. (2022) done in North – East Ethiopia, which reported that 57.6% of mothers were married, and their partners engaged in antenatal care, participated in early birth preparedness among teenage mothers.

Knowledge of teenage mothers on birth preparedness

The study revealed that most of the respondents, 20(62.5%), had acquired information from family members and friends. This could be because teenage mothers are always guided and counselled by family members on issues related to childbirth. These could have unreliable information, thus affecting effective birth preparedness. On the other hand, a study by Silwal et al. (2020) carried out in Nepal found that 86.6% of mothers had received information about birth preparedness from the health workers. Another study by Abita and Shkur (2020) conducted in south-west Ethiopia on knowledge and practice on birth preparedness and complication readiness among women found that 47.5% of mothers had received information about birth preparedness from the health workers.

The majority of the respondents, 24(75%), mentioned that birth preparedness was important as a sign of responsibility. This showed that teenage mothers were unaware of the primary importance of birth preparedness in reducing delays; mothers could resort to a reluctance to prepare, as it was perceived to have less impact on birth outcomes. On the contrary, a study by Devi & Sony (2025) conducted in Guwahati found that 66.7% of mothers were aware of the importance of birth preparedness in minimising the delays at the time of birth and also managing the possible complications that arise.

All respondents 32(100%) knew about saving money for transport, and 27(84.4%) knew about

saving money for delivery. This might be because they knew that transport and delivery services are expensive, thus they needed to store money for them. This is in line with a study by Tony-Igwe et al. (2024) carried out in Enugu, Nigeria, which found that mothers were aware of components of birth preparedness, such as saving money.

The study showed that most of the respondents, 22(68.8%), did not know about buying baby clothes. This might be due to unreliable sources of information (family members and friends) about birth preparedness, who have myths that buying baby clothes could lead to child death; therefore, they do not inform mothers about buying clothes. However, a study by Okello and Akatuhurira (2019) carried out in Uganda found that mothers knew that they should prepare baby clothes before delivery.

Conclusion

Teenage mothers had inadequate knowledge about the importance of birth preparedness and the need to buy the baby's clothes. They were aware of the need to save money for transport and delivery.

Recommendations

The Ministry of Health should design a written list of items needed during childbirth that are distributed to teenage mothers to raise awareness about components of birth preparedness.

Entebbe regional referral hospital should arrange an independent antenatal care unit for teenage mothers to teach them about components of birth preparedness, like its importance and buying baby clothes.

Health workers should conduct in-depth explanations about birth preparedness, its components and counselling about existing myths about birth preparedness.

Teenage mothers should attend antenatal care with their spouses so as to enhance adequate support to teenage mothers regarding birth preparedness, as well as completion of antenatal care, so as to receive appropriate training about birth preparedness.

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Abbreviations and acronyms

HMIS: Health Management Information System
IRC: Institution Research Committee
MoH: Ministry of Health
UHPAB: Uganda Health Professions Assessment Board
UNFPA: United Nations Population Fund
UNICEF: United Nations Children Fund
WHO: World Health Organisation

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Conflict of interest: The authors declared no conflicts of interest.

Author contribution: Sandra Mary Atimango conceptualised the study, developed the proposal, collected and analysed the data, interpreted the findings, and prepared the final research report.

Barbara Akankunda supervised the whole research process.

Data availability: Data supporting the findings may be obtained upon request from the corresponding author.

Informed consent: Written informed consent was obtained from all participants prior to their inclusion in the study. Participants were informed about the purpose of the study, procedures involved, potential risks and benefits, and their right to withdraw at any time without penalty.

Author biography: Sandra Mary Atimango is a student at St. Michael Lubaga Hospital Health Training Institute, pursuing a diploma in midwifery. Barbara Akankunda is a tutor at St. Michael Lubaga Hospital Health Training Institute.

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