Research Article

The Knowledge of Unsafe Abortion among the Youth: The Case of Tamale Metropolis in the Northern Region of Ghana

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Abstract:

Background: Unsafe abortion contributes significantly to maternal deaths in Africa despite the availability of safe abortion services. This study assessed the knowledge of unsafe abortion among the youth within the Tamale Metropolis in the Northern region of Ghana.

Material and methods: This was a cross-sectional descriptive study using structured questionnaires. Data was analysed using SPSS version 23.0 (Chicago).

Result: The mean age of respondents was 23 ±10.4 years. The great majority (98.8%) (P<0.0001) have heard of unsafe abortion. The act is common among young, and unmarried women (P<0.0001). Unsafe abortion is commonly committed outside health facilities (70.9%; P<0.0001), in the communities (73.2%; P<0.0001), supervised by herbalists (53.9%), because of confidentiality (43.5%) and affordability (42.9%). Majority, (77.4%; P<0.0001) have heard of a method of unsafe abortion. The commonly used method was herbal preparation/medicine (264 (77.6%); P<0.0001). The two major reasons for unsafe abortion were: to allow the victim continue with education (47.4%) and to avoid difficulties in caring for the pregnancy and child (25.9%). Approximately, 99.4% (P<0.0001) were aware of some complications associated with unsafe abortion, particularly death (38.8%) and severe bleeding per vaginam (16.5%). A total of 78 (22.9%) have ever been pregnant, and 68 (87.2%) aborted the pregnancy because their partners did not allow them to keep the pregnancy. The great majority (83.8%) have unsafe abortion at home (59.6%).

Conclusion: Respondents had significant knowledge of unsafe abortion and the associated complications. Majority of the respondents who have ever been pregnant had unsafe abortion outside a health facility.

Keywords: Youth, Knowledge, attitude and practice, unsafe abortion, Tamale Metropolis, Northern Ghana

Introduction

Maternal mortality is defined as deaths occurring in women while pregnant or within 42 days of termination of pregnancy.1 Reduction of maternal mortality is a high priority for the Ghanaian Government and international community. Maternal mortality is often seen as a hallmark for a nation’s development. A major contributor to maternal mortality is unsafe abortion and the related complications.2,3,4 The magnitude and severity of abortion-related morbidity and mortality has a great impact in the lives of many women living in developing countries with limited access to safe abortion services.2,3,4,5,6,7,8

One of the leading causes of maternal mortality in Ghana is unsafe abortion.3,5,6,7,8 despite the availability of safe abortion services and post abortion care.9,10,11,12 Studies in Ghana have shown that one in five women induced the abortion themselves or had the help of a friend.4,9,10,11,12 This current study assessed the knowledge and practices of unsafe abortion among the youth of Tamale Metropolis in the Northern region of Ghana.

Methodology

Study Design:

This was a cross sectional descriptive study that used a quantitative research technique to obtain data about the knowledge of respondents on unsafe abortion.

Study site:

The study was conducted in the Tamale Metropolis located within the capital of the Northern Region of Ghana. The population of Tamale Metropolis, according to the 2010 Population and Housing Census was 233,252, representing 9.4% of the region’s population. Approximately, 9.7% of the inhabitants were males with 50.3% females. The great majority of the population is living within urban localities (80.8%) with 9.4% of the region’s population. Approximately, 9.7% of the population is living within urban areas. The metropolis has 246 doctors and 1,708 nurses as the time of data collection. There are four government hospitals in the Metropolis: Tamale Teaching Hospital, Tamale West Hospital, Tamale Central Hospital and the Seventh-day Adventist Hospital.
Sample Size estimation

In estimating sample size, the following formula was used:

\[ N = \frac{(Z_{\alpha/2})^2 \cdot P \cdot (1-P)}{m^2} \]

Where \( N \) = sample size; \( P \) = estimated proportion of the youth in the study area expressed in percentage, \( m \) = maximum error; since \( P \) was known to be 34.13% for the study population, (in decimal as 0.34). By assuming a confidence interval of 95% (with a standard value of 1.96 which is the z-score as \( Z_{\alpha/2} \)) for the estimated population, maximum error of 5, a final sample was calculated to be 340 youths.

The target population was the youth of Tamale. Sample size of 340 youths was chosen for the study.

Tools for Data Collection:

The instrument for this study was a structured questionnaire. In designing the instrument, the objectives guiding this study were used as indicators. The expectation was that items in the instrument should reflect the realities of the objectives. Similarly, gaps realized during literature review in the content of this study served as rich sources of identifying items to be included in the instruments.

Sampling Procedure:

Purposive sampling technique was used for the study. The researcher chooses the sample based on who meet the criterion for the study.

Pre-test:

The questionnaires were pre-tested in the Dungu community, close to the Tamale campus of the University for Development Studies, Tamale. This was to determine the reactions of the respondents to the questionnaires before the final research questions were used.

Data Collection:

The data collection method was purely quantitative with well-structured questionnaires containing thirty seven (38) questions. They were made of close ended and open ended questions.

Table 1: Socio-demographic variables of the respondents

| Age groups (years) | Frequency (n) | Percentage (%) | P-values |
|--------------------|---------------|----------------|----------|
| 10 - 14            | 2             | 0.6            |          |
| 15 - 19            | 81            | 23.8           |          |
| 20 - 24            | 165           | 48.5           |          |
| 25 - 29            | 82            | 24.1           |          |
| 30 - 34            | 10            | 3.0            |          |

| Gender            | Frequency (n) | Percentage (%) | P-values |
|-------------------|---------------|----------------|----------|
| Females           | 268           | 78.8           | <0.0001  |
| Males             | 72            | 21.2           |          |

| Marital status    | Frequency (n) | Percentage (%) |
|-------------------|---------------|----------------|
| Single            | 278           | 81.8           |
| Married           | 59            | 17.4           |

Quality Control:

In order to ensure validity and reliability, pre-testing was done to assess the nature and reactions of response of respondents to the questionnaires. The pre-test was then used as control for the study.

Data Analysis and Presentation:

Using the Microsoft excel 2013 and Statistical Package of Social Sciences (SPSS) 20 version, data were analyzed and presented in simple ratios and proportions, percentages, and pictographs (bar chart, line graphs, and pie chart). Associations were determined using Fisher’s exact Test (Graphpad prism vision 5.01), with 95.0% confidence intervals and a statistical significant of <0.05.

Ethical Consideration:

The University for Development Studies, School of Allied Health Science gave approval to conduct this research through the Department of nursing in partial fulfillment of the requirements to be awarded Bsc in nursing. The Department of nursing wrote a letter of introduction which introduced the researchers to the Metropolitan Director of Ghana Health Service in Tamale. Approval was granted. Participants were made to know that, the research is purely for academic purposes and they will be interviewed privately to ensure confidentiality. Participants were told they have the right to answer or ignore sensitive questions. Sensitive questions were however asked in a way that minimized such discomfort as research assistants were properly trained on the questions.

Results

Socio-demographic characteristics of respondents

A total of 340 respondents were interviewed, with an age range of 10 – 34 years, mean age of 23 ±10.4 years and a modal age group of 20-24 years (48.5%). The great majority were females 268 (78.8%; P<0.0001) (Table 1). Approximately 60.0% (P<0.0001) were Muslims (Table 1). About 90.6% of the respondents had some form of formal education (P<0.0001), and many (64.9%) were senior high school graduates (SHS) (Table 1).
Knowledge and sources of information on Unsafe Abortion

A total of 336 (98.8%; P<0.0001) have heard of unsafe abortion, the classroom being the commonest source of information 115 (34.0%). Unmarried females were identified as the group of women who commonly commit unsafe abortion 294 (86.5%; P<0.0001) Female between the ages of 10 - 24 years were identified as the age group most likely to commit unsafe abortion in the community (206 (60.6%); P<0.0001) (Table 2).

Table 2: General knowledge of respondents on unsafe abortion

| Have you heard of unsafe abortion? | Frequency (n) | Percentage (%) | P values |
|-----------------------------------|--------------|----------------|----------|
| Yes                               | 336          | 98.8           | <0.0001  |
| No                                | 4            | 1.2            |          |

| What are the sources of information on unsafe abortion? | Frequency (n) | Percentage (%) | P values |
|-------------------------------------------------------|--------------|----------------|----------|
| Class room                                            | 115          | 34             |          |
| Electronic media                                      | 107          | 31.0           |          |
| Friends                                               | 88           | 26.0           |          |
| Print media                                           | 13           | 4.6            |          |

| Where do females go for abortion in your community?    | Frequency (n) | Percentage (%) | P values |
|-------------------------------------------------------|--------------|----------------|----------|
| 1. Health facilities                                  | 99           | 29.1           | <0.0001  |
| 2. Out of health facilities                           | 241          | 70.9           |          |
| Herbalists                                            | 130          | 53.9           |          |
| Homes                                                | 105          | 43.6           |          |
| TBAs                                                 | 6            | 2.5            |          |

| What is your opinion about abortion?                  | Frequency (n) | Percentage (%) | P values |
|-------------------------------------------------------|--------------|----------------|----------|
| Bad                                                   | 334          | 98.2           | <0.0001  |
| Good                                                  | 4            | 1.8            |          |

| What are the reasons for committing abortion?         | Frequency (n) | Percentage (%) | P values |
|-------------------------------------------------------|--------------|----------------|----------|
| For the lady to continue with education               | 161          | 47.4           |          |
| Difficulty in caring for the pregnancy and child      | 88           | 25.9           |          |
| Cultural reasons                                      | 36           | 10.6           |          |
| Religious beliefs                                     | 15           | 4.4            |          |

| Which group of females commonly commit abortion?      | Frequency (n) | Percentage (%) | P values |
|-------------------------------------------------------|--------------|----------------|----------|
| 1. Married women                                      | 46           | 13.5           | <0.0001  |
| 2. Unmarried women                                    | 294          | 86.5           |          |
| Single female adults                                  | 88           | 30.0           | <0.0001  |
| School girls                                          | 206          | 70.0           |          |

*Fisher’s exact test, with confidence interval of 95%, and statistical significant <0.05

Patronage of unsafe abortion service in community

Women commonly commit unsafe abortion outside the health facilities (241(70.9%); P<0.0001), mostly supervised by herbalists (53.9%). Females commonly choose these providers because of confidentiality (43.5%) (Figure 1).
The major reasons why women involved themselves in unsafe abortion were: to allow the victim continue with her education (161 (47.4%)) and to avoid the expected difficulty in caring for the pregnancy and child (88 (25.9%)) (Table 2). Majority (249 (73.2%); P<0.0001) of the respondents identified the providers of unsafe abortion services to be within their communities. A total of 263 (77.4%; P<0.0001) of the respondents interviewed have heard of a method of unsafe abortion. The commonly used method was herbal preparation/medicine (264 (77.6%); P<0.0001). The cost of abortion services were mostly described by most respondents as low and affordable (146 (42.9%)) (Table 3).

Table 3: Patronage of abortion services by women in the communities

| Question                                                                 | Frequency (n) | Percent (%) | P-values |
|-------------------------------------------------------------------------|---------------|-------------|----------|
| Do you know any location in your community where abortion services are provided? | 249           | 73.2        | <0.0001  |
| No                                                                      | 91            | 26.8        |          |
| Do you know any person who had unsafe abortion in your community?       | 77            | 22.6        | <0.0001  |
| No                                                                      | 263           | 77.4        |          |
| Which age group of females in your community are commonly at risk of unsafe abortion? |               |             |          |
| 10 – 24 years                                                          | 206           | 60.6        | <0.0001  |
| >24 years                                                              | 134           | 39.4        |          |
| Have heard of any method of abortion in your community?                | 263           | 77.4        | <0.0001  |
| No                                                                     | 77            | 22.6        |          |
| What are the methods of unsafe abortion you have heard of in your community? |               |             |          |
| Drugs (cytotec)                                                        | 76            | 22.4        | <0.0001  |
| Herbal medicine                                                        | 264           | 77.6        |          |
| Drinking herbal preparations                                           | 76            | 28.9        |          |
| The use of enema                                                       | 12            | 4.5         |          |
| Trauma (hit) on gravid uterus by male counterpart                       | 3             | 1.1         |          |
| Vagina insertion of herbs combined with oral ingestions herbal preparations | 122          | 46.2        |          |
| The use enema combined with oral ingestion herbal preparations         | 13            | 4.9         |          |
| Others                                                                  | 38            | 14.4        |          |
Complications of unsafe abortion identified by respondents

Abortion was commonly viewed by the respondents as a bad act (334 (98.2%); P<0.0001). The great majority (338 (99.4%); P<0.0001) of the respondents were aware of some complications associated with unsafe abortion. The first three common complications of unsafe abortion identified by the respondents in descending order were: death (38.8%), severe bleeding per vaginam (16.5%) and infertility after the practice (8.2%). Approximately, 60.6% of the respondents knew a female in their community who developed complications following unsafe abortion. (Table 4).

Table 4: Complications of unsafe abortion

| Frequency (n) | Percentage (%) | P-values |
|---------------|----------------|----------|
| Are you aware of any complication associated with unsafe abortion? | | |
| Yes | 338 | 99.4 | <0.0001 |
| No | 2 | 0.6 | |
| What are some of the complications associated with unsafe abortion? | | |
| Severe bleeding per vaginam | 56 | 16.5 | |
| Anaemia | 3 | .9 | |
| Infertility | 28 | 8.2 | |
| Uterine rupture | 6 | 1.8 | |
| Genital tract infection | 3 | .9 | |
| Death | 132 | 38.8 | |
| Combinations of the above | 112 | 33 | |
| Do you know any female in your community who developed complications of unsafe abortion | | |
| Yes | 206 | 60.6 | <0.0001 |
| No | 134 | 39.4 | |

The practice of unsafe abortion by respondents

A total of 78 (22.9%) respondents have ever been pregnant; 68 (87.2%) aborted the pregnancy because their partners did not allow them to keep the pregnancy. The great majority (57 (83.8%)) had unsafe abortion, mostly at home (34 (59.6%)). The victims commonly committed unsafe abortion at home by inserting drugs via the vagina (30 (88.2%)). (Table 5).

Table 5: Where and how respondents committed unsafe abortion

| Frequency (n) | Percentage (%) | P-values |
|---------------|----------------|----------|
| Have you ever been pregnant | | |
| Yes | 78 | 22.9 | <0.0001 |
| No | 262 | 77.1 | |
| Total | 340 | 100.0 | |
| If you have ever been pregnant, what was the outcome? | | |
| Kept it | | |
| Aborted it | 10 | 12.8 | <0.0001 |
| Unsafe abortion | 68 | 87.2 | |
| No response | 57 | 83.8 | |
| Where was the unsafe abortion done? | | |
| Home | 34 | 59.6 | |
| Quack doctors | 14 | 24.6 | |
| Hospital | 5 | 8.8 | |
Discussion

This study assessed the knowledge of the practice of unsafe abortion among the youth within the Tamale Metropolis. The study found the awareness level of unsafe abortion practice among the respondents to be significantly high and attributed to the fact that majority of the respondents had some form of formal education. This is in keeping with Rogo et al., (1998) study about two decades ago in Western Kenya, who reported 90.0% awareness level among their study population. The current finding, however, differs from a recent study by Thomas et al., (2016) in Ethiopia which reported fair awareness level of unsafe abortion among their study population. The reasons why some women are involved in unsafe abortion practice significantly varied globally, particularly in countries where social inequalities are an important determinant of access to safe abortion care. Many of the respondents in this current study in Tamale Ghana, indicated that, women commit unsafe abortions to allow the victim continue with her education, to avoid the unexpected difficulties in caring for the pregnancy and child cultural and religious factors. Our finding thus differs from the work of the Guttmacher Institute in Ghana in 2010, which reported the lack of financial resources to care for the unborn child (21.0%) as the major reason why women commit unsafe abortion. The practice of unsafe abortion has long being associated with youth, for this is the stage at which the likes of peer pressure, being active for sexual intercourse and also making an autonomous decision begins. In this study, approximately 60.0% of the study population found school going girls (the youth) as the most venerable group who are likely to commit unsafe abortion. This is in keeping with a number of studies cited partner's objection to carrying the pregnancy and child cultural and religious factors. The great majority of the respondents in this current study identified herbal medicine usage as the common method women employed to commit unsafe abortion, compared to the use of drugs (medical method), (P<0.0001). For instance, 46.2% said women commit unsafe abortion by inserting herbs vaginally, combined with oral ingestions herbal preparations (46.2%). This differs from reports previous studies in developing countries which found medical method using misoprostol as a common method of unsafe abortion among women. For instance Thomas et al (2016) in Ethiopia reported that most participants use medication (78.8%). The current study also found that most of the women initiated the process of unsafe abortion by themselves. The habit of self-initiation of unsafe abortion found in this study is similar to reports by other studies in Africa. For example, Hollander et al., (2003) and Mbonye (2000) reported in Africa that women induce the abortion themselves

The highly patronized service providers were the herbalists, with low or no formal education. This was attributed to the fact that their operations were highly confidential, moderate and affordable. Also majority of the respondents (73.2%) indicated that, these places for abortion were easily accessible to young girls seeking the service. The cost for abortion varies across Africa. However, low cost and accessibility of the providers of abortions, particularly in Africa have been described as the driving force to committing the act by young women. For instance, studies in Nigeria, and South and South-East Asia, reported that approximately half of the women obtained abortions from traditional health providers with no formal training or resort to uncertified providers of abortion

Reasons for which pregnant women seek abortion, especially from unqualified persons (unsafe abortion) varied globally, and may include socioeconomic concerns, family preferences and relationship problems. The practice is reported to be common in developing countries . Approximately, 87.2% of the respondents in this current study who have ever been pregnant aborted it. Again, the great majority had unsafe abortion mostly at home. The major reason for the act was that their partners did not allow them to keep the pregnancy. These findings are in line with reports of previous studies globally. For instance, Bankole et al., in their study titled “Reasons why women have induced abortions: evidence from 27 countries” cited partner's objection to carrying the pregnancy to term as a significant factor. In their study, the proportion of women citing relationship problems as the overriding reason for the abortion ranged from 25-42% in four countries, namely; Chile, Honduras, Mexico and Nigeria.

Conclusion:

The study found the respondent to have significant knowledge of unsafe abortion, particularly the place, persons involved, the methods used and the associated complications. Also, majority of the respondents who have ever been pregnant had unsafe abortion outside a health facility because their partners did not allow them to keep the pregnancy

Conflict of interest

There is no conflict of interest.
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Availability of data
The data used to produce this manuscript shall be made available upon request by the editor in chief of this journal.

Author’s contributions
NSR, LO, OA, VN and EMD conceptualized the manuscript. NSR, LO, OA and EMD collected and analysed data, and wrote the manuscript. NSR, LOS, OA, VN and EMD cross-checked the data, read through the final manuscript and approved if for publication.

Ethical Consideration:
The University for Development Studies, School of Allied Health Science gave approval to conduct this research through the Department of nursing in partial fulfillment of the requirements to be awarded Bsc in nursing. The Department of nursing wrote a letter of introduction which introduced the researchers to the Metropolitan Director of Ghana Health Service in Tamale. Approval was granted. Participants were made to know that the research is purely for academic purposes and they will be interviewed privately to ensure confidentiality. Participants were told they have the right to answer or ignore sensitive questions. Sensitive questions were however asked in a way that minimized such discomfort as research assistants were properly trained on the questions.

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