

## 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.<sup>1</sup> 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.<sup>2,3,4</sup> 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.<sup>2,3,4,5,6,7,8</sup>

One of the leading causes of maternal mortality in Ghana is unsafe abortion,<sup>5,6,7,8</sup> despite the availability of safe abortion services and post abortion care.<sup>9,10,11,12</sup> Studies in Ghana have shown that one in five women induced the abortion themselves or had the help of a friend.<sup>4,9,10,11,12</sup> 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 19.1% in the peri-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;  

$$N = \frac{(Z_{\alpha/2})^2 P (1-P)}{m^2} \quad N = \frac{(1.96)^2 0.34(1-0.34)}{(0.5)^2}$$

$$N = 340$$

Where by 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 questionnaire 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.

**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).

**Table 1: Socio-demographic variables of the respondents**

	Frequency (n)	Percentage (%)	P-values
<b>Age groups (years)</b>			
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	
<b>Gender</b>			
Females	268	78.8	<0.0001
Males	72	21.2	
<b>Marital status</b>			
Single	278	81.8	
Married	59	17.4	

**Der EM et al / The Knowledge of Unsafe Abortion among the Youth: The Case of Tamale Metropolis in the Northern Region of Ghana**

Divorce	3	0.9	
<b>Religion</b>			
Muslims	204	60.0	<0.0001
Christians	136	40.0	
<b>Level of education</b>			
No formal education	32	9.4	<0.0001
Some formal education	308	90.6	
Primary	5	1.6	
JHS	32	10.4	
SHS	200	64.9	
Tertiary	71	23.1	

**Key: JHS: Junior high school, SHS: Senior high school**

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

**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**).

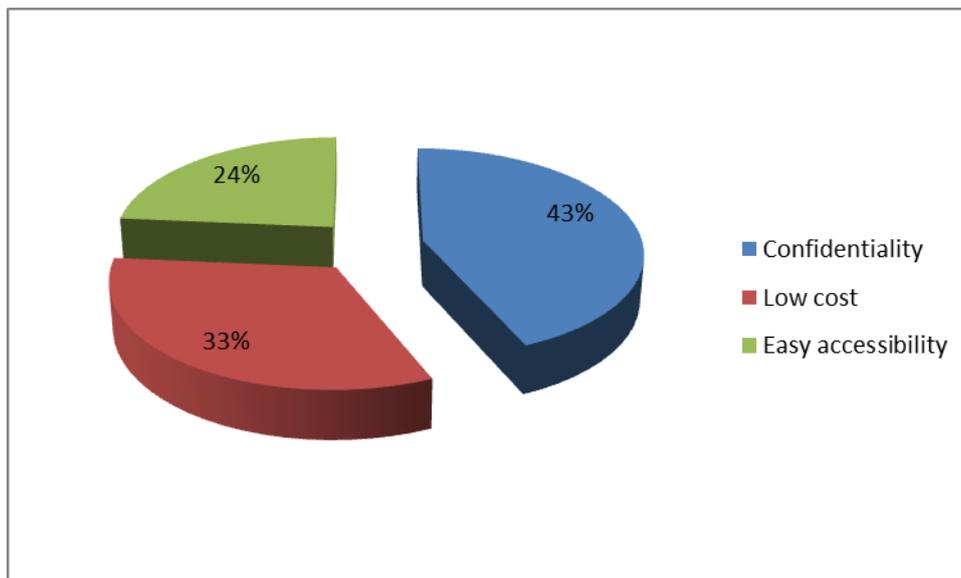
**Table 2: General knowledge of respondents on unsafe abortion**

	Frequency (n)	Percentage (%)	Pvalues
<b>Have you heard of unsafe abortion?</b>			
Yes	336	98.8	<0.0001
No	4	1.2	
<b>What are the sources of information on unsafe abortion?</b>			
Class room	115	34	
Electronic media	107	31.0	
Friends	88	26.0	
Print media	13	4.6	
<b>Where do females go for abortion in your community?</b>			
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	
<b>What is your opinion about abortion?</b>			
Bad	334	98.2	<0.0001
Good	4	1.8	
<b>What are the reasons for committing abortion?</b>			
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	
<b>Which group of females commonly commit abortion?</b>			
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**).



**Figure 1: The factors that accounts for the reasons why women commit unsafe abortion out of health facilities**

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**

	Frequency (n)	Percent (%)	P-values
<b>Do you know any location in your community where abortion services are provided?</b>			
Yes	249	73.2	<0.0001
No	91	26.8	
<b>Do you know any person who had unsafe abortion in your community?</b>			
Yes	77	22.6	<0.0001
No	263	77.4	
<b>Which age group of females in your community are commonly at risk of unsafe abortion?</b>			
10 – 24 years	206	60.6	<0.0001
>24years	134	39.4	
<b>Have heard of any method of abortion in your community?</b>			
Yes	263	77.4	<0.0001
No	77	22.6	
<b>What are the methods of unsafe abortion you have heard of in your community?</b>			
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	
<b>What is your opinion on the cost of abortion?</b>			

**Der EM et al / The Knowledge of Unsafe Abortion among the Youth: The Case of Tamale Metropolis in the Northern Region of Ghana**

Low cost	146	42.9
Moderate	143	42.1
Expensive	51	15.0

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

**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
<b>Are you aware of any complication associated with unsafe abortion?</b>			
Yes	338	99.4	<0.0001
No	2	0.6	
<b>What are some of the complications associated with unsafe abortion?</b>			
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	
<b>Do you know any female in your community who developed complications of unsafe abortion</b>			
Yes	206	60.6	<0.0001
No	134	39.4	

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

**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
<b>Have you ever been pregnant</b>			
Yes	78	22.9	<0.0001
No	262	77.1	
Total	340	100.0	
<b>If you have ever been pregnant, what was the outcome?</b>			
<b>Kept it</b>			
<b>Aborted it</b>			
	10	12.8	<0.0001
	68	87.2	
Unsafe abortion	57	83.8	
No response	11	16.2	
<b>Where was the unsafe abortion done?</b>			
Home	34	59.6	
Quack doctors	14	24.6	
Hospital	5	8.8	

Maternity home	4	7.0	
Total	57	100.0	
<b>What did you to cause unsafe abortion</b>			
By inserted drugs via the vagina	30	88.2	<0.0001
By inserting herbal preparation and drunk concoctions.	4	11.8	

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

## 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.<sup>13</sup> 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.<sup>14</sup>

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.<sup>15,16</sup> 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.<sup>12</sup>

The practice of unsafe abortion has long being associated with youth,<sup>12,14,15,16,17</sup> 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 that reported consistently high levels of unsafe abortion among adolescents in Africa.<sup>17,18,19</sup> For example, in 2004, WHO reported that, 59% of all unsafe abortions in Africa occurred in women aged less than 25 years.<sup>17</sup>

Self-medication with misoprostol as a method to cause abortion was been described in the 1980s.<sup>20,21</sup> 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.<sup>14,20,21,22</sup> For instance Thomas et al (2016) in Ethiopia reported that most participants use medication (78.8%).<sup>14</sup> 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.<sup>18,19,22</sup> For example, Hollander et al., (2003)<sup>18</sup> and Mbonye (2000)<sup>19</sup> 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 facts 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.<sup>18,19,23</sup> 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.<sup>13,23,24</sup> For instance, studies in Nigeria,<sup>18</sup> and South and South-East Asia,<sup>19</sup> 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.<sup>25,26,27,28</sup> The practice is reported to be common in developing countries.<sup>25,27</sup> . 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.<sup>26,27,28</sup> 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.<sup>28</sup>

## 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.

### Acknowledgement

We will like to thank all health workers in the Bongo district and also the participants for the time and consent to be part of this study.

### Funding source

The researchers received no funding for the work.

### 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 it 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.

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