

Determinants of EC Utilization among the Youth in the Tamale Municipality – A Cross-Sectional Study

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Abstract

Unintended pregnancy among the adolescent globally is very high. It poses serious health risk to them and must be addressed to save the young girls. The adolescent females are mostly in unstable relations and are most unlikely to be on regular contraceptives. Sex among them is sporadic and impromptu, hence they are unable to negotiate for safer sex, which sometimes results in unintended pregnancy. Emergency contraceptives remain the only option to prevent unintended pregnancies after unprotected sex. This study, therefore, sought to determine the factors that promote EC utilization among the Muslim youth in the Tamale metropolis of the Northern region of Ghana. A community-based cross-sectional design was adopted with a mixed method approach to collect both quantitative and qualitative data using a semi-structured questionnaire and FGD guide. A multi-staged sampling technique was used to select young Muslims, both males and females aged 15-24 years. Associated factors influencing EC use were determined using Chi-square (χ^2) and logistic regression at 95% CI and significant level set at $p < 0.05$. Socio-demographics and socio-cultural factors influencing knowledge and utilization of EC among young Muslims were; age (OR = 22.28; 95% CI 2.97-171.85; $p = 0.001$), marital status (OR = 0.56; 95% CI 0.34-0.93; $p = 0.030$), education (OR = 0.19; 95% CI 0.05-0.66; $p < 0.001$), and partner approval (OR = 0.23; 95% CI 0.06-0.83; $p = 0.020$). Significant factors that determined EC utilization were age, educational level, marital status, and partner approval.

Keywords: Adolescent, Emergency contraceptive, Muslim, Unintended pregnancy.

Introduction

Unintended pregnancy is a serious health and social issue that needs to be addressed to save the future of young girls. Prevalence of unplanned pregnancy in adolescents worldwide ranges from 33% to 82% [1]. According to the WHO, approximately 16 million girls within 15 to 19 years' age bracket give birth each year in developing regions and every year, some 3.9 million adolescents aged 15 to 19 years undergo unsafe abortions as a result of unintended pregnancy. The situation is worse in Africa as close to one-fifth of adolescents become pregnant yearly [2]. Poor literacy, lack of knowledge and access to contraceptives has been cited as contributory factors and that is so because in Africa, and especially Ghana, cultural, social and religious norms restrict sexual intercourse to only the married people [3] thus excluding the young unmarried people, who are very sexually active and mostly vulnerable and subject to sexual abuse or exploitations from

conversation involving sex and pregnancy prevention.

Because sexual intercourse in most adolescents is unplanned, there is an increased likelihood it will result in unintended pregnancy with its attending consequences. Emergency contraceptive will play a vital role in pregnancy prevention, unsafe abortion and unintended childbirth, which are the major problems of maternal health [4]. Previous studies elsewhere identified age, educational level, knowledge of ECs, culture, religion, sexual activity, previous use of regular contraceptives and marital status as strong predictors of EC utilization [5]. The northern region has seen an increasing trend, albeit slowly in the number of adolescents (10-19 years) attending antenatal care in three successive years (2014-26) [6], an indication that teenage pregnancy is not under control in the region yet. For the females to benefit from EC and avoid unintended pregnancies, we must understand factors that predict its uptake. This study, therefore, intends to determine the factors

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that promote EC utilization among the Muslim youth in the Tamale metropolis of the Northern region of Ghana.

Methods

Tamale is the capital town of the Northern Region, one of the sixteen regional capitals in the country. It is located within the Guinea Savannah belt. The population of Tamale Metropolis, according to the 2010 Population and Housing Census, is 233,252 representing 9.4 percent of the region's population. Males constitute 49.7% and females represent 50.3%. The proportion of the population living in urban localities (80.8%) is higher than that living in rural localities (19.1%) of the metropolis. The population of the metropolis is youthful (almost 36.4% of the population is below 15 years) depicting a broad-based population pyramid which tapers off with a small number of elderly persons (60 years and older) representing 5.1 percent.

A semi-structured questionnaire was used to collect data on the knowledge, socio-cultural acceptability and use of EC. Knowledge of Muslim youth on emergency contraceptive was assessed by evaluating their responses to ten (10) questions on ever heard of EC, EC information sources, type of EC, appropriate EC use time, when EC can cause abortions and conditions under which anyone can use EC such as forced sex/raped, condoms slipped off or burst, forgotten to take pill, when one has sex without using any FP method and when one want to terminate pregnancy (abortions). Each correct response to any of the knowledge questions attracted a score of "+1" while each "wrong" or "don't know" response was assigned a score of "0". The scores for each Muslim youth were summed and graded as follows; scores 0-4 scored point = inadequate knowledge level, 5-10 scored point = adequate knowledge level. The expanded programme of immunisation (EPI) method of selecting households was used in the data collection. In each of the communities, field teams first identified the centre of the community and spun a bottle to determine the direction to start with. All the eligible Muslim youths in the households were selected in the direction of the bottle using simple random sampling method. A sampling frame of all the houses was created using house numbers and a sampling interval of three (3) was used in the

sample frame in the selection of house to select eligible households and Muslim youths. The selected households were entered by the field enumerators and study protocol was administered to eligible participants. In a house where there was more than one household, a simple random sampling method through balloting was used to select one eligible household. Also, within the household where there are more than one Muslim youth, one male and one female were equally selected through simple random method. The essence was to ensure heterogeneity in the sample, as people in the same household may have similar characteristics. This also helps to ensure that each house and household had an equal chance of participation in the study. The qualitative method was executed using focused group discussion and in-depth interview. Each focus group comprised of eight (8) participants. These meetings took place at their choice of venue and time; that is data was taken in the natural settings of the respondents. A discussion guide with open-ended questions was used to probes further in seeking information that would facilitate improvement in the discussions and findings of the study. The rules for the discussion were explained to the participants, and each of them was allowed with adequate time by the facilitator to express their views and contribute to the discussion. Discussions were recorded with a tape and field notes taken alongside to help capture the total views and contributions of each participant. The in-depth interview was also conducted with the participants in a similar manner using the interview guide.

Results

Determinants of Emergency Contraceptives Utilization among Young Muslims

Table 1 below summaries the determinants of EC utilization among young Muslims in the Tamale metropolis based on the logistic regression of significant socio-demographic, knowledge level, cultural and religious factors. Age of respondents in the bivariate analysis was found to significantly influence emergency contraceptives utilization among young Muslims, as those who were aged above 18 years were more likely to have used emergency contraception than those below 18 years (OR = 22.28; 95% CI 2.97-171.85; p=0.001). However,

in the multivariate regression analysis, it was found to have a 6.21 times likelihood of EC utilization, but the relationship was not significant (AOR = 6.21; 95% CI 0.82-47.16; $p = 0.192$). Also, marital status of young Muslims was significantly associated with emergency contraception use, as those who were not married had a decrease chance of 44% of using emergency contraception as compared to those who were married (OR = 0.56; 95% CI 0.34-0.93; $p=0.041$). Marital status of young Muslims in the multivariate analysis was equally found to have had significant influence on the utilization of emergency contraception (AOR = 0.52; 95% CI 0.28-0.94; $p=0.001$) as well as partner approval of emergency contraception was found to have positively influenced emergency contraception use among young Muslims as those who were married and had disapproval from the partner had a decreased chance of contraceptives use as compared to those who had approval from their partner (AOR = 0.23; 95% CI 0.06-0.83; $p=0.021$).

Educational status equally had increased chance on emergency contraceptives, as emergency contraceptives use decreased with educational attainment (OR=0.09; 95% CI 0.03-0.31; $p<0.001$). Again, the final multivariate regression model, educational attainment was still found to significantly influenced emergency contraception utilization among young Muslims as those with primary education had decreased chance of EC utilization as compared to those with Tertiary education (AOR = 0.19; 95% CI 0.05-0.66; $p<0.001$).

Knowledge of Muslim youth on source of emergency contraceptives in both bivariate and multivariate analysis was associated with emergency contraceptives utilization as those who sourced emergency contraceptives information from health workers were found to have 1.94 times chance of emergency contraceptives utilization (OR = 1.94; 95% CI 1.02-3.72; $p=0.044$).

Table 1. Determinants of emergency contraceptives use among young Muslims

Variable	Ever use EC Yes n (%)	Unadjusted Odd Ratio (OR) (95% CI)	P-value	Adjusted Odd Ratio (AOR) (95% CI)	P-value
Age category					
15-17 years	1 (0.7)	1 (ref)	0.001	1	0.192
18-20 years	40 (13.2)	20.15(2.62-154.53)		6.52 (0.85-49.73)	
21-24 years	54 (14.5)	22.58(2.96-171-85)		6.21 (0.82-47.16)	
Marital status					
Married	72 (10.8)	1 (ref)	0.041	1	0.011*
Unmarried	23 (17.7)	0.56(0.33-0.93)		0.52 (0.28-0.94)	
Educational status					
Tertiary	53 (25.6)	1 (ref)	<0.001	1	<0.001*
JHS/JSS/Middle	9 (3.9)	0.12(0.05-0.25)		0.19 (0.09-0.42)	
SHS	30 (10.9)	0.35(0.21-0.58)		0.42 (0.25-0.69)	
Primary	3 (3.1)	0.09(0.02-0.32)		0.19 (0.05-0.66)	
Ever heard of EC					
Yes	88 (92.6)	1 (ref)	<0.001	1	0.092
No	7 (7.4)	0.10 (0.05-0.23)		0.12 (0.47-0.22)	
Sources of EC information					
Mass media	22 (25.0)	1 (ref)	0.032	1	0.044*
Health workers	27 (30.7)	2.14 (1.12-4.09)		1.94 (1.02-3.72)	
Friend	32 (36.4)	0.92 (0.51-1.66)		0.84 (0.46-1.53)	
Family members	7 (7.9)	1.13 (0.44-2.87)		1.04 (0.41-2.66)	
Can EC use cause abortion					
Yes	51 (53.7)	1 (ref)	<0.001	1	0.052
No	44 (46.3)	0.31 (0.19-0.48)		0.62 (0.38-1.03)	
Society lived disapproved EC use					
Yes	43 (12.9)	1 (ref)	0.021	1 (ref)	0.219

No	41 (15.3)	1.21(0.76-1.92)		1.29(0.78-2.14)	
Don't know	11 (5.2)	0.37(0.18-0.74)		0.67(0.31-1.49)	
Religious sect disapproves EC use					
Yes	80 (14.8)	1 (ref)	0.044	1 (ref)	0.364
No	3 (3.0)	0.17(0.05-0.58)		0.40(0.12-1.45)	
Don't know	12 (7.1)	0.44(0.23-0.84)		0.76(0.33-1.75)	
Would you still recommend EC if the need arises					
Yes	58 (14.0)	1 (ref)	0.044	1 (ref)	0.364
No	34 (8.9)	0.59(0.38-0.93)		0.86(0.47-1.59)	
Don't know	3 (21.4)	1.67(0.45-6.17)		1.69(0.43-6.59)	
Partner approves the use of EC					
Yes	90 (16.5)	1 (ref)	<0.001	1 (ref)	0.021*
No	5 (1.9)	0.09(0.03-0.24)		0.23(0.06-0.83)	
Advice on emergency contraception					
Yes	132 (94.3)	1 (ref)	<0.001	1 (ref)	0.112
No	358 (53.4)	0.06(0.03-0.15)		0.30(0.12-0.74)	
Bought emergency contraception					
Yes	114 (95.8)	1 (ref)	<0.001	1 (ref)	0.061
No	376 (54.4)	0.05(0.02-0.14)		0.22(0.07-0.64)	
Encourage EC purchase					
Yes	129 (93.5)	1 (ref)	<0.0001	1 (ref)	0.052
No	361 (46.3)	0.08(0.04-0.16)		0.43(0.18-1.02)	
**** indicates the level significance of variables at 5% (p<0.05)					

Source: Field Work, 2019

Discussion

Uptake and utilization of modern contraceptives among young people is influenced by many factors. In this study, socio-demographic, economic and cultural factors significantly influenced the participants' family planning and emergency contraceptives use. Factors such as cultural beliefs, religion, and sexual practices have been cited by many researchers to significantly influence young peoples' uptake and utilization of emergency contraceptives [7, 8, 9]. Strong predictors of young Muslim's utilization of EC in this study were found to be Age, Marital status, Educational status, and Partner approval. It was noted that the older young Muslims, those with higher educational qualification/attainment and the unmarried were more likely to use this form of contraceptive. These findings are consistent with a number of studies that found significant influence of socio-demographic variables such as age, educational level, and marital status on young people's utilization of emergency contraception [9, 10, 11]. Studies have found that persons who had approval of emergency contraception were more likely to use ECs and those who had no approval from their sexual

partners had a decreased chance of utilization [12, 13, 14, 15]. The link between educational attainment and increased EC use could be related to topics on family planning been discussed in schools at higher levels and access to more formal sources of information on contraception and EC for that matter, which will prevent misinformation and thus increase uptake and utilization.

Also, from this study, the unemployed group was associated with increased utilization of EC (49.2%) and this may be due to the fact that they may be unable to cater adequately for the children they may give birth to in their current situation, hence, the need to enquire more about pregnancy prevention whilst they satisfy their sexual desires and this might have contributed to the increased level of knowledge.

Conclusion

Age, educational level, marital status, and partner approval were the factors that significantly influenced the utilization of EC among respondents in this study. Also, the unemployed group was associated with increased utilization of EC. This was probably due to the fact that they are not ready to have

families they cannot take care of. This explanation fits well into the whole concept of family planning, where a couple gives birth when they are ready. Despite societal and

religious disapproval, the young people said they will still use EC and recommend it to their colleagues.

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