

Attitudes and Social Norms Influencing Adolescents' Contraception Utilisation in Bongo District, Ghana

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Abstract

Adolescent pregnancy poses a significant global challenge, with Ghana experiencing high rates contributing to annual maternal deaths. Effective contraception utilisation can prevent both pregnancy and sexually transmitted infections among adolescents. This study examines attitudes and social norms influencing adolescents' contraception utilisation in Bongo District, Ghana, employing a quantitative self-report cross-sectional design. Convenience sampling was used to recruit 379 adolescents, with data collected using a standardized questionnaire. Analysis conducted using SPSS Version 21 revealed a 100 % response rate, predominantly comprising females (66.8 %, n=253), with a mean age of 17.4. Approximately half of the respondents (53.3 %, n=202) reported using contraception, and adolescents' attitudes towards contraception use were mainly positive (n=229, 60.4 %). Furthermore, subjective norms positively affected contraception use. A majority of participants (n=233, 61.5 %) reported experiencing social pressure or support to use contraception, with the highest level of support coming from healthcare providers (n=237, 62.5 %). The study underscores the critical role of midwives, public health nurses, and healthcare providers in educating and promoting contraception use among adolescents.

Keywords: Adolescents, Contraception, Utilisation, Attitude, Subjective Norm.

1. Introduction

Adolescent reproductive health is an important concern as many adolescents are typically at risk during this stage of life (Berhe et al., 2024). Most adolescents in this phase engage in unhealthy behaviours such as unprotected sex, which leads to unwanted pregnancies, unsafe abortions, and sexually transmitted infections (Bukenya et al., 2020; Hkansson et al., 2018; Krugu et al., 2017).

Adolescent pregnancy is a major problem worldwide (Mathewos, Mekuria, 2018) and affects the education and well-being of families, communities and society at large (United Nations Children's Fund, 2008). Globally, an estimated 12 million adolescent girls become pregnant annually, with approximately 21 million of these pregnancies occurring among girls between the ages of 15 and 19 in low- and -middle-income countries (LMIC), particularly in East Asia and West Africa due to their large young populations (World Health Organization, WHO, 2018), poverty,

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inadequate education, and contraceptive dissemination, among others (Akanbi et al., 2021; Indongo, 2020; Kaphagawani, Kalipeni, 2017).

Despite several measures taken by both government and non-government agencies in Africa to address this phenomenon (Gunawardena et al., 2019), adolescent pregnancies continue to persist as a public health concern in numerous sub-Saharan African countries. In Ghana, adolescent pregnancy is a major contributor to maternal deaths (Engelbert Bain et al., 2019), with Bongo district recording the highest prevalence of teenage pregnancy in the country (Campus, 2018). The Annual District Health Report (2017) for Bongo District showed a decrease in 2015 from 20.1 % to 19.8 % in 2016 and an increase to 20.8% in 2017. However, this phenomenon can be counteracted by the effective and timely use of appropriate contraceptives, which not only prevent pregnancy but also sexually transmitted infections.

Contraception is a natural or artificial means or technique used worldwide to prevent pregnancy temporarily or permanently. The choice of a contraceptive method depends on individual choice, safety, effectiveness, and availability, including accessibility, affordability, and acceptability (Adjei et al., 2014a; Adjei et al., 2014b; Chernick et al., 2019). It is lifesaving and an essential element of reproductive health care (Nanda et al., 2020), improving women's reproductive autonomy, reducing unwanted pregnancies and unsafe abortions among adolescents, and having a profound impact on their physical, economic and psychological well-being (Adjei et al., 2014a; Adjei et al., 2014b).

Although there is a high level of knowledge (approximately 90 %) of contraceptive use among adolescents worldwide, its use among adolescents is low (James-Hawkins, Broaddus, 2016), particularly in sub-Saharan Africa (Blackstone et al., 2017; Casey et al., 2020; Ochako et al., 2015) highlighting a gap between knowledge and use, but a study in Kenya found an increase in the use of long-acting reversible contraceptives (18 %) among adolescents aged 15 to 19 years (Kungu et al., 2020).

In a Ghanaian study, it was discovered that despite a significant level of awareness among adolescents regarding contraception (95 %), only 18 % of them utilised it (Agyemang et al., 2019a). Usage is low due to myths and misconceptions, inaccessible service locations, and financial constraints, religious beliefs, cultural norms, provider training, and poor attitudes (Blackstone et al., 2017; Shahabuddin et al., 2017; Subedi et al., 2018; Ochako et al., 2015).

Several measures have been taken to curb this problem in Ghana. The Ministry of Health and its agencies and support partners launched the Youth Corner concept to help youth find reproductive health services, which include contraceptive services. These facilities also provide post-abortion care and counselling to reduce abortion stigma and misunderstandings about contraception (Hkansson et al., 2018). Although tremendous work has been done in the area of policy implementation and advocacy for adolescents' right to reproductive health, including contraception and postpartum women (Adjei et al., 2014a; Adjei et al., 2014b), there is little data on the factors that influence uptake among young people. Hence, the study aimed to examine the attitudes and social norms affecting the use of contractive methods among adolescents in the Bongo district in the Upper East Region of Ghana.

2. Methods and Materials

Approach and Design

The study was a descriptive cross-sectional survey. It was conducted in the Bongo district in the Upper East Region of Ghana. The total number of adolescents in the district is approximately 28494 (Ghana Statistical Service, 2021). The district has educational institutions, including a private university and seven Senior High Schools. Additionally, it has a district hospital, seven health centres, and thirty-six Community-based Health Planning and Services compounds, all rendering family planning services (Ghana Districts, 2006). Bongo district faces significant challenges, particularly the highest teenage pregnancy rates among the eight districts in the region, hence the decision for its choice.

Sampling and Sampling Procedure

The convenience sampling method (Sarfo et al., 2022) was used to recruit 379 adolescents aged 10-19. To be eligible, respondents had to have resided in the Bongo District for a minimum of one year and express a willingness to take part in the study. Adolescents with hearing, speech, or writing

difficulties were excluded from the research. The sample determination for this study was done using Krejcie and Morgan's pre-calculated sample determination table (Krejcie, Morgan, 1970).

Data Collection and Analysis

Data on various variables was collected in the Bongo district using the measurement scale initially developed by Richardson et al. (1997) to explore factors influencing condom use among high school students in Nova Scotia using the theory of planned behaviour. The focus of this study was adolescent contraception utilisation and a modified instrument with two subscales was used: attitude and subjective norms. A 5-point Likert scale ranging from 1 ("strongly disagree") to 5 ("strongly agree") was used in the study. The Cronbach's Alpha of the scale measuring attitude was 0.82, and the subjective norm was 0.53. Descriptive statistics were obtained from SPSS version 21 to comprehensively understand the characteristics of the major variables of interest to the research work.

Ethical Consideration

Prior to data collection, ethical approval from the Noguchi Memorial Institute for Medical Research Institutional Review Board (NMIMR-IRB) (certificate number: NMIMR-IRB CPN 050/22-23) was obtained from NMIMR-IRB, and permissions were secured from regional health and education authorities as well as community leaders. Detailed briefings about the study were provided to all respondents, with opportunities for questions. Verbal or written consent was obtained from participants aged 18 and above, while parental consent was sought for those below 18. In boarding schools, teachers acted as guardians for minors. Respondents were informed about the study's benefits and potential risks. Anonymity and confidentiality were assured, and participants were informed of the voluntary nature of their participation.

3. Results

Socio-Demographic Characteristics of the Participants

Table 1 depicts socio-demographic data of respondents aged 13-19: mean age 17.4 (SD=1.54). Overall, participants included 66.8 % females and 33.2 % males.

Table 1. Socio-Demographic Characteristics

Variable	Frequency (n=379)	Percentage (100%)
Age		
10-13	6	1.6
14-16	93	24.5
17-19	280	73.9
Mean age=17.4		
Sex		
Male	126	33.2
Female	253	66.8
Religion		
Christian	334	88.1
Islamic	36	9.5
Traditionalist	9	2.4
Marital status		
Never married	343	90.5
Married	36	9.5
No. of Children		
0	358	94.5
1	13	3.4
2	8	2.1
Level of education		
Uneducated	7	1.8
Basic	158	41.7
Secondary	213	56.2
Tertiary	1	0.1

Variable	Frequency (n=379)	Percentage (100%)
Occupation of Participant		
Student	327	86.3
Unemployed	43	12.1
Employed	9	2.3
Parent's educational level		
Uneducated	187	49.3
Basic	100	26.4
Secondary	48	12.7
Tertiary	44	11.6
Occupation of parent		
Formal employment	48	12.7
Informal employment	191	50.4
Unemployed	140	36.9
Number of family members		
3-5	98	25.9
6-8	176	46.4
9+	105	27.7
Participants' position of birth		
1-2	188	49.6
3-4	122	32.2
5+	69	18.2

Contraception Utilisation (Behaviour)

Table 2 showed that the majority (n=202,53.3%) of the adolescents indicated that they use contraceptives.

Table 2. Contraception Utilisation

Do you use contraceptives?		
Responses	Frequency	Percentage
Yes	202	53.3
No	177	46.7
Total	379	100.0

Table 3 revealed a positive attitude towards contraception. Acceptance of partner-suggested contraception scored highest, while perceiving contraceptives as inconvenient scored lowest.

Table 3. Comprehensive Item Response Attitude of Adolescents Towards Contraception Utilisation

Variable	Frequency (n=379)	Percentages
Contraceptives are too much trouble		
Agree	147	38.79
Neutral	96	25.33
Disagree	136	35.88
Contraceptives are unreliable		
Agree	183	48.28
Neutral	61	16.09
Disagree	135	35.62

Variable	Frequency (n=379)	Percentages
I just don't like the idea of using contraceptive		
Agree	161	42.42
Neutral	56	14.78
Disagree	162	42.74
I would avoid using contraceptives if at all possible		
Agree	179	47.23
Neutral	52	13.72
Disagree	148	39.05
Contraceptive ruin the sex act		
Agree	132	34.83
Neutral	98	25.86
Disagree	149	39.31
Contraceptives are uncomfortable for both partners		
Agree	149	39.31
Neutral	97	25.59
Disagree	133	35.09
I do not think contraceptives interfere with the enjoyment of sex		
Disagree	142	37.47
Neutral	90	23.75
Agree	147	38.79
I would have no objection if my sexual partner suggested that we use a contraceptive		
Disagree	133	35.09
Neutral	52	13.72
Agree	194	51.19
Status of attitude		
Positive Attitude score	229	60.42
Negative Attitude score	150	39.58
Total	379	100.00

Table 4 shows subjective norms measure the influence of those within the social circles of adolescents specifically. Family, friends, sexual partners and significant others and the impact they have on the adolescents' contraception use. The results indicated that the majority of participants (n=233, 61.5 %) had experienced social pressure or support to use contraception, with the highest support being health care providers (n=237, 62.5 %).

Table 4. Comprehensive Item Response of Adolescents Towards Contraception Utilisation

Variable	Frequency (n=379)	Percentages
If I was sexually active and told my doctor, he/she would encourage me to use contraceptive		
Disagree	95	25.07
Neutral	47	12.40
Agree	237	62.53
My sexually active friends use contraceptives		
Disagree	106	27.97
Neutral	101	26.65
Agree	172	45.38
If I told my parents/guardians/siblings that I was sexually active, they would approve of my use of contraceptive		
Disagree	175	46.17

Variable	Frequency (n=379)	Percentages
Neutral	67	17.68
Agree	137	36.15
I think that my current or future partners would be willing to use contraceptive		
Disagree	173	45.65
Neutral	66	17.41
Agree	140	36.94
Most people in my community would approve of the use of contraceptives by sexually active teens.		
Disagree	174	45.91
Neutral	62	16.36
Agree	143	37.73
Most guys I know don't like to use contraceptive		
Agree	233	61.48
Neutral	43	11.35
Disagree	103	27.18
To most girls, a guy who uses a contraceptive is sexier.		
Disagree	111	29.29
Neutral	54	14.25
Agree	214	56.46
Status of subjective norms		
Negative	146	38.52
Positive	233	61.48
Total	379	100

4. Discussion

Demographic Features of Participants

The socio-demographic data of the study provides an essential point for understanding the participants in the study. It highlights the diversity of the sample, which includes participants from diverse religious backgrounds, marital statuses and family structures in the study setting. The mean age of the study participants was 17.4 years, indicating that the majority of the participants were below 18 years old and were very vulnerable to teen pregnancy (Dunn et al., 2019). Though the study did not measure the age for sexual debut, some studies have indicated that most adolescents start sexual activity between the ages of 10 and 17 (Harrington et al., 2021). This finding is consistent with previous studies on the socio-demographic features of adolescents concerning contraception utilisation (Kilmer et al., 2022). Also, the majority of the participants were females (66.8 %). This high proportion of female participants in this study is consistent with the fact that the majority of adolescents in Ghana are females (Ghana Statistical Service, 2021). Moreover, the study indicated that many of the participants (88.1 %) were Christians, probably because it was a Christian-dominated district.

The results of this study have implications for the design and implementation of interventions for adolescents in Ghana. For example, the fact that the majority of the participants were students suggests that interventions should be designed to be accessible to students. Also, a larger proportion of participants' parents were uneducated, which suggests that interventions on contraception use should be designed to be culturally appropriate and sensitive to the needs of out-of-school adolescents and families who are illiterates.

Furthermore, the higher proportion of never-married participants in the study is likely due to the fact that the majority of participants were under the age of twenty (20). Also, the majority of uneducated parents in the study point to the fact that the district is deprived, which contributes to low levels of education in the district. Moreover, many of the participants' parents were employed in the informal sector, which is consistent with the economic conditions in most communities in sub-Saharan Africa, where the majority of people are employed in the informal sector (World Bank, 2018). The high proportion of participants from families with 3 to 5 members in the study is indicative of the average family size in Ghana (Ghana Statistical Service, 2021).

Though the socio-demographic data of participants was pertinent to understanding the diversity of the sample and family structures of the participants, the study had an unexpected finding, which indicated that none of the socio-demographic characteristics had a significant relationship with contraception utilisation. The finding is contrary to previous studies that suggested that adolescents' contraception use was associated with socio-demographics such as age, gender, marital status, number of children, and educational status, among others (Amoah et al., 2023; Ojoniyi et al., 2022; Oppong et al., 2021).

Contraception Utilisation

The findings of the study suggest that a little over half of the adolescents (53.3 %) are using contraception. Though not many studies have cited increased contraception utilisation among adolescents, the finding is consistent with few studies which indicated that contraceptive use among adolescents is increasing (Amoah et al., 2023; Kilmer et al., 2022; Senders, Horner-Johnson, 2022). For instance, a study conducted in the southern part of Ghana, which assessed the prevalence and determinants affecting contraception uptake among young females, found that contraceptive use among sexually active young women in the study setting was significantly higher (n=211,76%) than the national contraceptive prevalence rate (Amoah et al., 2023).

The study further cited the availability and accessibility of emergency contraception and condoms at vantage points such as restaurants, drug stores and supermarkets as contributors to the high adolescent female contraception use. Relatedly, a trend analysis done from 2006 to 2017 among adolescents and young adults in the USA revealed an increase in the usage of emergency contraceptives, citing easy access to emergency contraceptives from over-the-counter as a contributor to the increased use (Mehta et al., 2022). Another systematic review conducted in 29 low- and middle-income countries revealed that there was an increasing demand for contraception by adolescents in these countries (Deitch, Stark, 2019). The study further postulated that the high demand for contraception among adolescents was associated with knowledge of sexual and reproductive health topics. This implies that initiatives such as increasing sex education programmes, availability of contraceptives and the provision of free or low-cost contraceptives in areas accessible to adolescents have the potential to improve adolescents' contraception utilisation.

Another likely explanation for this finding is that there has been an allocation of school nurses to all the secondary schools in the Bongo district. These school nurses provide services, including contraception services, which makes it easier for the adolescents in the schools to have access to the services, and this might have increased the high contraception use reported. School-based health centres operated by experienced healthcare providers have been cited in other studies as one of the ways of improving contraception access among adolescents (Bersamin et al., 2018; Fisher et al., 2019; Sullivan et al., 2022; Wang et al., 2018).

Also, the District Director of Health in Bongo indicated during the researcher's visit to the health directorate that the district had intensified their engagement with adolescents through the organization of adolescent health clubs. During their meetings, varied health education topics, including contraception, are given in their quest to reduce teenage pregnancy in the district. This was evident during the data collection, which was collected from adolescents during these club meetings.

Moreover, the descriptive analysis of the study indicated that adolescents had positive attitudes toward their contraception use. Also, adolescents had social pressure to use contraceptives, suggesting a positive influence of social norms on contraception use. Concurrently, adolescents had positive intentions to use contraception. Lastly, the majority of the adolescents had the confidence to use contraception, hence the reported good percentage of contraceptive use among adolescents in the study setting. It is also worth noting that though there was a reported high use of contraception among adolescents in the study, a significant minority (46.7%) of the adolescents in the study reported not using contraceptives. This is similar to previous studies that have reported low contraception use among adolescents (Issah et al., 2022; Kawuki et al., 2022; Marimirofa et al., 2022). This suggests that there is still a need to increase adolescents' awareness of contraceptive use as well as tackle other factors that contribute to high contraception uptake among adolescents.

Adolescents' Attitudes Towards Contraception Use

Despite available literature from previous studies that cited various negative misconceptions and beliefs such as stigma, contraceptive is a means used by the white race to eradicate the black

race, infertility in the future, and fear of the side effects, among others (Marshall et al., 2021; Mulubwa et al., 2021; Mwaisaka et al., 2021), this study identified that adolescents generally had a positive attitude towards contraception use. However, this is consistent with studies previously done by other researchers (Cederbaum et al., 2022; Masonbrink et al., 2023; Montoya et al., 2022).

The greatest attitude score of (n=229, 60.42 %) suggested that adolescents were willing to accept and use contraceptives even if proposed by a sexual partner. For instance, a study done in Malawi on adolescent girls and young women's contraceptive conversations with significant others revealed that almost all the study participants indicated that contraceptive conversation with a sexual partner yielded positive results with regard to contraception use (Bhushan et al., 2021). Similarly, a study carried out in Nigeria alluded that adolescent women's sexual partners had a positive influence on their contraception uptake (Sanchez et al., 2020). This suggests that adolescents are more likely to use contraceptives if they have a supportive partner. This also implies that it is important to encourage adolescents to talk to their partners about contraception and to make sure that their partners are supportive of its use. Also, the lowest attitude score indicated that participants generally viewed contraceptives as an easy and reliable means of preventing unintended pregnancies as well as preventing Sexually Transmitted Infections.

This indicates that adolescents are willing to use contraceptives. Relatedly, a study conducted in Kenya found that adolescents' contraception use was associated with the desire to avoid pregnancy (Harrington et al., 2021). There is, therefore, the need to provide adolescents with more accurate information on contraception and its benefits, as well as address any negative perceptions they have regarding contraception use, which will encourage a more positive attitude towards contraception, which may translate to actual utilisation.

Subjective Norms of Adolescents Towards Contraception Utilisation

The results of this study highlighted that subjective norms had a positive influence on adolescents' contraception uptake. This suggests that participants are generally open to using contraception. However, the difference in perceived expectations across different social groups elucidates that some adolescents may be more likely to use contraception if they perceive that their family or sexual partners approve of it. Similarly, previous studies have linked adolescent contraception use to family support and sexual partner approval (Bhushan et al., 2021; Harrington et al., 2021).

In support of the above findings, a study by Nyanta et al. (2023) reported high contraception use, and this was attributed to information obtained from immediate family members increasing their awareness of contraception. Regarding sexual partners influencing adolescents' contraception use, the finding of this study is in line with a study done in Ethiopia, which suggested that discussing contraception use with intimate partners influenced adolescents (Babore, Heliso, 2022). Other studies that concurred with the findings of this study identified partner communication, peers, family and community to influence adolescent contraception use (Chernick et al., 2019; Sanchez et al., 2020).

Though the current study did not ascertain the role family and a sexual partner play in the influence on their contraception use, the finding is encouraging because a plethora of studies have indicated that adolescents in Ghana and the sub-region in general are less likely to even talk about contraception use or their sexual reproductive needs with family members and sexual partners as a result of stigma, fear of being disowned by parents and discrimination against them due to their age, gender or both (Coast et al., 2019; Dioubaté et al., 2021; Rehnström Loi et al., 2019; Rizvi et al., 2019). Likewise, few studies have been done in the area of adolescent partner support in contraception use (Crawford et al., 2021). Where there is partner support, for instance, it is usually limited to married couples, and in some cases, conversation on contraception use among adolescent couples is seen as inappropriate in some cultural settings (Do et al., 2020).

Additionally, the findings of the study suggest that healthcare providers play a significant role in encouraging adolescent contraception use. Adolescents require support, adequate counselling, encouragement and provision of adequate information regarding contraception use from health providers to make the right decision concerning contraception. The actions and perceptions of health care providers can either affect adolescents' contraception use positively or negatively. It is, therefore, imperative for healthcare providers who provide reproductive health services to adolescents to be knowledgeable, approachable and trained to be able to handle them. This finding

is supported by a study that was conducted in Kenya, which alluded that healthcare providers influenced adolescents' contraception use positively (Velonjara et al., 2018). The study also found that adolescents perceived that their sexually active friends were using contraception. This suggests that peer influence had a crucial role to play in adolescent contraception use.

Finally, the finding of the study demonstrates that the family, health care providers, peers, intimate partners and the community all have a vital role to play in promoting adolescents' contraception use. It is, therefore, necessary to consider these stakeholders when designing interventions for adolescents. Parents or guardians should be educated on the benefits of contraception and should be encouraged to support their adolescents in that regard. Health providers should also be trained to deliver contraceptive information and services to adolescents in a professional and friendly manner. This can be done through school-based health education programmes and community-based outreach programmes, as well as by ensuring the privacy and confidentiality of adolescents. Sexual partners and peers should also be encouraged to support their contraceptive use. This can be achieved through individual counselling, group education sessions, adolescent health durbars, club meetings and public awareness campaigns.

Moreover, in promoting positive social norms towards contraception uptake among adolescents, it is imperative to create a supportive environment. This can be done by promoting positive portrayals of contraception in both the traditional and social media, by providing access to contraception in schools and community health centres and by making it easy for adolescents to talk to health care providers about contraception without being afraid of discrimination. This will help to ensure that all adolescents have access to the right information and resources they need to make informed decisions about their sexual health.

5. Study Limitation

The study employed a cross-sectional study design; thus, the causal relationship between the study variables was not established. A longitudinal study is therefore required to establish this causal effect.

6. Conclusion and Implication for Nursing/Midwifery Knowledge

The study showed that the respondents were predominantly young, Christian and female participants, with the majority of participants' parents being uneducated. The study further suggested that a high proportion (53.3 %) of participants were using contraception, reflecting an increasing trend as compared to the reported low contraception use of contraception among adolescents established in other studies. Possible factors contributing to this included school-based initiatives, positive attitudes and subjective norms. Adolescents generally exhibited positive attitudes toward contraception use, especially when supported by intimate partners. Likewise, subjective norms influenced by family, peers and healthcare providers had a positive impact on adolescents' contraception use.

Despite the significant increase in the percentage of adolescents' contraception utilisation, a substantial minority (46.7 %) were not using contraception, indicating that there may be other factors influencing contraception utilisation among adolescents that need to be explored. Again, due to the significant minority that are still not using contraception, stakeholders must provide accurate information on the benefits of contraception as well as address misconceptions to encourage more positive attitudes. Moreover, a supportive environment which involves all stakeholders, including opinion leaders, parents, healthcare providers, intimate partners, and peers, among others, will contribute greatly to promoting social norms towards contraception utilisation among adolescents. The study, therefore, seeks to remind midwives, public health nurses and healthcare givers providing reproductive health care to adolescents of the vital role they play in promoting contraception use among adolescents. There are, therefore, implications for future research, such as the need for a longitudinal study to examine the causal relationship between the variables.

7. Declarations

Ethics statement

Ethical clearance was obtained from NMIMR-IRB (CPN 050/22-23).

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Author's contributions

This study was designed by R, A. CB, and E.A. Data was collected by RA and analysed by RA, CB, EA, and BCA. All authors wrote and reviewed the manuscript. All authors have read and approved the manuscript.

Conflict of interest statement

All authors have declared no conflict of interest, and all reference materials have been duly acknowledged.

Consent for publication

Not applicable.

Availability of data and materials


Data and materials associated with this study are available upon request.


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