

Modern contraceptive utilisation and associated factors among adolescents in selected communities of Sunyani West Municipality, Ghana: A cross sectional survey.

Abstract

Background: Adolescence marks the transition from childhood to adulthood with remarkable physiological and anatomical changes which have a significant influence on reproductive health. These changes have serious implications on their developmental life exposing them to risky sexual behaviour, increasing their susceptibility to sexually transmitted diseases and unplanned pregnancies which may lead to unsafe abortion subsequent to maternal mortality. The utilisation of modern contraceptives is paramount in averting the majority of these complications. This study was aimed at evaluating modern contraception utilisation and associated factors among adolescents in the Sunyani West Municipality of Ghana.

Methods: This was a community-based cross-sectional study that recruited 366 adolescents between the ages of 10-19 years. The communities within the municipality were grouped into five clusters where each cluster represent a set of communities. By lottery method a community was selected randomly, yielding five communities for the study. A purposive sampling was employed to select the household with an adolescent (s) and a simple random sampling was employed to recruit the eligible respondents with the aid of a structured questionnaire which was administered face to face with respondents. Data on respondent's sociodemographic factors, knowledge and attitudes towards modern contraception obtained from the study were analysed descriptively and inferentially with the application of Statistical Package for Social Sciences version 26, USA (SPSS 26). Findings were presented using tables and graphs. A probability value less than 0.05 was considered significant statistically.

Results: The study found that 53.6% of the adolescents used a modern contraception utilisation with 57.8% of the respondents having adequate knowledge and 51.2% demonstrated poor attitudes towards contraception usage. A significant association was found between adolescents' level of income and contraceptive usage ($X^2 = 7.3, p = 0.029$).

Conclusion and recommendations. Adolescents in this study had an average utilisation of modern contraceptives due to their good knowledge however, their attitude towards contraception was poor. The increase in contraception utilisation in addition to their knowledge on contraception promotes adolescents'

reproductive health, thereby reducing their chances of unplanned pregnancies and decreasing susceptibility to sexually transmitted diseases. Promoting and intensifying public education through awareness creation on local radio stations and social gatherings by health authorities, non-governmental bodies and religious authorities would empower adolescents to utilise modern contraception, hence averting associated repercussions of its non-use.

Keywords: Adolescents, Contraception, Modern, Municipality, Sunyani.

Introduction

Adolescents form a group of young people between the ages of 10-19 years (1) It is a stage marked with the development of increased physiological growth, characteristic of adulthood (1). It is also a period of increasing adolescents' socio-cognitive growth that influences their social interactions by determining their identity, maturation of value systems and internalization of behavioural patterns (2). During this phase of life, most adolescents are exposed to the influence of their peers in their decisions and actions (1,2), influencing a majority to experience their first sexual encounter which may have a major impact on their lives (3). Every year, many female adolescents throughout the world become pregnant and almost half of these pregnancies are unplanned, which makes the adolescents more susceptible to pregnancy-related complications such as stillbirth (4). This is due to the lack of or improper use of modern contraceptives (1) mostly as a result of misconceptions linked to the usage of contraceptives among adolescents (5). Evidence showed that the lack of contraceptive usage among female teenagers leads to unwanted pregnancies and abortion-related morbidities and mortalities (6).

Many adolescents have difficulty accessing modern contraceptive services despite its numerous benefits (7). For example, it is found that most young people, especially in African regions, have insufficient knowledge about contraception (4). Being able to identify the factors that contribute to the challenges adolescents face during their sexual encounter would increase the use of modern contraceptives, thereby reducing their chances of unexpected pregnancies and infections (1). It is hypothesized that increased efforts to educate adolescents about reproductive health would encourage contraceptive use (8). Therefore, improving the accessibility and effective use of contraception is very important to achieve universal access to reproductive health services, especially among adolescents in developing countries (9). Similarly available evidence has shown that around 3.2 million unsafe abortions and 5,600 maternal deaths could be prevented if adolescents use modern contraceptives(10). It is therefore envisaged that increasing the use of contraceptives, by identifying the factors associated with their use among

adolescents should be a global aim of initiating interventions that would improve the use of modern contraceptives, leading to a reduction in unplanned pregnancies and sexually transmitted diseases (10)

Globally, sexually active adolescents are less likely to use modern contraceptives, which increases their risk of sexually transmitted infections (11). Many adolescents in low and middle-income countries do not utilise modern contraceptives due to lack of availability and adverse effects, making access to modern contraception difficult for many teenagers, particularly those living in remote areas (12,13). Due to a lack of information on the use of modern contraceptives among adolescents, adolescent girls are exposed to unplanned pregnancy resulting in the low socioeconomic power of adolescent parents and the nations as a whole (14,15). In Ghana, around 45% of adolescents use modern contraceptives which is below the World Health Organisations' recommendation of 80-85% use of modern contraceptives (16). Additionally, approximately one in ten single teenagers in urban areas and twice that number in rural areas have children due to a lack of access and information on modern contraception, increasing maternal and infant mortality(17). For instance, available statistics indicated that around seventy-five per cent of teenage girls before the age of twenty experience high levels of sexual engagement, exposing themselves to the risk of developing and transmitting sexually transmitted infections (16).

Despite the numerous advantages of modern contraception, many adolescents have trouble accessing modern contraceptive options (7). Most studies on adolescent modern contraceptive utilisation in Ghana targeted only females and also employed health facility-based design (18–20). In the Sunyani West municipality, there is a paucity of information on modern contraception utilisation among adolescents. Therefore to address this information gap, this study aimed to determining modern contraception utilisation and associated factors among adolescents in selected communities of Sunyani West municipality of Ghana.

Methods and materials

Study design

This was a quantitative study that employed a cross-sectional study design (Community-based study). The study recruited adolescents from five selected communities in the Municipality. The inclusion criteria consisted of adolescents who voluntarily agreed to participate in the study. Again, adolescents who resided in the selected communities and whose parents consented were considered for inclusion. Adolescents who voluntarily refused participation in the study were excluded. Moreover, adolescents who were mentally challenged were not considered for inclusion in the study.

Sample size and sampling technique

The municipality has a total of nineteen communities. By cluster sampling, the communities were divided into five clusters with each cluster representing a set of communities. Cluster A-D had four communities whilst cluster E had three communities. In selecting the required communities for the study, convenience sampling techniques were adopted to meet the estimated sample size whilst considering the cost of transport. In selecting the household within the selected communities, a purposive sampling technique was employed. With this technique, every adolescent in a household was selected purposively for the study. In recruiting adolescents from an eligible household, a simple random sampling technique by lottery method was used for a household with more than one eligible respondent and a purposive sampling technique for a respondent in a household. The sampling process continued until the sample size of 366 estimated for the study was obtained.

Data Collection

A self-administered structured questionnaire was developed to gather primary data from respondents. The questionnaire was developed taking into consideration the objectives of the study. In all, the questionnaire had four sections, with the first section soliciting information on the respondent's sociodemographic characteristics which comprised eight questions, the second section gathered information on the respondent's self-reported utilisation of contraception. The third section solicited information on respondents' knowledge of contraception and comprised nine questions whilst the fourth section assembled data on respondents' attitudes towards contraception and was made up of eleven questions. The investigator spent a maximum of three days in each of the five communities for data collection. During the questionnaire administration, all questions relating to the study was answered and respondents took 10-15 minutes to complete a questionnaire. The sampling procedure continued until the total number of 366 eligible adolescents estimated for the study was obtained.

Data management and analysis

In analysing the data collected for the study, the investigator employed the Statistical Package for the Social Sciences (SPSS) version 26, USA. The categorical variables were assigned codes before entry into the SPSS software. The categorical variables were analysed descriptively and findings were presented in proportions and percentages whilst the continuous variables were expressed as mean and standard deviation based on the normality test outcome. The utilisation of modern contraception was analysed by presenting respondents' self-reported data of contraception use in frequencies and percentages and the

findings were displayed graphically. The mean score for knowledge of respondents on contraception was 30.5 which was used as a cut-off point. This was categorised into adequate knowledge when the score is greater than 30.5 and inadequate knowledge when the score is less than 30.5. Additionally, the mean score for the attitudes of respondents was 36.1. A respondent is said to possess a good attitude if the mean score was greater than 36.1 and a poor attitude if the mean score is less than 36.1. The association between respondents' sociodemographic characteristics and utilisation of contraception was analysed by employing the Pearson Chi-Square Test at a 95% confidence interval. A p-value less than 0.05 was considered statistically significant between contraception utilisation and associated factors.

Results

The study recruited 366 respondents and there was a 100% response. The ages of respondents, 161(44.0%) fell between 17-19 years whilst 152(41.5%) fell between 14-16 years and 50(14.5%) between the ages 11-13 years. Above half 224(61.2%) respondents were females whilst 142 (38.8) were males. An average 187(51.1%) respondents had secondary education whilst 158(43.2%) had basic education. The majority 287(78.4%) of respondents were unemployed. With regard to respondents' marital status, 331(90.4%) of respondents were single. Most 293(80.1%) of respondents were Christians. Majority 290(79.2%) of the respondents were Akan's, 69(18.9%) were northern and 7(1.9%) were ewes. In addition, with whom respondents stay with, slightly above average 97(53.8%) of respondents lived with both parents, 79(21.6%) stayed with one parent (either father or mother) (Table1).

Table 1: Distribution of sociodemographic characteristics of respondents

Variable	Category	Frequency (N=366)	Percentage (%)
Age (years)	11-13	53	14.5
	14-16	152	41.5
	17-19	161	44.0
Gender	Male	142	38.8
	Female	224	61.2
Level of Education	Non-formal education	21	5.7

	Basic education	158	43.2
	Secondary education	187	51.1
Employment Status	Employed	287	78.4
	Unemployed	79	21.6
Marital Status	Single	331	90.4
	Married	33	9.0
	Divorced	2	0.5
Religion	Christianity	293	80.1
	Islamic	69	18.9
	Traditional	3	0.8
	Others	1	0.3
Ethnicity	Akan	290	79.2
	Northerners	69	18.9
	Ewe	7	1.9
Level of income	None	287	78.4
	Lower-income earner	54	14.8
	Middle-income earner	25	6.8
Whom do you stay with?	Both parents	197	53.8
	One parent	79	21.6
	Other relatives	48	13.1
	Partner	9	2.5
	By self	33	9.0

Source: Field Data, 2022

Modern contraception utilisation

In this study, more than half of 196(53.6%) respondents had utilise modern contraception whilst 170(46.4%) do not use modern contraception (Figure 1).

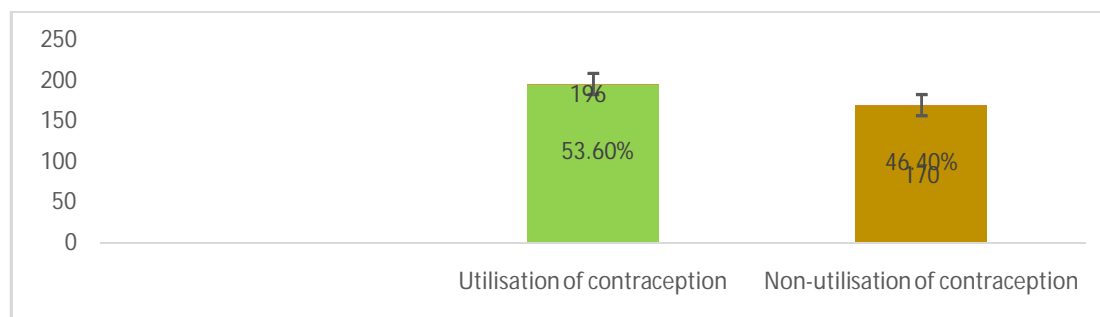


Figure1: Contraception utilisation

Respondent's knowledge of contraception

The study found that of the 366 respondents, 250(68.3%) strongly agreed and 86(23.5%) agreed of being aware of pill contraceptives which can be taken daily for days or emergency contraceptives that can be taken within 72 hours. Most 262(71.6%) and 86(23.5%) respondents strongly agreed and agreed that injectable contraceptives can protect against pregnancy for one month or more respectively. A significant number of respondents 256(69.9%) and 93(25.4%) strongly agreed and agreed that condoms can be used to prevent unwanted pregnancies and sexually transmitted diseases accordingly. Additionally, 311(85.0%) of respondents strongly disagreed that Intrauterine Device (IUDs) can prevent unwanted pregnancies for up to ten years. Again, 309(84.4%) of respondents strongly disagreed that contraceptives (Norplant) can be implanted in arms to prevent pregnancies. Most 308(84.2%) respondents strongly disagreed that both males and females can undergo sterilization to prevent pregnancy. About 163(44.5%) of the respondents strongly agreed and 101(27.6%) were not sure that if you don't want to use any of the modern methods of contraceptives, you can use the withdrawal method or the calendar approach respectively. The majority 235(64.2%) of respondents and 91(24.9%) strongly agreed and agreed that contraceptives can be obtained from any health facility or licensed chemist shop (drug store or pharmacy). Additionally, 262(71.6%) of respondents strongly agreed that friends and media are the main sources of information on contraception (Table 2).

Table 2: Distribution of knowledge of respondents on contraception

Knowledge item	Strongly disagree n (%)	Disagree n (%)	Not Sure n (%)	Agree n (%)	Strongly Agree n (%)
I am aware of pills which can be taken	2(0.5)	2(1.9)	21(5.7)	86(23.5)	250(68.3)

daily or emergency ones that can be taken within 72 hours of unprotected sex					
I am aware of injectable contraceptives that can protect you against pregnancy for a month or three months	3(0.8)	8(2.2)	7(1.9)	86(23.5)	262(71.6)
I am aware that condoms can be used to prevent unwanted pregnancy and sexually transmitted diseases	2(6.5)	8(2.2)	7(1.9)	93(25.4)	256(69.9)
I know of IUDs that can prevent you from unwanted pregnancy for up to ten years with a minimum protection of five years	311(85.0)	39(10)	7(1.9)	7(1.9)	2(0.5)
I know of a contraceptive that is implanted on your arm to prevent pregnancy (Norplant contraceptive)	309(84.4)	39(10.7)	7(1.9)	8(2.2)	3(0.8)
Both males and females can undergo sterilization	308(84.2)	38(10.4)	9(2.5)	8(2.2)	3(0.8)
I am aware that if you don't want to use any of the modern contraceptives you can use the withdrawer method or the calendar approach	10(2.7)	25(6.8)	101(27.6)	67(18.3)	163(44.5)
Contraceptive can be obtained from any Health facility or licensed chemical shop(drug store/pharmacy)	5(1.4)	11(3.0)	24(6.6)	91(24.9)	235(64.2)
Friends and the media are the major sources of my information on contraceptive	3(0.8)	8(2.2)	7(1.9)	86(23.5)	262(71.6)

Source:

Field

Data,

2022,

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Knowledge of respondents on contraception

In this study, 216(57.8%) respondents had adequate knowledge of contraception whilst 150(42.2%) had inadequate knowledge of contraception (Figure 2).

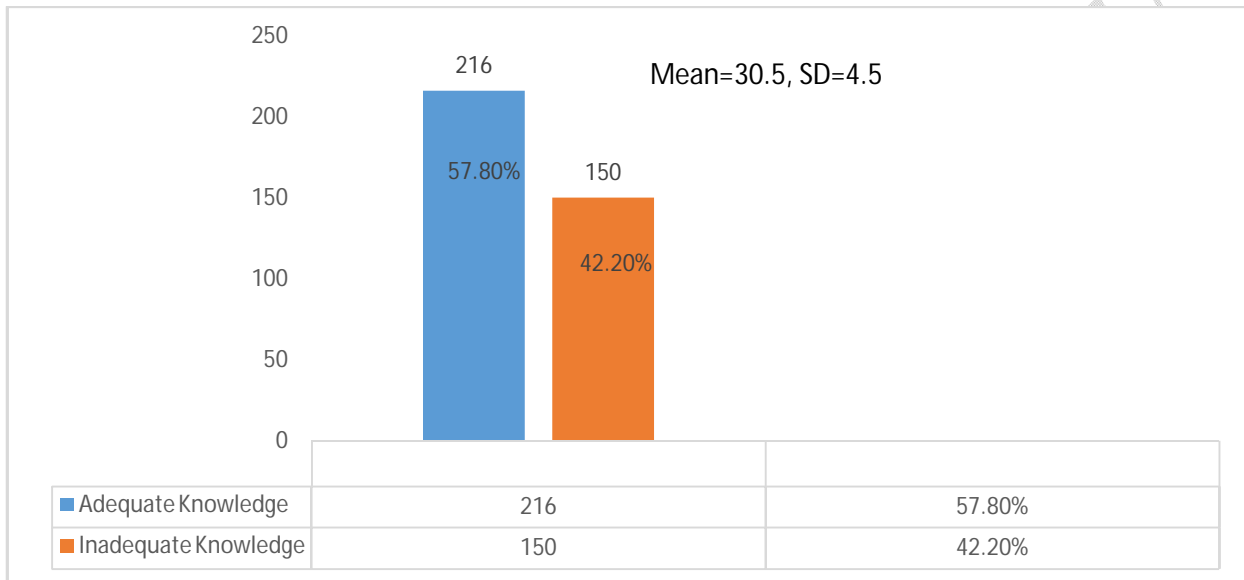


Figure 2: Knowledge of respondents on Contraception utilisation

Attitude of respondents

Concerning respondents' attitudes towards contraception, it was established that 101(27.6%) of respondents were not sure, 67(18.3%) agreed and 163(44.5%) strongly agreed that parents are the last resort for advice on contraceptives use. Most 270(73.8%) respondents strongly agreed that contraceptives are for adults and therefore, there is no need of using at a tender age. With the usage of contraceptives, 114(31.1%) and 45(12.3%) strongly disagreed and disagreed that prolonged use of contraceptives possess risks. Additionally, 114(31.1%) and 45(12.3%) strongly disagreed and disagreed respectively whilst 40(10.9%) were not sure, 76(20.8%) and 91(24.9%) agreed and strongly agreed respectively that contraceptive is only for married people. Concerning contraceptive methods, 254(69.4%) and 69(18.9%) strongly disagreed and disagreed respectively that, contraceptive methods encourage women to be promiscuous. However, 15(4.1%) and 17(4.6%) strongly agreed and agreed accordingly that contraceptive methods encourage women to be promiscuous. Again, 254(69.4%) of respondents strongly disagreed that using contraceptives can lead to infertility whilst 15(4.1%) and 17(4.6%) agreed and

strongly agreed that contraceptive use can lead to infertility among women. Most 254(69.4%) strongly disagreed that getting pregnant at a tender age is acceptable by their family whilst 16(4.4%) and 15(4.3) agreed and strongly agreed that getting pregnant at a tender age is accepted by their family. The majority 270(73.8%) of respondents strongly agreed that they don't feel comfortable using contraceptives, particularly condoms. Additionally, 254(69.4%) and 69(18.9%) respondents strongly disagreed and disagreed that they feel shy to go and buy contraceptives whilst 15(4.1%) and 17(4.6%) strongly agreed and agreed that they feel shy to go and buy contraceptives. Concerning respondent's fear of side effects of the use of contraceptives, especially the pills and the implants, 101(27.6%) of respondents were not sure of the fear of side effects on contraceptive use whilst 67(18.3%) and 163(44.5%) agreed and strongly agreed of fear of side effects of using contraceptives (Table 3).

Table 3: Distribution of attitudes of respondents towards contraception

Statement	Strongly disagree n (%)	Disagree n (%)	Not sure n (%)	Agree n (%)	Strongly Agree n (%)
My parents are the last resort I will fall on for advice on contraceptive use	10(2.7)	25(6.8)	101(27.6)	67(18.3)	163(44.5)
Contraceptives are for adults and I don't see the need to use them at this tender age	3(0.8)	7(1.9)	7(1.9)	79(21.6)	270(73.8)
Prolong use of contraceptives possess risks and I don't intend to use	114(31.1)	45(12.3)	40(10.9)	76(20.8)	91(24.9)
My parents are the last resort I will fall on for advice on contraceptive use	3(0.8)	7(1.9)	7(1.9)	79(21.6)	270(73.8)
Contraceptive is only meant for married people	114(31.1)	45(12.3)	40(10.9)	76(20.8)	91(24.9)
Condoms encourage male infidelity	254(69.4)	69(18.9)	11(3.0)	15(4.1)	17(4.6)
Contraceptive methods encourage women to be promiscuous	254(69.4)	69(18.9)	11(3.0)	15(4.1)	17(4.6)
The use of contraceptives can lead to	254(69.4)	69(18.9)	11(3.0)	15(4.1)	17(4.6)

infertility among women					
Getting pregnant at a tender age is accepted by family	254(69.4)	68(19.2)	11(3.0)	16(4.4)	15(4.3)
I don't feel comfortable using contraceptives, especially condom	3(0.8)	7(1.9)	7(1.9)	79(21.6)	270(73.8)
I feel shy to go and buy contraceptives	254(69.4)	69(18.9)	11(3.0)	15(4.1)	17(4.6)
I fear the side effects of the use of contraceptives especially, the pills and the implants	10(2.7)	25(6.8)	101(27.6)	67(18.3)	163(44.5)

Source: Field Data, 2022.

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Attitudes of respondents towards contraception

The total mean score of respondents' attitudes towards contraception was (Mean=36.1). A respondent with a score less than the mean score of attitude was classified as poor attitude whilst those with a score greater than the mean score were classed as good attitude. In this study, 176(48.1%) of respondents had good attitudes towards contraception whilst 190(51.9%) had poor attitudes towards contraception (Figure 3).

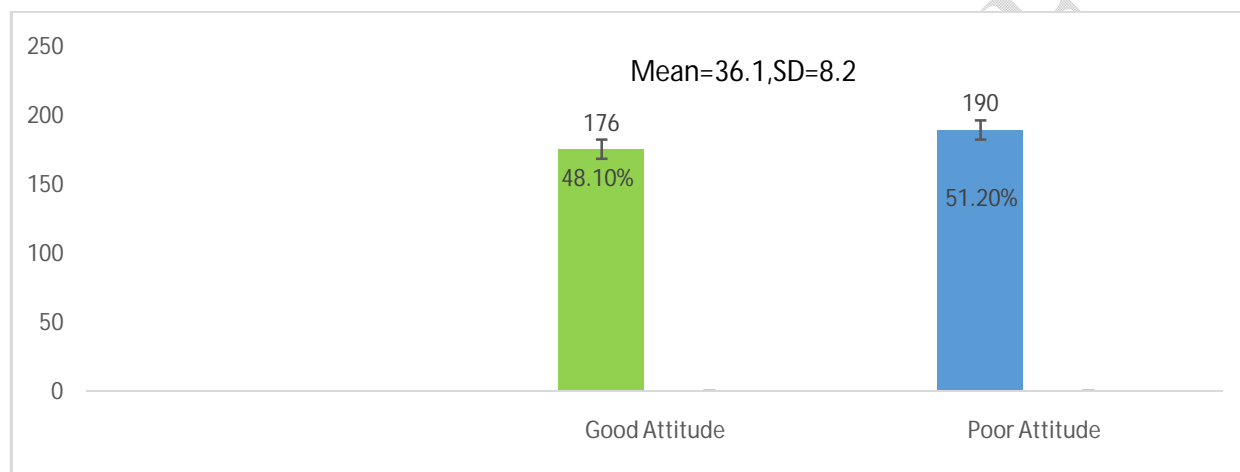


Figure 3: Attitude of respondents towards contraception utilisation

Association between Sociodemographic factors and contraceptive utilisation

At a 95% Confidence interval, the Pearson Chi-Square Test was employed to determine the association between respondents' sociodemographic characteristics and modern contraception. The study established that respondents' level of income was associated with the utilisation of modern contraception and such association was significant ($X^2 = 7.1, p = 0.029$). However, no significant association was found between factors such as the age of respondents ($X^2 = 6.45, p = 0.09$) and level of education ($X^2 = 0.63, p = 0.7$) and modern contraception use (Table 4).

Table 4: Association between Sociodemographic Characteristics and Contraception

Variable	Prevalence of Contraceptive utilization		X^2 (p-value)
	Utilization of Contraception n (%)	Non-Utilization of Contraception n (%)	
Age (years)			6.45(0.09)

11-13	28(14.3)	24(14.1)	
14-16	73(37.2)	80(71.1)	
17-19	95(48.5)	66(38.8)	
Gender			0.18(0.67)
Male	78(39.8)	64(37.6)	
Female	118(60.2)	106(62.4)	
Level of Education			0.63(0.7)
Non-formal education	13(6.6)	8(4.7)	
Basic Education	84(42.9)	74(43.5)	
Secondary Education	99(50.5)	88(51.8)	
Marital Status			2.33(0.31)
Single	178(90.8)	153(90.0)	
Married	18(9.2)	15(8.8)	
Divorced	0(0.0)	2(1.2)	
Income Level			7.1(0.029)*
None	156(79.6)	132(77.1)	
Lower income level	22(11.2)	32(18.8)	
Middle-Income level	18(9.2)	7(4.1)	
Religion			3.87(0.28)
Christianity	155(79.1)	138(81.2)	
Islamic (Muslims)	38(19.4)	31(18.2)	
Traditional	3(1.5)	0(0.0)	
others	0(0.0)	1(0.6)	
Ethnicity			2.0(0.37)
Akan	155(79.1)	30(17.6)	
Northerners	39(19.9)	135(79.4)	
Ewe	2(1.0)	5(2.9)	
Whom do you stay with?			1.75(0.78)
Both parents	101(51.5)	96(56.5)	
One parent	45(23.0)	34(20.0)	
Other relatives	26(13.3)	22(12.9)	
Partner(s)	4(2.0)	5(2.9)	
By Self	20(10.2)	13(7.6)	

*: p -value < 0.05, statistically significant, X^2 : Chi-Square.

Discussion

Modern contraceptive utilisation among adolescents was 53.6%. A prevalence of 9.4% modern contraception utilisation had been found by Sserwanja et al (2021) (21), 18% by Konkanali et al (2019) (4), 11.9% of modern contraception usage of adolescents by Allotey et al (2020) (7) and 74.5% by Usinger et al, (2018) (1), which contrasted the findings of present study outcome. Similarly, a prevalence of 8.7% of modern contraception use among adolescents had been reported by Bakesiima et al, (2020) (22) and 68.7% by Mwaisaka et al (2020) (23) and findings were dissimilar to this present study outcome. In Nigeria, a cross sectional study by Crawford et al (2021) found a prevalence of 45.3% of adolescent use of modern contraception (24). In Ghana, a prevalence of 43.0% of modern contraception usage had been found (25) and findings were inconsistent. The differences in study designs in addition to differences in sample size, and sampling techniques could also be a possible factor for the dissimilarities' of findings. Moreover, the differences in culture and beliefs, unavailability and inaccessibility of contraception in terms of cost and affordability could also account for the difference in study outcomes.

This current study found that 57.8% of respondents had adequate knowledge of contraception whilst 48.1% of the adolescents were found to possess good attitudes toward contraception. A similar report had been reported in a cross-sectional study by Karao (2020). The study further indicated that whilst respondents had adequate knowledge of modern contraception, they were, however, afraid of the side effects of modern contraception. As such their attitudes towards modern contraception were poor which agrees with the findings of this present study (26). In Turkey, a descriptive cross-sectional study found that most adolescents do not utilise modern contraception during their first sexual encounter due to insufficient knowledge towards modern contraceptive use leading to a significant increase in unplanned pregnancies and findings were dissimilar to current study reports (4).

Adolescents use of modern contraception was a result of education received from friends and immediate family members. This has increased their knowledge of contraception and as such stand high in using contemporary contraception (27). A study by Usinger et al (2018) indicated that only a few adolescents had inadequate knowledge of modern contraception and this contrasted with the findings of this present study (1). The study, however, revealed that, though adolescents had low knowledge of modern contraception, their attitudes towards contraceptive use were good which was similar to present study outcome. A study by Crawford et al (2021) in Nigeria indicated most adolescents were informed about modern contraception and as such have good knowledge and this was similar to the outcome of this present study (24). Again, a cross-sectional study by Mbachu et al (2021), revealed that majority of female adolescents had sufficient knowledge of modern contraception which was similar to the present study outcome (5). Low knowledge and a poor attitude towards modern contraception had been

discovered in a cross-sectional study conducted by Munakampe et al (2018) (28) and this disagreed with the outcome of current study. Evidence by Sharma et al (2021), revealed that there is inadequate knowledge of modern contraception among adolescents and this did not support the finding of the present study (29). What could have accounted for the similarities in study findings relating to the knowledge and attitudes of adolescents towards contraception could be ascribed to adolescent's exposure to social media and education on from a friend and immediate family members. The differences in study findings could also be attributed to a difference in study methodology between the studies cited.

This current study demonstrated that adolescents' level of income had a significant association with their modern contraception utilisation. This means that adolescents' level of income through gainful employment or supported financially had a significant association with use of modern contraception. It was revealed in a cross-sectional study conducted in Ghana that, adolescents who work to earn an income had a positive association with use of modern contraception. This was similar to the findings obtained for this present study (30). Similarly, a related cross-sectional study by Oppong et al (2021) conducted to determine the prevalence and knowledge of contraceptive utilisation documented that, the wealth of an adolescent determines their level of income associated with their use of modern contraception and this consistent with the outcome of present study (18). Similar studies had also found that adolescents who earn some income from work showed significant association with modern contraception utilisation (31, 32).

Conclusion and recommendations

This study concluded that more than half of the adolescents in the municipality surveyed utilise modern contraception. A little over half of the adolescents had adequate knowledge of modern contraceptives which translated into respondents' poor attitudes towards contraception. Additionally, the adolescents' level of income was significantly associated with modern contraception utilisation in the municipality. An increase in the utilisation of modern contraception by the adolescents through adequate knowledge of contraception is very crucial in reducing their risk of sexually transmitted diseases and unwanted pregnancies with subsequent reduction in maternal morbidities and mortalities from unsafe abortion, during pregnancy and childbirth. Local radio stations in the municipality should institute programs targeted at adolescent use of modern contraceptives as this will increase their knowledge and improve their attitudes toward modern contraceptive use. The study recommends future qualitative enquiry to explore the challenges that deter adolescents from utilising modern contraceptives in the municipality.

Limitations of the study

There is the possibility of recall bias on the part of the respondents. The findings of the study were limited to adolescents and cannot be used to generalise all men and women above adolescent age and of reproductive age in the municipality

Ethical Approval and Consent:

Ethical approval to conduct the study was obtained from the Christian Health Association of Ghana Ethical Review Committee with approval number (CHAG-IRB04062022). Both informed written consent and assent form was sought from respondents and parents or guardian. Permission was sought from local health authorities and the municipal health directorate. Respondents were made to understand that participation in the study was voluntary. Upon the visit of the investigator in the community, the respondent's consent were sought and the questionnaire was administered to the respondents in person. The investigator was assisted by two trained research assistants in administering the questionnaire. Data collection was one on one with respondents. Complete questions were explained to the respondents. Respondents who were capable of answering the questions were allowed to complete the questionnaire themselves. Those who were unable to read had one on one interview with the investigator or any of the research assistants.

Data and material availability

Data and materials for the study are available upon request from the corresponding authors

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