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Factors associated with male acceptance of modern contraceptive methods. A descriptive cross-sectional study in a periurban municipality



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Abstract

Background Male knowledge and acceptance of modern contraceptive use play a significant role in uptake. This study assessed the factors associated with male acceptance of modern contraceptive methods in Ho Municipality.

Methods A cross-sectional study with a quantitative approach was employed. Systematic random sampling was used to select 503 participants from households with married men and women. A structured pre-tested questionnaire, including open-ended and closed-ended questions, was researcher assistant administered. Data analysis was conducted using STATA version 17.

Results The majority of the respondents identified that contraceptives are used to prevent pregnancy (91.19%), and also identified the following as birth control commodities: birth control pills (64.94%), female condoms (15.71%), intrauterine devices - IUDs (4.79%), and implants (4.21%). Factors such as affordability, employment status, income, and access significantly influenced male acceptance of contraceptives. The study revealed that men (84.67%) agreed with their partner to use contraceptives after sexual intercourse while only 37% agreed to use contraceptives before sexual intercourse. Among those who did not accept the use of modern contraceptives, the reason provided was the fear of side effects (65.13%). Men who find modern contraceptives affordable were more likely to use them (AOR = 8.15; 95%CI:3.49–19.02; *p*-value < 0.001). Also, unemployed men were less likely to use modern contraceptives (AOR = 0.14; 95%CI:0.044–0.44; *p*-value = 0.001). Men with lower income (50–900 cedis average monthly income level) were less likely to use modern contraceptives (AOR = 0.28; 95%CI:0.07–1.02; *p*-value = 0.05).

Conclusion Increasing interventions aimed at continuously reducing the cost of modern contraceptives is essential for improving male acceptance and the overall success of modern contraceptive use in other communities with low male involvement. The government, Healthcare agencies, community leaders, and family planning organizations should work together to actively intervene in lowering the cost of modern contraceptives to improve access by men.

Keywords Modern contraceptives, Male acceptance, Family planning, Reproductive health, Knowledge and utilisation

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Introduction

The fertility rate for sub-Saharan Africa (SSA) of 4.6 is almost twice the global estimate of 2.5 [1, 2]. As of 2019 and 2021, approximately 190 million women of reproductive age and 214 million women, respectively, did not use any contraceptive method [3]. To attain the sustainable development goal (thus SDG 3.7), providing universal access to sexual and reproductive healthcare services by 2030 and the use of modern contraceptives is crucial [4]. Contraceptives are essential tools in empowering individuals to exercise control over their fertility, and enabling them to make informed decisions regarding the timing and spacing of pregnancies [5, 6]. The use of modern contraception prevents pregnancy-related risks for women, especially for adolescent girls [7]. Modern contraceptive methods refer to all scientifically identified techniques that can be adopted by couples to prevent pregnancy. These methods of contraception included sterilisations of all forms, intrauterine devices, subdermal implants, oral contraceptive pills, injectables, emergency contraceptive pills, diaphragms, cervical caps, spermicides, vaginal rings and sponges. The use of contraceptives are crtical for infant survival. Children born within two-years birth interval have about 60% increased risk of infant death, and those born within two to three years have about 10% increased risk, compared to those born after three years or longer [4, 8, 9].

When men are actively engaged in family planning decision-making or the use of modern contraceptives, it has the potential to foster enhanced communication between sexual partners, bolster adherence, and elevate overall satisfaction with reproductive health choices [10]. Men's acceptance of modern contraceptives involves sociocultural, economic, and individual factors [11]. The involvement of men in family planning decisionmaking and uptake is crucial for women's usage [12]. In some jurisdictions, modern contraceptive use has been primarily seen as a woman's responsibility, with limited involvement of male partners [9, 13, 14]. Recognising the benefits of male involvement in family planning is critical for uptake by women in traditional African societies. Consequently, efforts have been made to shift this paradigm in recent years to consciously involve men. In SAA, the involvement of male partners in family planning has been found to have several benefits, such as increased contraceptive uptake among women, improved spousal communication, and enhanced reproductive health outcomes [10, 15]. Also, men's involvement can influence modern contraceptive uptake, access to healthcare services, and the overall well-being of the family [16, 17].

In Ghana, modern contraceptive uptake is gradually increasing. For instance, modern contraceptive use has increased from 10 to 22% from 1993 to 2014 respectively while satisfaction for modern contraceptives has also risen from 18 to 30% within the same period [18-20]. Also, in some developing countries, despite this achievement, there remains a significant disparity in male acceptance of modern contraceptives, hindering progress toward achieving comprehensive reproductive health goals [13, 20, 21]. Statistical data reveal a concerning trend of low male involvement and support for the use of modern contraceptives by their spouses [13]. In Ghana, a substantial proportion of men express reluctance or opposition towards the use of modern contraceptives by their partners [10]. At the same time, approximately, 30 and 42% of married and unmarried women respectively still have an unmet need for family planning services [22, 23]. In comparison, the total demand for family planning services stands high for unmarried sexually active women [22, 23]. This evidence underscores a critical challenge within Ghana's reproductive health programs, showing the lack of robust and careful intervention for male acceptance and support for modern contraceptives. The reluctance and misconceptions among men hinder efforts to achieve universal access to family planning services and contribute to persistent unmet needs among women, thereby impacting their reproductive autonomy and overall well-being. This study assessed the factors associated with male acceptance of modern contraceptives in Ho Municipality.

Methodology

Study design

The study employed a cross-sectional design. Data was collected from men in a sexual union with at least a female partner and living within the Ho municipality at a point in time and no follow-up was required.

Study site description

Ho Municipal is one of the eighteen districts in Volta Region, Ghana. The population for 2021 is 229,615 with 112,990 males representing 49.21% and 116,625 females representing 50.79% [24]. The Municipality shares boundaries with the Adaklu and Agotime-Ziope Districts to the South, Ho West District to the North and West, and the Republic of Togo to the East. Its total land area is 2,361 km² thus representing 11.5% of the region's total land area. The Total Fertility Rate (TFR) for the Municipality is 2.6. About one-third (35.8 1%) of the population aged 12 years and older are married, 42.8% have never married, by age 45-49 years, about 70% of males (69.6%) are married compared to a little below twothirds of males (60.1%). At age 65 and above, widowed females account for as high as 57.8% while widowed males account for only 13.9%. There are 60 health facilities within the Municipality [24].

Study population sampling and sample size

The study population consists of men aged over 18 who are in union with a female partner within the Ho Municipality. Men in union with a female partner refer to men who are married or cohabiting in a formal or informal sexual relationship. The men were selected from Dome Ahwo, Hleha, Have and Bankoe communities.

The sample size was determined by using the Cochrane formula [25] for cross-sectional studies. Where: $n_o =$ sample size, Z = Z-score (critical value) of 1.96 on the standard normal distribution curve at 95% confidence level, e = margin of error of 5%, P = Estimated proportion (prevalence). q = 1-p. Since the population of males of reproductive age within Ho municipality might be large, the degree of variability of male partner involvement in family planning utilization among women is unknown. This study will assume the maximum variability within the population of men of reproductive age and the prevalence of male partner involvement in family planning utilization to be equal to 50% [25].

Hence p = 0.5, q = 1-0.5, q = 0.5, Therefore, the sample size was calculated as; $n_o = 384$. Adjusting for the 31% non-response rate, the sample size for the study was estimated as $n_o = (31/100) \times 384 = 119.04$. The sample size was then calculated as $384 + 119.04 = 503.04 \approx 503$. Therefore, the sample size for the survey was 503 adult males in the Ho municipality. The study utilized a convenience sampling method. Participants were selected based on their accessibility and willingness to participate. Men available in the community were contacted by trained research assistants to participate in their homes.

Data collection procedures

Data for the study was collected with the support of six trained field research assistants. The research assistants were trained for three [3] days before the study on the purpose of the study and to acquaint them with the research instruments. Data collection was done using questionnaires. The research questionnaire was developed through a literature review and identifying gaps in the literature that warrant further studies. The questionnaire was reviewed by members of the research team who had knowledge of the subject area. Further, the questionnaire was pretested in the Dzolo-Gbogame community and a test re-test reliability score (alpha Cronbach = 0.71) was computed for the knowledge segment. The pre-test was conducted using 20 participants. The pre-test community had the same demographic characteristics as the study community. The pre-test also allowed for consistency in the interpretation of research questions and in identifying for comprehensiveness of the questions.

The instrument was divided into four [4] sections; A-D. Section "A" assessed the socio-demographic characteristics. Sections B-D, focus; on the knowledge level of male

partners' involvement (acceptance) in modern family planning, the prevalence of males' acceptance of modern contraceptive use by their female partners, and factors influencing male partner's involvement in modern family planning utilization. The research assistants moved from house to house within the study setting and invited men who met the inclusion criteria to participate after providing consent. The questionnaire was administered within a comfortable space in the precinct of the respondents' homes.

Data handling and analysis

The data was entered into EpiData Entry Client v4.0.2.49 for cleaning and coding and then exported into STATA v17 for analysis. Descriptive statistics such as mean or median, frequencies, and proportions were used to describe and summarize the data. To establish the associations between variables, Chi-square and linear regressions (linearity, normality, and multicollinearity) were computed at *p*-values of less than 0.05 and were considered statistically significant at a 95% confidence interval.

Ethical considerations

Ethical approval for this study was obtained from the University of Health and Allied Sciences (UHAS) Ethics Review Committee. Participants Information and Consent Form explaining the purpose of this study was provided to participants to obtain their written consent for the study. Participants were informed that participating in the study was voluntary, and they could withdraw from the study at any time they wished without any consequences. To maintain participant confidentiality, the names and details of participants were not linked to the data and findings.

Results

Socio-demographic characteristics

Table 1 shows the socio-demographic characteristics of the 522 adult men in this study. The results indicate that the majority of the men were between 25 and 34 years old (59.20%), Christian (81.42%), and Ewe (57.85%), employed (69.73%), and tertiary level of education (50.96%). The majority (64.37%), were within the middle-income range of GHC1000 to GHC3000.

Knowledge level of modern contraceptive

The respondents identified that contraceptives are used to prevent pregnancy (91.19%), and also identified the following as birth control commodities: birth control pills (64.94%), female condoms (15.71%), IUDs (4.79%), and implants (4.21%). Regarding sources of information, the respondents indicated that they got their information from partners (37.93%), friends (29.12%), health workers (12.6%), and media (5.4%). A majority stated

 Table 2
 Knowledge on modern contraceptive

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Variables	Frequency	Percent
Age		
15 to 24	162	31.03
25 to 34	309	59.20
35 to 46	51	9.77
Religion		
African Traditional	15	2.87
Christianity	425	81.42
Islam	82	15.71
Ethnicity		
Akan	138	26.44
Ewe	302	57.85
Ga /Dangme	54	10.34
Guan	9	1.72
Mole/Dagbani	19	3.64
Educational status		
JHS/ Middle school	30	5.75
No formal education	17	3.26
Primary	27	5.17
SHS/SSS/O Level/A Level	182	34.87
Tertiary	266	50.96
Marital status		
Cohabiting	44	8.43
Divorced/Separated	4	0.77
Married	67	12.84
Never married	405	77.59
Widowed	2	0.38
Employment status		
Employed	364	69.73
Unemployed	158	30.27
Household Income		
Higher-income (> 3500 cedis)	58	11.11
Lower income(50–900 cedis)	128	24.52
Middle income (1000–3000 cedis)	336	64.37

that emergency contraceptive pills should be taken immediately after sex (81.03%) and are used to prevent pregnancy (89.66%). Implants were mainly identified as Implanon (57.28%) and Jadelle (42.72%), with the efficacy lasting for 3–5 years (69.35%). The men also identified that there are associated side effects observed in their women using modern contraceptives (74.33%). Others identified that a prescription is needed for acquiring contraceptives (67.82%). Table 2 describes the distribution of knowledge on modern contraceptives.

Factors influencing men allowing women to use contraceptives

Adult men in Ho municipality find modern contraceptives affordable (80.27%) and do not face difficulties accessing them (72.22%). Some respondents reported that cultural and religious beliefs influence modern contraceptive use (23.75%). Also, the Contraceptive options are discussed with partners (55.17%) and sometimes

Variables	Frequency	Percent
General idea about contraception		
used for abortion	4	0.77
used to prevent STDs	42	8.05
used to prevent pregnancy	476	91.19
Types of contraceptives known		
Amenorrhea Method	1	0.19
Diaphragm	1	0.19
Female condom	82	15.71
IUD	25	4.79
Implants	22	4.21
Injectable	49	9.39
Lactational	3	0.57
Pills	339	64.94
Sources of contraceptive information		
Family member	27	5.17
Friends	152	29.12
Health worker	66	12.64
Media	28	5 36
Others*	9	1 72
Partner	108	37.03
Emorgoney contracontivos	150	57.55
A method used for abortion	51	10.24
A method used to provent program	J4 460	00.66
A method used to prevent pregnancy	400	69.00
Duration to use emergency contraceptive pills	422	01.02
On an della	423	81.03
Unce dally	87	16.67
	12	2.30
How to take birth control pills		
Immediately after sex	423	81.03
Once daily	87	16.67
Twice a week	12	2.30
Types of contraceptive implants		
Implanon	299	57.28
Jadelle	223	42.72
How long do contraceptive implants last		
1–2 years	62	11.88
3–5 years	362	69.35
4–8 years	98	18.77
Modern contraceptives have potential side		
effects.		
No	97	18.58
Not sure	37	7.09
Yes	388	74.33
Modern contraceptives prescription		
No	354	67.82
Not sure	40	7.66
Yes	128	24.52

experience conflict on contraceptive use with partners (23.37%). The majority of men independently decided to use contraceptives (79.50%). The predominant factor influencing the use of contraceptives is the desire to avoid pregnancy (75.86%), child spacing (8.43%), peer

influence (5.36%), fear of side effects (3.45%), religious beliefs (2.68%), and lack of information (1.92%). Among those who did not accept the use of modern contraceptives, the reason provided was the side effects (65.13%). Table 3 describe the distribution of factors influencing men allowing women to use contraceptives.

Prevalence of modern contraceptive use among men

The study revealed that men (84.67%) agreed with their partner to use contraceptives. Some of the respondents indicated that they only use contraceptives soon after sexual intercourse (37.16%). The most contraceptive method used was coitus interruptus (56.15%), followed by pills (24.60%), injectables (11.23%), IUDs (5.35%), and implants (2.67%). Over the last three months, 21.65% have used contraceptives. Emergency Contraceptive use is most frequent after sex (68.39%). Table 4 describes the prevalence of contraceptive use among males.

Table 3 Factors influencing men allowing women to use contraceptives

Variable	Frequency	Percent
Contraceptives affordable		
No	80	15.33
Not sure	23	4.41
Yes	419	80.27
Difficult to access contraceptives		
No	377	72.22
Not sure	30	5.75
Yes	115	22.03
Have cultural and religious restrictions to use contraceptive.		
No	325	62.26
Not sure	73	13.98
Yes	124	23.75
Partner discusses contraceptive options		
No	226	43.30
Not sure	8	1.53
Yes	288	55.17
Conflict with partner on contraceptive use		
No	344	65.90
Sometimes	56	10.73
Yes	122	23.37
Decision on type of contraceptive use		
You (male)	415	79.50
Your Partner	107	20.50
Reasons for not accepting the use of modern contraceptives		
Attitude of the contraceptive providers	65	12.45
Distance to pharmacy/hospital	28	5.36
Family members opposed to using	4	0.77
Infrequent sex	29	5.56
Partner refusal	56	10.73
Side effects	340	65.13

Predictors of males' acceptance of modern contraceptive

Multivariate logistic regression analysis showed that men who find modern contraceptives affordable were more likely to use them (AOR = 8.15; 95%CI:3.49–19.02; *p*-value < 0.001). Also, unemployed men were less likely to allow their partners to use modern contraceptives (AOR = 0.14; 95%CI:0.044–0.44; *p*-value = 0.001). Men with lower income (GHC50 -900) had lower odds of using modern contraceptives (AOR = 0.28; 95%CI:0.07–1.02; *p*-value = 0.05). Men who perceive themselves to face difficulties accessing contraceptives have higher odds of using them compared to those who do not face such difficulties (AOR = 1.96; 95%CI: 0.74–5.19; *p*-value = 0.031). Table 5 shows the predictors of males' acceptance of modern contraceptives.

Discussions

This study identified factors associated with male acceptance of modern contraceptives in a peri-urban resourcelimited setting. In the current study, the majority of participants used contraceptives in collaboration with their partners. This may warrant a relatively low fertility rate of 2.6 compared to the global estimate of 2.5 [1, 2]. As the fertility rate may seem to be encouraging, continued acceptance and usage by men may be responsible for the significant improvement. Therefore, to achieve the specific goal of acceptable fertility levels, there ought to be conscious efforts to involve men in contraceptive use. In Kenya [26], Cameroon [27], Ethiopia [28–30], Malawe and Tanzania [31], spousal involvement was critical for contraceptive use. Although the men in this study had good knowledge about modern contraceptives, some aspects of their knowledge content are inappropriate and may affect their usage. For instance, eight out of every ten men in this study (81.03%) expressed that birth control pills should be taken immediately after sexual intercourse. This presupposes that men consider birth control pills to play the role of emergency contraceptive pills. This misconception potentially may lead to lower usage [30] or may be responsible for inappropriate usage. Diverse strategies including media campaigns, and health worker outreach programmes are critical in improving men's knowledge of the content of contractive methods [32, 33]. Men's awareness and acceptance of modern contraceptives are strongly linked to their access to information and education on family planning [16, 34]. Thus, local health authorities must leverage the role of the media, in educating and promoting men's understanding of modern contraceptives, especially in peri-urban communities and this is because appropriate knowledge about contraceptives is crucial for informed decision-making and responsible sexual behaviour [32, 33, 35]. Adult males, mostly household heads, are critical decision-makers in women's health, and they know

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Variables	Frequency	Percent
Agree with a partner to use contraceptives		
after unprotected sex.		
Yes	442	84.67
No	80	15.33
Use contraceptives when having sexual		
intercourse.		
Yes	194	37.16
No	297	56.90
Not sure	21	4.02
l don't remember	10	1.92
Type of contraceptive method ever used by		
a partner.		
IUD	10	5.35
Implants	5	2.67
Injectable	21	11.23
Pills	46	24.60
Withdrawal	105	56.15
Used contraceptives in the last three months		
Yes	113	21.65
No	366	70.11
Not sure	20	3.83
l don't remember	23	4.41
How frequently do you use contraceptives?		
Daily	14	2.68
Weekly	13	2.49
Monthly	15	2.87
Occasionally	72	13.79
Rarely	51	9.77
Any time after sex	357	68.39
Use of coitus interruptus		
Yes	431	88.87
No	54	11.13

contraceptive use is critical for women's health [21, 36, 37]. Therefore, comprehensive educational interventions utilizing community health workers targeting both men and women are essential to improving knowledge content [30, 38, 39]. Such programs should focus on providing accurate information about different types of contraceptives, their usage, benefits, and potential side effects.

The findings indicate that 84.67% of men agree with using contraceptives after unprotected sex and 69.6% accept to use of modern contraceptives because it was recommended by their female partners. The acceptance of contraceptive use is essential, but actual usage often falls short due to barriers such as cost, availability, and lack of support by male partners [40]. There were varying acceptance rates of modern contraceptive use among married or cohabiting couples in SSA, ranging from 15 to 75% [41]. In India, the acceptance of modern contraceptives ranged from 25 to 75% among married men, with urban and higher-educated men showing higher acceptance [1, 3, 42]. This current study found that age,

ethnicity, and level of education determine the acceptance of modern contraceptives. Regional studies provide additional insights into the prevalence of male acceptance that show that even though general knowledge and attitude may be high, actual usage is usually relatively low [43–45] Addressing barriers to access and increasing the availability of contraceptives can help bridge the gap.

Other factors that influence male contraceptive use are the perception of affordability of contraceptives, being unemployed, inability to afford, having no difficulty accessing contraceptives, and being in the high socioeconomic class. The association between difficulties in accessing contraceptives and use suggests that overcoming economic barriers can lead to higher usage rates [46]. Addressing these barriers through subsidies, improved access, and support services can enhance contraceptive use. In Uganda [46], Nigeria [47], Brazil [42, 48], Ethiopia [49] and Kenya [26, 45], education, wealth index, and the number of living children were key predictors of contraceptive use among both men and women. In other studies, however, cultural socio-economic, and spousal norms and personal beliefs were critical in shaping men's acceptance of contraceptives [27, 31]. In patriarchal societies like India, traditional gender roles often facilitate men's participation in contraceptive decision-making [50, 51]. The influence of men on the health decisions of women in Africa is pervasive. This also influences men's determination of women's choices in health, especially childbirth and upbringing [52]. Therefore, there is a need for culturally sensitive approaches to family planning that will address local beliefs and practices. Encouraging open communication between partners and addressing cultural and socioeconomic barriers are essential for improving acceptance and facilitating effective family planning. Only 23% of subjects reported a cultural or religious reason for not using modern contraception despite almost all subjects reporting having a religious faith. Regardless of respondents indicating the low influence of culture, their strong religious affiliation can be used as a conduit to provide critical health education. This finding is a departure from previous studies that identified that local cultural and religious beliefs were critical in the general acceptance and use of modern contraceptive methods [41, 43]. This is important because even though religious belief is critical in human behaviour, enhancing health education, mitigating myths and encouraging open dialogue can influence people's decisions regarding contraceptive use [17, 18, 49]. Therefore, in focusing on male acceptance of contraceptive methods, attention must focus on multiple factors including religion, identify gaps and promote effective use of information.

Table 5 Predictors of males' acceptance of modern contraceptive

Variables/Parameters	<i>P</i> -values	COR (95% CI), <i>p</i> -value	AOR (95% CI), <i>p</i> -value
Age	< 0.001		·
15 to 24		Ref	Ref
25 to 34		1.99(1.12-3.55),0.019	1.36(0.63-2.93),0.424
35 to 46		0.16(0.85-0.34),0.001	1.19(0.21-6.54),0.836
Religion	< 0.001		
African Traditional		Ref	Ref
Christianity		1.96(0.53-7.20),0.309	
Islam		0.45(0.12-1.75),0.253	
Ethnicity	< 0.001		
Akan		Ref	Ref
Ewe		1.24(0.63-2.41),0.523	0.84(0.35-1.99),0.699
Ga /Dangme		0.09(0.42-0.19),0.001	0.36(0.10-1.31),0.124
Guan		Ref	Ref
Mole/Dagbani		0.21(0.71-0.19),0.004	0.14(0.036-0.611),0.008
Educational status	< 0.001		
JHS/ Middle school		Ref	
No formal education		0.72(0.14-3.67),0.691	0.22(0.026-1.84),0.163
Primary		0.005(0.001-0.56)0.0.001	0.10(0.005-2.02),0.134
SHS/SSS/O Level/A Level		1.59(0.49-5.14),0.434	0.41(0.84-0.19),0.267
Tertiary		1.16(0.38-3.56),0.787	0.14(0.14-3.11),0.600
Marital status	< 0.001		
Cohabiting		Ref	Ref
Divorced/Separated		Ref	Ref
Married		16.57(6.09-45.07),0.001	1.73(0.32–9.28),0.519
Never married		16.27(8.09-32.7),0.001	2.09(0.52-8.36),0.294
Widowed		1.93(0.11-33.1),0.649	5.49(0.16-181),0.340
Employment status	0.004		
Employed		Ref	Ref
Unemployed		0.13(0.081-0.23),0.001	0.14(0.044-0.44),0.001
Household Income	0.002		
Higher-income (≥ 3500)		Ref	Ref
Lower income (50–900 cedis)		0.24(0.10-0.58),0.001	0.28(0.07-1.02),0.05
Middle income (1000 cedis		1.57(0.64-3.79),0.316	0.68(0.19-2.42),0.555
Contraceptives affordable	0.031		
No		Ref	
Not sure		1.51(0.59-3.8),0.59	0.55(0.13-2.25),0.408
Yes		16.87(9.37-0.36),0.001	8.15(3.49-19.02),0.001
Ever face difficulty in accessing contraceptives	0.034		
No		Ref	
Not sure		0.54(0.23-1.27),0.159	0.73(0.22-2.39),0.604
Yes		2.06(1.02-4.17),0.043	1.96(0.74-5.19),0.031
Culture and religion influence the decision	0.001		
No		Ref	Ref
Not sure		1.21(0.49-3.03),0.669	1.77(0.53–5.90),0.352
Yes		0.21(0.13-0.36),0.001	0.52(0.20=1.30),0.166
Partner discuss contraceptive options	0.030		
No		Ref	
Not sure		0.91(0.11-7.69),0.931	11.18(0.77–61.66),0.076
Yes		0.57(0.35-0.95),0.033	1.64(0.72-3.69),0.232
Conflict with partner on contraceptive use	0.001		
No		Ref	
Sometimes		0.49(0.22-0.12),0.091	0.34(0.11-1.02),0.055
Yes		0.18(0.11-0.32),0.001	0.75(0.2-2.28),0.001

Table 5 (continued)

COR (95% CI), <i>p</i> -value	AOR (95% CI), <i>p</i> -value
1.25(0.67-2.33),0.47	1.40(0.58-3.35),0.447
Ref	Ref
1.12(0.69–1.84),0.630	0.99(0.58–1.70), 0.992
	COR (95% CI), <i>p</i> -value 1.25(0.67–2.33),0.47 Ref 1.12(0.69–1.84),0.630

Strengths and limitations

Examining knowledge, prevalence, and factors influencing acceptance of contraceptives, the study offers a holistic view of the issues surrounding modern contraceptive use. The study provides valuable insights into how various socio-demographic and economic factors can affect modern contraceptive use. This multi-faceted approach enhances the relevance and applicability of the findings. The observation that utilization rates were high is a significant finding, highlighting the potential for continuous educational interventions to further improve contraceptive practices. The study's cross-sectional design limits its ability to establish causal relationships between variables. Longitudinal studies are needed to assess how changes in knowledge and attitudes over time affect contraceptive use. Another critical limitation was the use of a self-developed questionnaire to assess respondent's knowledge of contraceptive use. Future studies must focus on the use of acceptable tested questionnaires. The data may be subject to self-reporting biases, where participants may underreport or over-report their contraceptive use or knowledge due to social desirability or recall issues. In addition, this study also had a limitation concerning the plethora of contraceptive methods that were assessed. Even though it has been earlier stated that modern contraceptive methods included sterilisations of all forms, use of intrauterine devices, subdermal implants, oral contraceptive pills, injectables, emergency contraceptive pills, use of diaphragms, cervical caps, spermicides, vaginal rings and sponges, this current one focused on only the hormonal contraceptive methods. This is because they appear to be the most common forms of contraception commonly adopted by couples in Ghana. However, future studies must consider incorporating the various contraceptive methods.

Conclusion

The results revealed that a majority of the men had knowledge about modern contraceptives and they also influenced the use of modern contraceptives. Even though modern contraceptives mainly target women, male involvement and acceptance are critical in the overall uptake because they influence women's decision-making. Increasing men's understanding of contraceptive use is essential for a continuous improvement in both their acceptance and the overall success of contraceptive use in the communities. Healthcare providers, community leaders, and family planning organizations should work together to actively involve men in family planning discussions and decision-making processes. This can be achieved through targeted counselling sessions, community workshops, and awareness campaigns that highlight the role of men in supporting their partners' contraceptive use. Also, future research may identify the level of unmarried sexually active males in women's use of contraception as this current one had the majority of participants in a marital relationship.

Author contributions

The authors were involved in conceptualisation (JAAT), planning (JAAT, MFNAA, ERK), collection of data (JAAT, KDK), analysis (JAAT, KDK), initial drafting of manuscript (JAAT, MFNAA, ERK, KDK), reviewing the manuscript for significant intellectual inclusion (JAAT, MFNAA, ERK, KDK). All authors read and approved the final manuscript.

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Data availability

All data generated or analysed during this study are included in this published article.

Declarations

Ethics approval and consent to participate

Ethical approval for this study was obtained from the University of Health and Allied Sciences (UHAS) Ethics Review Committee. Participants Information and Consent Form explaining the purpose of this study was provided to participants to obtain their written consent for the study. Participants were informed that participating in the study was voluntary, and they could withdraw from the study at any time they wished without any consequences. To maintain participant confidentiality, the names and details of participants were not linked to the data and findings.

Consent for publication

Not applicable.

Competing interests

The authors declare no competing interests.

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