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Determinants of emergency contraceptive use among female senior high school students in the Akuapem south municipality, Ghana

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Abstract

This study investigated the knowledge, awareness, and use of emergency contraceptives (ECs) among female Senior High School students in the Akuapem South Municipality of Ghana, guided by the Theory of Planned Behaviour (TPB). A cross-sectional quantitative design was employed, surveying 300 students from two schools. Data were collected using a structured, self-administered questionnaire and analyzed with descriptive statistics and regression models. Results showed while awareness of ECs was high (98%), its actual use was moderate (50%). Attitude ($p<0.001$) and subjective norms ($p<0.001$) significantly predicted intention, while perceived behavioural control ($p<0.005$) predicted actual use of emergency contraceptives. Mean construct scores reflected positive attitudes (M=3.9), low subjective norms (M=2.7), moderate perceived control (M=3.5), weak intentions (M=2.8), and low reported behaviour (M=2.6). Cultural, religious, and moral concerns were major deterrents to EC use. The findings highlighted the need for culturally sensitive interventions to: bridge the gap between awareness and effective use of ECs, that would help reduce unintended pregnancies among students (including adolescents) in Ghana. *(Afr J Reprod Health 2026; 30 [1]: 74-85).*

Keywords: Emergency Contraceptives, reproductive health, Theory of Planned Behaviour, Attitude, Subjective Norms, Perceived Behavioural Control

Résumé

Cette étude a examiné les connaissances, la sensibilisation et l'utilisation des contraceptifs d'urgence (CU) chez les lycéennes de la municipalité d'Akuapem Sud, au Ghana, en s'appuyant sur la théorie du comportement planifié (TCP). Une étude transversale quantitative a été menée auprès de 300 élèves de deux établissements scolaires. Les données ont été recueillies à l'aide d'un questionnaire structuré auto-administré et analysées par des statistiques descriptives et des modèles de régression. Les résultats ont montré que si la sensibilisation aux CU était élevée (98 %), leur utilisation réelle était modérée (50 %). L'attitude ($p < 0,001$) et les normes subjectives ($p < 0,001$) prédisaient significativement l'intention, tandis que le contrôle comportemental perçu ($p < 0,005$) prédisait l'utilisation réelle des contraceptifs d'urgence. Les scores moyens des construits reflétaient des attitudes positives (M = 3,9), de faibles normes subjectives (M = 2,7), un contrôle perçu modéré (M = 3,5), de faibles intentions (M = 2,8) et un faible taux d'utilisation déclarée (M = 2,6). Les préoccupations culturelles, religieuses et morales constituaient des freins majeurs à l'utilisation de la contraception d'urgence. Les résultats ont mis en évidence la nécessité d'interventions adaptées au contexte culturel afin de combler le fossé entre la sensibilisation et l'utilisation effective de la contraception d'urgence, contribuant ainsi à réduire les grossesses non désirées chez les élèves (y compris les adolescentes) au Ghana. *(Afr J Reprod Health 2026; 30 [1]: 74-85).*

Mots-clés: : Contraception d'urgence ; Santé reproductive ; Théorie du comportement planifié ; Attitude ; Normes subjectives ; Contrôle comportemental perçu.

Introduction

Unintended pregnancy remains a pressing public health concern worldwide, with significant social, economic, and health implications, particularly for adolescents. Globally, approximately 121 million unintended pregnancies occur annually, with adolescents contributing a substantial proportion due to high rates of unprotected sexual activity and inconsistent contraceptive use[1,2] Unintended adolescent pregnancies are associated with increased risk of unsafe abortions, school dropout, and adverse maternal and neonatal outcomes, highlighting the urgency of effective preventive strategies among this target group.[3,4]

Emergency contraception (EC) plays a critical role in preventing pregnancy after unprotected sexual intercourse or contraceptive

failure. It has been recognized by the World Health Organization (WHO) as a safe, effective, and essential component of comprehensive contraceptive services.[4] EC methods (including levonorgestrel-based pills, ulipristal acetate, and copper intrauterine devices) are most effective when used within 72–120 hours after intercourse. [5] Evidence from multiple countries indicates that increasing knowledge and access to EC significantly reduces unintended pregnancy rates.[6,7]

In sub-Saharan Africa, however, adolescent access to EC remains constrained by limited availability, stigmatization, and low levels of accurate knowledge.[8,9] In Ghana, adolescent fertility remains high, with a rate of 76 births per 1,000 girls aged 15–19 years.[10] While EC is legally available and an "over-the-counter" contraceptive, barriers such as misconceptions about safety, moral and religious disapproval, and lack of comprehensive sexuality education hinder its uptake.[11,12] Studies conducted among Ghanaian adolescents have reported high awareness but relatively low correct knowledge and usage of ECs.[13,14] This awareness–utilization gap calls for targeted research to understand determinants of EC behaviour within culturally specific contexts.

The Theory of Planned Behaviour (TPB) provides a robust framework for understanding and predicting health-related behaviours, including contraceptive use. According to the TPB theory, behavioural intention is influenced by attitude toward that behaviour, subjective norms, and perceived behavioural control.[15] Prior studies applying TPB to contraceptive use have demonstrated its utility in explaining variance in intention and actual behaviour among adolescents.[16, 17] However, there is limited application of TPB in examining EC use among school-going adolescents in Ghana, especially in peri-urban settings.

In the Akuapem South Municipality, anecdotal reports from school health coordinators and local health facilities suggest rising cases of adolescent pregnancies, despite reportedly high awareness of ECs. This paradox highlights the need for a deeper understanding of the interplay between knowledge, attitudes, perceived norms, and control beliefs in shaping EC behaviour among this group. By applying the TPB model, this study sought to bridge existing knowledge gaps and provide evidence for context-specific interventions.

This study aimed to assess knowledge, awareness, and use of emergency contraceptives among female Senior High School students in the Akuapem South Municipality, Ghana, and to examine the influence of the TPB constructs (i.e. attitude, subjective norms, and perceived behavioural control) on intention and actual EC use or behaviour.

Methods

Study design and theoretical framework

This study employed a cross-sectional quantitative survey design, guided by the Theory of Planned Behaviour (TPB) as a conceptual framework. The TPB posits that an individual's intention to perform a behaviour is shaped by three constructs (attitude toward the behaviour, subjective norms, and perceived behavioural control), which together influence actual behaviour. The model provided the theoretical basis for measuring and analyzing determinants of emergency contraceptive (EC) use among the target population.

Study area

The study was conducted in the Akuapem South Municipality of the Eastern Region of Ghana. The municipality is predominantly peri-urban and semi-rural, with an estimated population of 161,000, of which approximately 20% are adolescents aged 10–19 years. [2] Educational facilities include multiple Senior High Schools (SHSs), Vocational institutes, and Junior High Schools (JHSs). Despite the availability of health facilities and pharmacies, anecdotal reports from local health officials indicated high rates of adolescent pregnancies, suggesting possible gaps in contraceptive knowledge and use.

Study population and inclusion criteria

The target population consisted of female Senior High School students aged 15–19 years enrolled in two selected public SHSs within the municipality. Students were eligible if they: were present in school during the data collection period; provided

informed assent or consent (for those 18 years and above) and guardians consent (from those in authority within schools for students below 18 years); and were willing to participate voluntarily in the study. Students who were pregnant at the time of the survey or had medical conditions affecting participation were excluded.

Sample size determination and sampling procedure

The sample size was calculated using Yamane's formula for finite populations at a 95% confidence level and 5% margin of error, based on the combined female student population in the selected schools. This yielded a target sample of approximately 300 respondents. A two-stage sampling approach was used: In the first stage, two public SHSs were purposively selected based on their size and accessibility; In the second stage, within each school, the stratified random sampling was applied by year group to ensure proportional representation, followed by simple random sampling within strata to select participants.

Data collection instrument

A structured, self-administered questionnaire was developed based on TPB constructs and adapted from validated tools used in similar studies. The questionnaire comprised of five sections: socio-demographic characteristics (age, religion, year of study, marital status, parental education, and residence); secondly, knowledge and awareness of ECs (types, sources, correct timing, and safety). In addition, Attitudes toward ECs (measured using responses on a 5-point Likert scale from strongly disagree to strongly agree); subjective norms (perceived social pressure from peers, family, or religion), perceived behavioural control (self-assessed ability to access and use EC) and behavioural intention and actual EC use (reported past use and likelihood of future use).

The questionnaire was pre-tested on 30 students in a similar school outside the study area to assess its clarity, reliability, and cultural appropriateness. Necessary modifications were made to the questionnaire before its final administration.

Data collection procedure

Data collection took place in the month of August 2023. Researchers, fluent in English language, administered the questionnaire during students' free periods in classrooms to minimize disruption to school activities. Researchers checked the questionnaire on-site for completeness before collection.

Data management and analysis

Data were entered into SPSS version 26.0 for cleaning and analysis. Descriptive statistics (frequencies, percentages, means, and standard deviations) summarized socio-demographic characteristics, knowledge, attitudes, and EC usage patterns. Composite scores for TPB constructs were calculated by averaging responses to relevant Likert-scale items. Multiple linear regression was used to assess predictors of intention to use EC, while logistic regression was used to examine determinants of actual EC use. Statistical significance was set at $p < 0.05$.

Ethical considerations

Ethical clearance was obtained from the Ethics Committee of the College of Basic and Applied Sciences (ECBAS 036/22–23). Permission was also sought from the Municipal Education Directorate and the Heads of participating schools. Informed consent was obtained from all participants who were >18 years while guardians' consent (from those in authority within schools) was sought for minors (<18 years). Confidentiality and anonymity were maintained during the study, and participants were assured they could withdraw at any time without penalty.

Results

Data in Table 1 showed respondents ranged in age from 15 years to above 19 years, with a little over half aged 17–18 years (51%). The majority were Akan (66%). Three-quarters (75%) reported not being in a relationship. Christianity was the predominant religion (93%), while 65% resided in urban or peri-urban areas as compared to 35% in rural settings.

Table 1: Socio-demographic characteristics, Knowledge and awareness of contraceptives

Variable	Category	Frequency (n = 300)	Percentage (%)
Age (years)	15–16	102	34
	17–18	152	51
	19 and above	46	15
Ethnic background	Akan	198	66
	Ewe	52	17
	Ga/Adangbe	28	9
	Other	22	7
Relationship status	Not in a relationship	224	75
	In a relationship	76	25
Religion	Christian	278	93
	Muslim	16	5
	Traditional/Other	6	2
Place of residence	Urban/peri-urban	194	65
	Rural	106	35
Awareness of contraceptives	Yes	300	100
Awareness of general types of contraceptives (multiple responses) *	Long – acting method	57	19
	Hormonal method	70	24
	Permanent method	105	36
	Fertility awareness method	105	36
	Emergency contraceptives	282	94
	Barrier methods	291	99
Knowledge of EC definition	Yes	242	81
Awareness of specific EC methods (multiple responses) *	Levonorgestrel pills	218	73
	Copper IUD	46	15
	Ulipristal acetate	18	6
	Abortifacients	15	5
	Unproven substances	9	3
Knowledge about correct timing of EC use	Within 72 hours	198	66
	Beyond 72 hours	102	34
Sources of EC information (multiple responses) *	Friends/peers	142	47
	Teachers	86	29
	Health workers	184	61
	Media (TV/radio/social media)	168	56

Footnote: Multiple responses possible; percentages are based on sub-sample sizes.
(Data derived from Field Survey, 2023)

Table 2: Ever-use and patterns of EC among respondents

Variable	Category	Frequency	Percentage (%)
Ever used EC	Yes	150	50.0
	No	150	50.0
	Total	**300**	**100.0**
Frequency of use (among ever-users)	Once	78	52.0
	2–3 times	54	36.0
	>3 times	18	12.0
	Total	**150**	**100.0**
Reason for use (multiple responses)	After unprotected sex	88	58.7
	After partners condom break/slip	36	24.0
	Missed taking regular pill	26	17.3
	Total	**150**	**100.0**
	Not being sexually active	92	61.3

Reason for non-use (among never-users)	Religious/moral objection	36	24.0
	Fear of side effects	22	14.7
	Total	**150**	**100.0**
Place of obtaining EC * (multiple responses)	Pharmacy	128	85.3
	Health facility	42	28.0
	Friends/others	14	9.3

It further showed that all respondents (100%) had heard of contraceptives. A greater number of students had knowledge about a variety of types of contraceptives with the most known type being the barrier method (specifically, the male condom). Most respondents explained they were aware of it because it was affordable, available and relatively easy to purchase (accessible). Knowledge about emergency contraceptives was also high (94%) among respondents. As identified in this study, long-acting and hormonal methods were not that well known.

The study revealed that awareness of emergency contraception (EC) was universal among respondents (100%), and 81% could correctly define the term. Among ECs, Levonorgestrel pills were the most recognized method (73%), while awareness of copper IUD (15%) and ulipristal acetate (6%) was very low. In addition, it was deduced that a minority of respondents mentioned abortifacients (e.g. Ergot, Cytotec, Quinine, Mifepristone and Primolut N) and scientifically unproven substances (e.g., herbal remedies, hot water, lemon and sugar solutions and analgesics) as EC methods, suggesting persistent misconceptions and misinformation. While two-thirds (66%) correctly identified that EC should be used within 72 hours after unprotected sex, a substantial proportion (34%) believed it remained effective beyond this period. Health workers (61%) and the media (56%) were the main EC information sources, but peers (47%) also played a major role, which may explain the spread of inaccurate knowledge.

Table 2 showed half of the students (50%) had ever used emergency contraceptives (EC). Among those who had used EC, a little over half (52%) had used it only once, while a few (12%) had used it more than three times. The main reasons for using EC were to prevent pregnancy after unprotected sex (59%), condom failure (24%), or missing regular contraceptive pills (17%).

For those who had never used EC, the most common reason was not being sexually active (61%), followed by religious or moral objections (24%) and fear of side effects (15%).

When asked where they obtained ECs, most users said they obtained it from pharmacies (85%), while fewer mentioned health facilities (28%) or friends and other sources (9%). Overall, the findings show that EC use among students was mostly occasional and linked to specific situations rather than regular practice.

A regression analyses identifying predictors of intention and actual use of emergency contraceptives (EC) was presented in Table 3. Attitude toward EC was the strongest predictor of both intention ($\beta = 0.46$, $p < 0.001$) and actual EC use (AOR = 2.85, 95 % CI 1.60–5.09). Subjective norms also positively influenced intention ($\beta = 0.24$, $p < 0.001$) but did not significantly predict actual use (AOR = 1.72, $p = 0.058$). Perceived behavioural control predicted both intention ($\beta = 0.14$, $p = 0.017$) and actual use (AOR = 2.14, 95 % CI 1.25–3.67).

Among demographic variables, being ≥ 18 years (AOR = 1.94, 95 % CI 1.11–3.40) and being in a relationship (AOR = 3.41, 95 % CI 1.96–5.94) significantly increased the odds of EC use. Overall, the TPB model explained almost half (48 %) of the variance in intention and 36 % in actual EC behaviour, indicating a strong predictive utility of attitudinal and control factors, that could be used as leverage points for targeted interventions.

The behavioural tendencies of respondents in relation to their emergency contraceptives (ECs) use, was assessed using the Theory of Planned Behaviour (TPB).

The results are presented in Figure 1. The study found that 87% of participants exhibited perceptions and intentions indicative of non-adoptive behaviour toward EC use.

Table 3: Regression analyses predicting intention and actual use of emergency contraceptives (EC) among respondents

Predictor variable	B (SE)	B	t / Wald χ^2	p-value	Adjusted Odds Ratio (AOR)	95% CI
Attitude toward EC	0.42 (0.06)	0.46	t = 7.00	<0.001***	2.85	1.60 – 5.09
Subjective norms	0.21 (0.05)	0.24	t = 4.20	<0.001***	1.72	0.98 – 3.01
Perceived behavioural control (PBC)	0.12 (0.05)	0.14	t = 2.40	0.017*	2.14	1.25 – 3.67
Age ≥18 years	—	—	—	—	1.94	1.11 – 3.40
Currently in a relationship	—	—	—	—	3.41	1.96 – 5.94
Constant	0.84 (0.28)	—	t = 3.00	0.003**	—	—

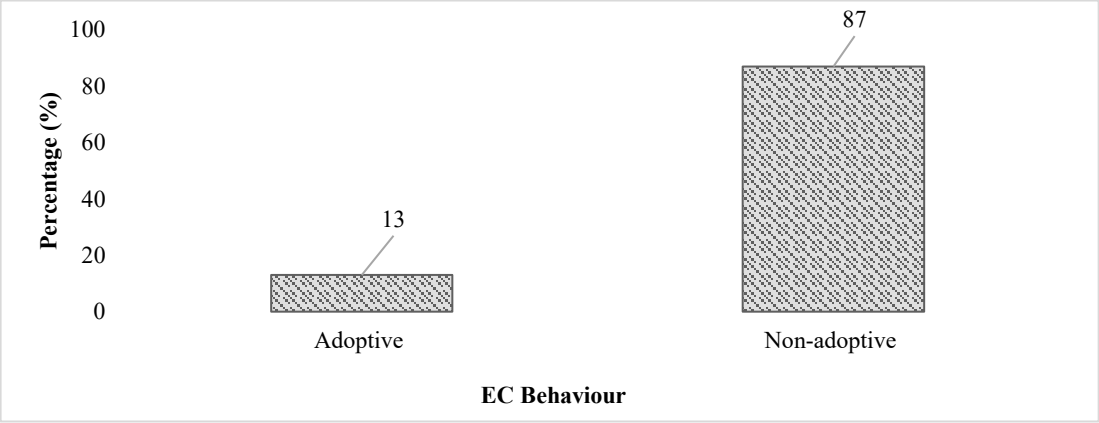
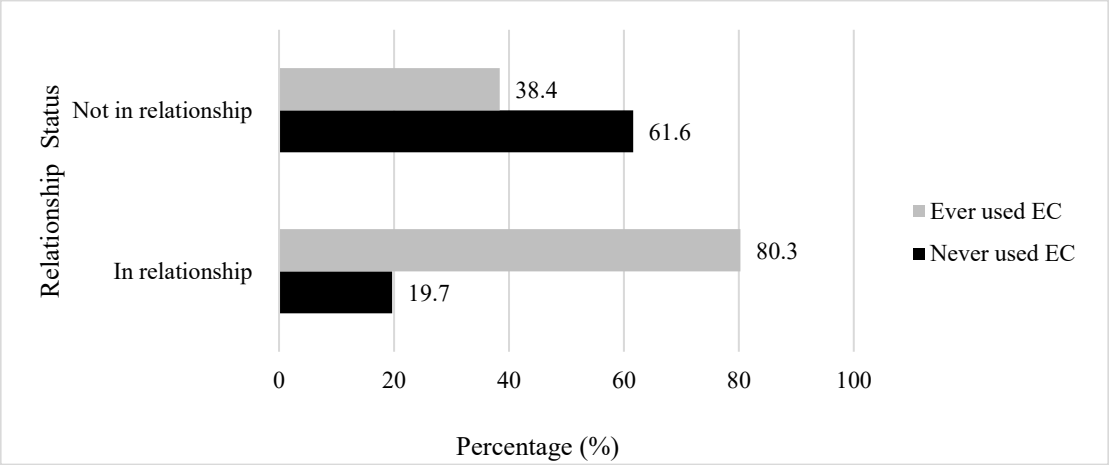


Figure 1: Respondents EC use behaviour deduced using the TPB Model
(Data from Field Survey, 2023



(n = 300)

Figure 2: *Proportion of EC use by relationship status*
(Data from Field Survey, 2023).

This presupposes that although many respondents reported being sexually active, their responses reflected low likelihood or future avoidance of EC use, as inferred from the assessment of TPB-based constructs. As shown in Figure 2, students currently in a relationship reported significantly higher EC use (80.3%) as compared to those not in a relationship (38.4%), highlighting relationship status as a strong behavioural determinant.

Discussion

Knowledge and awareness of emergency contraception

The study found universal awareness of contraceptives among respondents, with 80.7% able to correctly define emergency contraception (EC) and 72.7% identifying levonorgestrel-based pills, 15.3% identifying the copper intrauterine device (IUD), and 6.0% identifying ulipristal acetate as methods. This high awareness aligned with earlier Ghanaian studies showing increased EC awareness among adolescents in urban and peri-urban settings.[13,12] The predominance of levonorgestrel recognition was consistent with its status as the most widely available over-the-counter EC in Ghanaian pharmacies.[14]

However, awareness of other EC methods, such as the copper intrauterine device (15.3%) and ulipristal acetate (6.0%), was markedly low. This mirrors findings from sub-Saharan Africa, where pill-based EC dominates due to affordability, accessibility, and marketing, while provider-dependent methods remained underutilized.[18,19] There was limited knowledge of the correct time frame for EC use (only 66.0% correctly identified the 72-hour window) and this further underscored an important knowledge gap. Misconceptions, such as beliefs that EC caused infertility (24.0%) or equating EC use to conducting an abortion (19.3%), have been reported in other Ghanaian[20] and Nigerian contexts,[21] suggesting that these views were deeply embedded in cultural and moral narratives.

The Theory of Planned Behaviour (TPB) framework suggested that accurate knowledge could shape positive attitudes and perceived behavioural control, both of which significantly predicted intention and actual EC use in this study. Nonetheless, knowledge alone may be insufficient to ensure optimal uptake, especially when countered by strong social or moral disapproval.[16] From a policy and intervention perspective, the high baseline awareness provides a platform for targeted educational campaigns to deepen accurate knowledge and correct misconceptions. Schools, health workers, and media channels (identified as key sources of EC information) could be leveraged to deliver comprehensive sexuality education that includes non-pill EC options and clarifies legal and health aspects.

Attitudes, subjective norms, and perceived behavioural control toward EC use

The study revealed generally positive attitudes toward EC use (M = 3.9), indicating a favourable evaluation of its role in preventing unintended pregnancies. This aligned with research in Ghana and other sub-Saharan African countries showing that adolescents who perceived C as effective and beneficial were more likely to have the intention to use it. [22,16] The significant influence of attitude on intention ($\beta = 0.46$, $p < 0.001$) identified in this study was consistent with the Theory of Planned Behaviour,[1] which posited attitude as a key driver of behavioural intention.

Conversely, subjective norms scored lowest among the TPB constructs (M = 2.7), reflecting limited perceived approval from significant others such as parents, peers, and religious leaders. Similar findings have been documented in adolescent reproductive health studies in Ghana, where cultural and religious values strongly discouraged premarital sexual activity, thus indirectly stigmatizing youth who used contraceptives.[20,12] The weaker role of subjective norms in predicting EC intention ($\beta = 0.24$, $p < 0.001$) suggested that, although social disapproval existed, some students or the youth may prioritize personal beliefs and perceived benefits over external pressures.

Perceived behavioural control (M = 3.5) emerged as both a significant predictor of intention ($\beta = 0.14$, $p = 0.017$) and actual EC use (AOR = 2.14, $p = 0.005$). This highlighted the importance of self-efficacy and access-related factors in student or the youth's (including adolescents) contraceptive

behaviour. Similar patterns have been reported in other African countries like Kenya and Ethiopia, where adolescents with higher confidence in their ability to access and use ECs, often facilitated by proximity to pharmacies and health facilities, demonstrated higher uptake.[19,20]

The interplay of these constructs suggested that interventions aiming to increase EC use among adolescents should focus not only on improving knowledge but also on strengthening positive attitudes and enhancing perceived behavioural control. Reducing and addressing structural barriers (e.g., cost, pharmacy stock-outs) and psychosocial barriers (e.g., stigma from pharmacists or peers) may help translate intention into actual behaviour. Additionally, engaging community and religious leaders in adolescent reproductive health advocacy could gradually result in greater acceptance of subjective norms.

Association between TPB constructs and intention to use EC

The multivariate analysis demonstrated that all three TPB constructs (attitude, subjective norms, and perceived behavioural control) were significantly associated with intention to use EC, collectively explaining 48% of the variance in intention. This finding supports Ajzen's postulation that behavioural intention was shaped by the interplay of cognitive evaluations, perceived social pressures, and self-efficacy.

Attitude emerged as the strongest predictor ($\beta = 0.46$, $p < 0.001$), highlighting the primacy of personal beliefs and perceived benefits in shaping reproductive health intentions among adolescents. Similar findings have been reported among Ghanaian university students[16] and Nigerian secondary school populations,[25] where favourable attitudes toward EC correlated with higher stated willingness to use the method. This highlighted the role of value-based interventions, such as evidence-driven health education, in reinforcing positive perceptions.

Subjective norms ($\beta = 0.24$, $p < 0.001$) also contributed meaningfully to intention, although less strongly. While the overall mean subjective norms score was low (M = 2.7), those perceiving greater social approval reported higher intention scores. This is consistent with Kenyan research showing that peer and partner approval significantly increased adolescent contraceptive uptake.[23] Given that adolescence is a developmental stage heavily influenced by peer dynamics, programmes that foster peer-led advocacy may enhance normative support for EC use.

Perceived behavioural control ($\beta = 0.14$, $p = 0.017$) was the least influential predictor of intention but remained important, as it reflected students (including adolescents') confidence in overcoming barriers to EC access. This has been corroborated in studies in Ethiopia and South Africa where it showed that adolescents with greater perceived access (through affordable pharmacies, confidentiality assurances, and supportive health staff) expressed stronger contraceptive intentions.[26,24] This suggests that strengthening enabling environments could amplify the translation of favourable intentions into practice.

The combined effect of these constructs on intention suggests a multi-pronged approach for public health interventions: reinforcing positive attitudes with factual information, addressing normative barriers by engaging influencers in students (including adolescents') social networks, and enhancing access through youth-friendly services. Such strategies could help close the observed gap between awareness and optimal EC use in peri-urban Ghana.

Predictors of actual EC use and implications for intervention

The logistic regression model identified positive attitude, high perceived behavioural control, and being in a relationship (a socio-demographic characteristic) as significant predictors of actual EC use, and this explained 36% of the variance in behaviour. Attitude was the most influential predictor (AOR = 2.85, $p < 0.001$), reaffirming that favourable perceptions not only enhanced intention but also drove real-life contraceptive actions. This finding mirrors previous Ghanaian and Nigerian studies where attitude served as both an attitudinal and behavioural determinant of contraceptive uptake.[16,25]

Perceived behavioural control was also a strong predictor (AOR = 2.14, $p = 0.005$), suggesting that students (including adolescents') confidence in their ability to obtain and correctly

use EC significantly influenced actual usage. Evidence from Ethiopia[24] and Kenya[23] revealed that youth-friendly pharmacy services, discreet access points, and affordable prices improved this sense of control and, consequently, contraceptive behaviours. In this study, the dominance of pharmacies (85.3%) as the primary EC source of purchase highlighted both their accessibility and potential role as strategic intervention points for adolescent reproductive health programmes.

Relationship status showed the strongest behavioural association (AOR = 3.41, $p < 0.001$), with students (including adolescents) in relationships being more than three times as likely to use ECs as compared to those not in relationships. This aligned with patterns seen in adolescent sexual health literature, where sexual activity (including contraceptive need) was higher among those in steady relationships.[27] The implication is that targeted interventions for students (including adolescents) in relationships, including negotiation skills and consistent contraceptive use education, could yield significant benefits in pregnancy prevention.

Interestingly, subjective norms did not significantly predict actual EC use ($p = 0.058$), despite influencing intention. This gap suggests that while social approval may shape willingness, real-life actions are more dependent on individual agency and access. This disconnects between intention and behaviour aligned with TPB literature, which acknowledged that external barriers (e.g., cost, stock availability, provider stigma) could prevent intended actions.[1, 28]

The aforementioned findings further confirmed the applicability of the Theory of Planned Behaviour (TPB) to the study of EC use.

Programmatic implications

Strengthening adolescent reproductive health in Ghana requires a multi-pronged approach that addresses both perceptions and structural barriers to emergency contraception (EC) use. First, attitude-focused campaigns should frame EC as a safe, responsible, and legitimate option for preventing unintended pregnancies. Such campaigns need to counter persistent myths that EC causes infertility or constitutes abortion, while presenting its use as an act of empowerment and responsibility that safeguards young women's health and educational future. Delivered through schools, media, and peer networks, these efforts could normalize EC use and reduce stigmatization. At the same time, access-enhancing strategies, including expanding youth-friendly pharmacies and clinic services, ensuring affordability through subsidies or policy support, and training health providers and pharmacists to deliver non-judgmental, adolescent-friendly care, are essential. These measures would reduce the fear of embarrassment or rejection that often prevents the youth, students (including adolescents) from acting on their contraceptive intentions.

Finally, given that relationship status strongly influenced EC use in this study, relationship-focused education should be incorporated into school and community programmes. This would equip students (including adolescents) or the youth with skills to negotiate contraceptive use within intimate partnerships, challenge gendered power imbalances, and make independent, informed reproductive decisions. Together, such strategies have the potential to close the gap between awareness and actual use of ECs, enabling adolescents to exercise greater reproductive autonomy and reduce the incidence of unintended pregnancies. Addressing these predictors through integrated interventions could therefore help bridge the gap between high awareness and optimal EC use, ultimately contributing to reductions in students (adolescent) pregnancy rates in peri-urban Ghana.

This study applied aspects of the Theory of Planned Behaviour to examine knowledge, attitudes, subjective norms, perceived behavioural control, and their influence on intention and actual use of EC among female Senior High School students in the Akuapem South Municipality of Ghana. It was realized that awareness of EC was universal, yet gaps persisted in correct knowledge of timing, availability of non-pill methods, and misconceptions about safety of use. Attitude emerged as the strongest predictor of both intention and actual use, followed by perceived behavioural control. Relationship status was also a key behavioural determinant, while subjective norms played only a modest role in intention and did not directly predict EC use behaviour. These findings highlighted the fact that students (including

adolescents) EC use in peri-urban Ghana was shaped by a combination of cognitive, social, and contextual factors, with individual agency and access outweighing normative influences. Addressing knowledge gaps, enhancing positive attitudes, and strengthening students (e.g. adolescents') confidence in accessing EC could therefore contribute significantly to reducing unintended pregnancies.

Improving students (including adolescents) access to and use of EC in Ghana requires interventions at multiple levels. Integrating EC education into school curricula as part of comprehensive sexuality education would ensure that students receive accurate information on correct timing, available options, and safety, thereby reducing reliance on myths and misinformation. At the service delivery level, pharmacies and health facilities should be strengthened as youth-friendly spaces by guaranteeing confidentiality, expanding EC availability, and reducing judgmental health provider attitudes through targeted training. Community engagement is also critical; involving religious and traditional leaders in educational campaigns could help dismantle stigma and cultural misconceptions that discourage contraceptive use among students, adolescents or the youth as a whole. In addition, peer-led health communication initiatives could leverage the strong influence of social networks to promote positive reproductive health norms and encourage informed contraceptive decision-making. Finally, there is a need for longitudinal and qualitative research to better understand the dynamics of the intention–behaviour gap observed in this study and to monitor the long-term effectiveness of educational and access-enhancing interventions. Together, these strategies offer a comprehensive pathway toward reducing unintended pregnancies among students or the youth and advancing reproductive health rights in Ghana.

Limitations

The researchers acknowledge there were a few participant, methodological and contextual limitations.

Participant limitations: The study addressed a sensitive topic, and some participants may have given socially desirable rather than fully accurate responses. It also focused only on female students in public Senior High Schools, excluding males, private institutions and younger adolescents (10–14 years), which limits generalizability. Voluntary participation may also have introduced selection bias.

Methodological limitations: The cross-sectional design prevented causal inference between TPB constructs and emergency contraceptive use. Data collection also relied on a structured, self-administered questionnaire, mostly with closed-ended items, which may have limited the depth of responses.

Contextual limitations: Misinformation, stigma, and cost barriers surrounding emergency contraception may have influenced self-reports. The study also focused solely on EC, without assessing the use of other contraceptive methods, providing a partial view of adolescent reproductive behaviour.

These limitations notwithstanding, the study made significant contributions to knowledge about emergency contraceptive use.

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Contribution of authors

All authors made significant contributions to the manuscript:

Cynthia Gadegbeku: Contributed to the conceptualization of the research idea; played a key collaborative and supervisory role (i.e. provision of oversight, leadership and mentorship during drafting of the proposal, development of the methodology, data collection, data analysis, interpretation and writing) for the research activity;

drafting and editing the manuscript for publication based on the reviewers' comments.

Cynthia Bediako: Contributed to the conceptualization of the research idea, review of literature, data collection, analysis and interpretation, drafting and submission of the research report.

Fortune Djirackor: Her contribution was playing a collaborative and supervisory role (i.e. provision of oversight, leadership and mentorship during drafting of the proposal, development of the methodology, data collection, data analysis, interpretation and writing) for the research activity).

Frank Asempah: Assisted with data analysis and interpretation, and the initial drafting of the manuscript for publication.

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