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Research Article

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Knowledge, Attitude and Perception of Female Students (18-49) Years) Towards Emergency Contraceptive Pills Utilization at Lusaka apex medical university, Lusaka. Zambia

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ABSTRACT

Introduction: Emergency contraception (EC) is a method used to prevent pregnancy after unprotected sexual intercourse, following incorrect use or failure of regular contraceptive methods, including cases of sexual assault where no contraceptive protection was used. The widespread availability of emergency contraception in middle-income nations like Zambia offers an effective means of preventing a large proportion of unintended pregnancies. The aim of this study was to establish the level of knowledge, attitude and perception of female students (18-49) towards emergency contraceptive pill utilization at Lusaka Apex Medical University.

Methods: A cross-sectional study design was employed to assess the level of knowledge, attitude and perception of female students (18-49) towards emergency contraceptive pill utilization at Lusaka Apex Medical University. Simple random sampling technique was used to select 230 respondents to participate in the study. The ethical approval was obtained from The University of Zambia Biomedical Research Ethics Committee (REF. No. 5593-2024), and Lusaka Apex Medical University respectively. Primary data was collected from 230 study participants using structured questionnaire with closed ended questions. The collected data was analyzed using SPSS version 29 and MS excel and was presented using tables and pie charts. Multivariate logistic regression analysis was used to examine the relationships between socio-demographic characteristics and knowledge, attitude and perception parameters.

Results: The study found that, the largest age group among the participants was 41-49 years, comprising 30% of the sample, while the smallest age group was 21-30 years, accounting for 22.17%. In addition, the study disclosed that, most of the respondents (70%) at Lusaka Apex Medical University possessed an adequate level of knowledge regarding the utilization of emergency contraceptive pills, whereas 30% exhibited inadequate knowledge on the subject. Age ($p < 0.003$), marital status ($p < 0.004$), religion ($p < 0.001$), level of education ($p < 0.000$), occupation ($p < 0.000$) and number of children ($p < 0.000$) were found to have significant association with level of knowledge on emergency contraceptive pill utilization among female students at Lusaka Apex Medical University. Apart from that, the study also revealed that most of the respondents (71.8%) had positive attitudes towards emergency contraceptive pills utilization at Lusaka Apex Medical University in Zambia. In addition, 28.2% of study participants had negative attitudes towards emergency contraceptive pills utilization. The study further exposed that, a good proportion of study participants (65%) had a positive perception of emergency contraceptive pills utilization, in contrast to 35% who held negative perceptions.

Conclusion: The study concludes that female students at Lusaka Apex Medical University generally demonstrate adequate knowledge, positive attitudes, and favorable perceptions toward the utilization of emergency contraceptive pills. However, notable proportions of participants still exhibited inadequate knowledge, negative attitudes, and unfavorable perceptions, indicating existing gaps. Therefore, the researcher recommends that Lusaka Apex Medical University, in collaboration with the Ministry of Health, the Ministry of Higher Education, and international partners such as WHO and UNESCO, strengthens and institutionalizes targeted reproductive health promotion programs on emergency contraceptive pill (ECP) utilization. These programs should integrate comprehensive health education, social mobilization, health communication, peer education, and counseling to enhance knowledge, promote informed decision-making, and foster positive perceptions of ECP use among female students in institutions of higher learning. Additionally, the introduction of community discussions and campus-based health forums is recommended to address misconceptions and shift negative perceptions toward ECP utilization.

Keywords: Knowledge, Attitude, Perception, Emergency Contraceptive, Lusaka, Zambia

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Introduction

Evidence indicates that by 2017, 214 million women of reproductive age in developing countries had an unmet need of contraceptive use, where the most common cause was limited access, limited variety of methods, fear or experience of side effects, cultural or religious intolerance, low quality of service, and gender-based barriers [1]. Other than that, evidence also shows that year by year, about 80 million of women get unwanted pregnancies, about 20 million of them result in illegal abortions. In a recent systematic review and an evaluation of the causes of maternal mortality, it was found that abortions cause 49% of maternal deaths and cause millions of complications many of which are long term. Teenagers take part in one in every four unsafe abortions in Africa, which results in 50 percent of all the deaths [2].

One of the studies, done on female students in the University of KwaZulu-Natal in South Africa indicated that approximately 49.8% of the students were conscious of emergency contraceptive (EC). In addition, the research established that, 53.2% of respondents were sexually active, 21.2% respondents had used EC before the study and 29.5% respondents believed that EC could be used within 72 hours after engaging in unprotected sex and 8% of respondents reported that EC could be taken almost immediately before sexual intercourse [3]. Accurate growing evidence indicate that, emergency contraceptives have the ability to reduce the chances of unwanted pregnancy by over 95% when taken within 72 hours of intercourse. EC is a good option among the women who encountered contraceptyive failure, incorrect birth control use, sexual assault, or consensual but unplanned and unprotected sex [4].

The other line of research disclosed that a high percentage (78.3) of unwanted pregnancies was among those respondents who were having sex. Importantly, almost half (43.3) of these unwanted pregnancies were aborted. The percentage of students sampled who reported that they ever used emergency contraception was only 10. Although, over half (69.9) of the students were aware of emergency contraception, only two out of seven (27) of them were very certain that they knew when it was most effective [5].

Moreover, evidence explains that the effectiveness of emergency contraception has been proven in the prevention of unwanted pregnancies, but there is still low usage of the method in most countries (low and middle) especially among young women in institutions of higher learning [6]. The discrepancy between awareness level and proper knowledge about emergency contraception highlights consistent lack of knowledge in reproductive health education, access to valid information and prompt service use. There is a scarcity of empirical research studies on the awareness, attitude, perception, and use of emergency contraceptive pills by students in Zambia, particularly in higher institutions of learning. Thus, this research attempted to determine the degree of knowledge, attitudes, and perception of emergency contraceptive pills among the female students of Lusaka Apex Medical University with the purpose of informing the development of specific interventions to curb the cases of unintended pregnancies and unsafe abortions among this susceptible group of people

Materials and Methods

A cross-sectional study design was utilized to examine the knowledge, attitudes, and perceptions of female students aged 18–49 years regarding the utilization of Emergency Contraceptive Pills (ECPs) at Lusaka Apex Medical University in Lusaka, Zambia. Ethical clearance for the study was obtained from The University of Zambia Biomedical Research Ethics Committee (REF. No. 5593-2024), and Lusaka Apex Medical University respectively. Prior to data collection, written informed consent was obtained from all eligible participants. The objectives and purpose of the study were clearly explained to the respondents to ensure informed participation. Participants were also informed that the study posed no risk of harm, offered no direct personal benefits, and that participation was entirely voluntary. They were also advised of their right to withdraw from the study at any time without any consequences. Participants received a brief explanation of the study objectives, delivered either in group sessions where appropriate or individually when necessary. Confidentiality and anonymity were strictly maintained, and no personally identifiable information including names, National Registration Card numbers, residential addresses, or phone numbers was collected. All research materials were securely stored, with access limited to the researcher. Participants were informed that completion of the questionnaire would take approximately 10–15 minutes. Data were collected using a structured, self-administered questionnaire consisting of closed-ended questions designed to assess knowledge, attitudes, and perceptions toward Emergency Contraceptive Pills. The questionnaire was reviewed by the researcher's supervisor to ensure content validity, and the researcher underwent training in cultural sensitivity to ensure respectful engagement with participants. A pilot study was conducted at Cavendish University to evaluate the clarity, reliability, and consistency of the data collection instrument. Individuals who participated in the pilot study were excluded from the main study to avoid selection bias. Cronbach's alpha was used to assess the internal consistency of the questionnaire items related to ECP knowledge, attitudes, and perceptions. The study proposal was submitted to the Institute of Distance Education at the University of Zambia for peer review and methodological validation prior to implementation. A simple random sampling technique was employed to select participants, ensuring equal opportunity for inclusion among eligible female students. The final sample size comprised 230 participants. Data collection was conducted between 1st September and 30th October, 2024 at Lusaka Apex Medical University. Completed questionnaires were reviewed for completeness and accuracy before data entry. Data were analyzed using the Statistical Package for Social Sciences (SPSS) version 28. Descriptive statistics were used to summarize the data and present findings in tables and charts. Multivariate logistic regression analysis was performed to examine associations between socio-demographic factors and levels of knowledge, attitudes, and perceptions toward ECP utilization, with statistical significance set at $p < 0.05$.

Results

Table 1: Socio-Demographic Variables

Variable	Responses	Frequency	Percentage
AGE (YEARS)	15-20	52	22.6%
	21-30	51	22.2%
	31-40	58	25.2%
	41-49	69	30.0%
TOTAL		**230**	**100%**

MARITAL STATUS	Single	53	23.0%
	Married	38	16.5%
	Divorced	45	19.6%
	Widowed	46	20.0%
	Separated	48	20.9%
TOTAL		**230**	**100%**
SOCIAL CLASS	Upper class	77	33.5%
	Middle class	75	32.6%
	Lower class	78	33.9%
TOTAL		**230**	**100%**
RELIGION	Christian	188	81.7%
	Muslim	42	18.3%
TOTAL		**230**	**100%**
LEVEL OF EDUCATION	1st year	66	28.7%
	2nd year	50	21.7%
	3rd year	57	24.8%
	4th year	57	24.8%
TOTAL		**230**	**100%**
OCCUPATION	Unemployed	89	38.7%
	Informal employment	79	34.4%
	Formal employment	62	27.0%
TOTAL		**230**	**100%**
NUMBER OF CHILDREN	0	20	8.7%
	1	18	7.8%
	2	29	12.6%
	3	30	13.0%
	4	22	9.6%
	5	20	8.7%
	6	29	12.6%
	7	17	7.4%
	8	26	11.3%
	9	21	9.1%
TOTAL		**230**	**100%**

Table 1 shows that, the largest age group was 41-49 years (30%), while the smallest was 21-30 years (22.2%). The results further revealed that a significant proportion of respondents (81.7%) were Christians while a small proportion of study participants (18.3%) were Muslim. Single participants made up 23.0%, the most common marital status, followed by separated individuals at 20.9%. Social class was evenly distributed, with lower class at 33.9%, upper class at 33.5%, and middle class at 32.6%. Employment data revealed that the majority were unemployed (38.7%), with a significant portion engaged in informal work (34.4%).

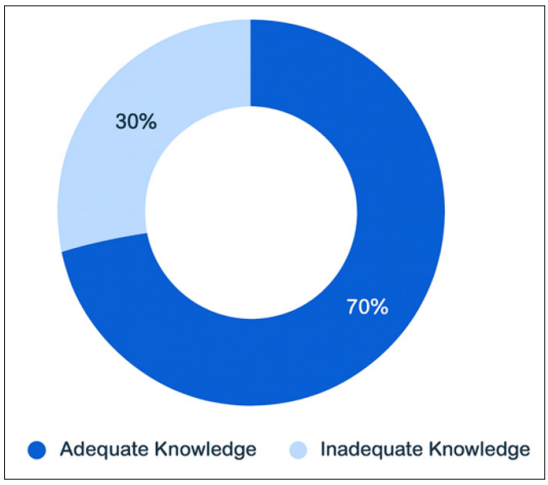

Figure 1: Level of Knowledge on Emergency Contraceptive Pills Utilization Mong Female Students

Figure 1 shows that, a large proportion of study participants (70%) had adequate level of knowledge on emergency contraceptive pills utilization at Lusaka Apex Medical University while a few study participants (30%) had inadequate level of knowledge on emergency contraceptive pills utilization.

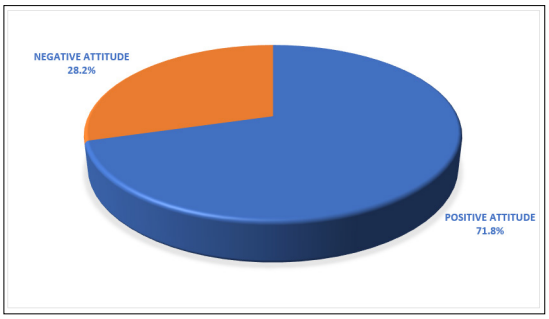

Figure 2: Attitudes of Female Students Towards Emergency Contraceptive Pills Utilization

Figure 2 demonstrates that, most of the respondents (71.8%) had positive attitudes towards emergency contraceptive pills utilization at Lusaka Apex Medical University in Zambia. On the other hand, 28.2% of study participants had negative attitudes towards emergency contraceptive pills utilization.

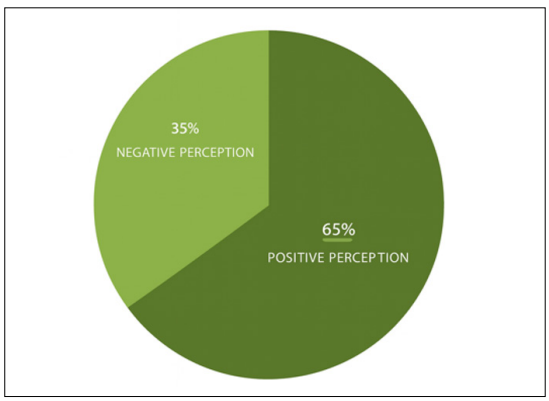

Figure 3: Perception of Female Students Regarding Emergency Contraceptive Pills

Figure 3 indicates that, the majority of study participants (65%) had positive perception towards emergency contraceptive pills

utilization at Lusaka Apex Medical University in Zambia. Other than that, a few respondents (35%) had negative perception towards emergency contraceptive pills utilization.

Table 2: Association Between Respondents' Level of Knowledge on Emergency Contraceptive Pill Utilization and Socio-Demographic Variables

Age, marital status, religion, level of education, occupation and number of children were found to have significant association with level of knowledge on emergency contraceptive pill utilization among female students at Lusaka Apex Medical University in Zambia ($P < 0.05$).

SOCIO-DEMOGRAPHIC VARIABLES	χ^2 value	Df	p-value
AGE	23.312	2	0.003**
MARITAL STATUS	21.16	4	0.004**
SOCIAL CLASS	20.172	5	0.58
RELIGION	23.114	4	0.001**
LEVEL OF EDUCATION	25.217	2	0.000**
OCCUPATION	24.113	4	0.000**
NUMBER OF CHILDREN	20.631	3	0.000**

($P < 0.05$).

Discussion

Demographic Data

The findings presented in this study illustrate a diverse socio-demographic profile of the study participants. The age distribution indicates that the majority of respondents were in the older reproductive age group of 41–49 years (30%), suggesting that a substantial proportion of participants had prolonged exposure to reproductive health experiences and services, while younger adults aged 21–30 years constituted the smallest group (22.2%). This age pattern may reflect differential participation across age cohorts or varying levels of engagement with the study population. Religious affiliation was predominantly Christian, with more than four-fifths of respondents (81.7%) identifying as Christians, while Muslims accounted for a smaller proportion (18.3%). This distribution mirrors the dominant religious composition of the wider population and may have implications for reproductive health knowledge and practices, given the influence of religious beliefs on health-seeking behavior and contraceptive use. In terms of marital status, single participants constituted the largest group (23.0%), followed closely by those who were separated (20.9%), highlighting a substantial proportion of respondents who may be at increased risk of unintended pregnancies due to potentially inconsistent contraceptive use.

Moreover, Socio-economic status was relatively evenly distributed across social classes, with lower, middle, and upper classes each accounting for approximately one-third of the participants. This balanced distribution suggests minimal socio-economic skewness within the sample, thereby enhancing the representativeness of findings across different economic strata. Employment status further revealed underlying economic vulnerability, as the majority of respondents were unemployed (38.7%), while over one-third were engaged in informal employment (34.4%). This employment pattern underscores potential financial instability, which may influence access to healthcare services, reproductive health information, and contraceptive utilization. Overall, the socio-demographic characteristics depict a heterogeneous population whose age, marital status, religious affiliation, and economic conditions are likely to interact in shaping reproductive health knowledge and behaviors.

Level of Knowledge on Emergency Contraceptive Pills Utilization Among Female Students

The results of the present research indicate that, a big percentage of the research participants (70) were well informed on the use of emergency contraceptive pills in Lusaka Apex Medical University whereas some of the research participants (30) were poorly informed on emergency contraceptive pills utilization. This observation implies that students of Lusaka Apex Medical University have a fairly good awareness and knowledge of ECPs, which could be explained by their exposure to health-related education and training, availability of academic resources, and contact with healthcare providers in a medical university environment. Moreover, lectures, peer-to-peer discussions, university health services, clinical zones, and online channels may have assisted in bettering the knowledge levels as well. It was observed that age ($p = 0.003$), marital status ($p = 0.004$), religion ($p = 0.001$), level of education ($p = 0.000$), occupation ($p = 0.000$) and number of children ($p = 0.000$) had significant association with level of knowledge on emergency contraceptive pill utilization among female students in Lusaka Apex Medical University in Zambia. Nevertheless, almost one-third of the participants with poor knowledge demonstrates the existence of the information gaps, which may be caused by the disparities in the academic programs, year of study, cultural attitudes, or insufficient exposure to sexual and reproductive health education.

Comparing the existing results with the outcomes of other environments, it is observed that convergence and divergence are present. As an example, the proportion of sufficient knowledge in this study is greater than the proportion of sufficient knowledge in Botswana, where, as a proportion of the total number of students, 95% were aware of emergency contraception, yet only 53% had a good or adequate level of information This is in contrast with the implication that the awareness alone does not always lead to complete knowledge. This could be due to the fact that more educated students were represented in the current study than in the Botswana study because of the medical and health-oriented academic setting that Lusaka Apex Medical University is situated in compared to the more heterogeneous student population in the Botswana study. Also, when the Botswana study identified high levels of association between knowledge and attitudes and other variables (age, urban living, year of study, etc.) [7].

The current results suggest that institutional context can be more instrumental in determining the level of knowledge. The same can be said about the findings of the current study compared to the results of Ethiopia reported by another researcher where less than half of the respondents were sufficiently aware of emergency contraceptives, and the proportion of those with good knowledge was only 27.2%. Such significantly low levels of knowledge underline the fact that there is a significant lack of

reproductive health education in the university setting that is under consideration. Comparatively speaking, the fairly good amount of knowledge that was recorded in the current study can be used to reiterate the relevance of structured health teachings and the availability of accessible sources of information, which would seem to be more easily accessible to students in a university-level setting. On the other hand, the present findings are more consistent with those obtained in Ethiopia, who found out that the knowledge about emergency contraception was high among university students, but the attitude levels were lower [8,9].

Both articles indicate that increased exposure to information, usually by media, and learning medium, can lead to greater awareness and knowledge. Nevertheless, although Ahmed et al. have expressed the importance of sexual activity in attitudes and emergency contraception use, in the current study, more attention is paid to the adequacy of knowledge, which might not be sufficient to determine attitudes or use. It is possible to draw additional similarities with the results of the Uganda where close to all university students proved to have sufficient understanding of contraceptives. Though contraceptive knowledge in the study of that article focused more on knowledge in a general rather than on ECPs, the fact that the level of knowledge was high supports the idea that university settings especially where there are well-developed health education elements provide a better insight of reproductive health practices. However, the Ugandan study also found that there were still gaps in knowledge of certain techniques, including female condoms, which is also reflected in the data of the present study that a significant portion of the population is not sufficiently aware of ECP [10].

Conversely, the research outside the African setting, including Tamil Nadu, India, demonstrated in the absence of high awareness and moderate general knowledge of emergency contraception, with mostly negative attitudes. In comparison to these findings, the present study also shows a healthier knowledge profile, which might be due to the variations in curricular practices, cultural attitude to contraceptives, and the availability of reliable health information. Nevertheless, the misunderstandings and negative perceptions reported in the Indian study are consistent with the ineffective knowledge reported in 30 percent of the participants in the current study, which suggests that the issue of misinformation and attitudinal barriers is still worldwide. Lastly, the results of another author also differ with the present findings, since the level of awareness and use of emergency contraception among Ethiopian university students was significantly low even though they were ready to use ECPs when necessary. Such inconsistency highlights a common thread in the literature: the readiness and awareness do not always correlate with proper knowledge or real practice. Comparatively, the larger percentage of well-informed respondents in the current study is an indication that the study has made progress but further supports the interventions that need to be specific to correct any gaps in knowledge [11,12].

Therefore, the existing results indicate that the students in the Lusaka Apex Medical University are relatively knowledgeable regarding the use of emergency contraceptive pills as compared to most studies in the region and even internationally. However, the presence of a significant minority with poor knowledge levels underscores the necessity to have long-term, intensive reproductive health education that is accommodative to all children, no matter program or heritage, to achieve a holistic level of knowledge and sound judgment on emergency contraception.

Attitudes of Female Students Towards Emergency Contraceptive Pills Utilization

The result of the current paper shows that most of the respondents (71.8) showed positive attitudes towards the use of emergency contraceptive pills (ECPs) at the Lusaka Apex Medical University and slightly more than a quarter (28.2) expressed negative sentiments about this commodity. Such a preponderance of positive attitudes indicates a rather favorable perception and acceptance of ECPs among the study population which can be explained by exposure to reproductive health information, better education and awareness with the role of ECPs in preventing unintended pregnancies in this population. The concentrations of reports of negative attitudes amongst a significant minority, however, might be indicative of inaccurate myths, moral or religious issues, fear of side effects or poor knowledge of ECP safety and efficacy. Thus, the findings suggest that despite the fact the attitudes towards the use of ECP are predominantly favorable, specific health education and counseling interventions are still needed to help to overcome the negative attitudes that are still observed and encourage the informed and responsible use of emergency contraception.

The present findings seem to be more promising, when compared with the results provided by one author in the context of the attitudes toward ECPs. The author found that half of the students (50 percent) were comfortable using ECPs but 74 percent heard about emergency contraceptives. Conversely, the current study presented a much greater percentage of respondents with positive attitudes (71.8%).

This disparity could be attributable to historical gains in the area of reproductive health education, growing focus on the rights of contraceptives in the world, and more acceptance of emergency contraception over the years. Nonetheless, Miller study showed significant gaps in knowledge as not a third of students knew about prescription status, side effects, or mechanisms of action, indicating that positive attitudes do not always result in a well-rounded knowledge. This goes in line with the implication of the current findings which is that the favourable attitudes are not enough without the correct and precise information so that proper utilization can be facilitated [13].

Likewise, the results of this paper are congruent with those of another researcher who have established that 76.5% of the respondents were favourable to emergency contraception. The similarity in the percentage of favorable attitudes in the studies indicates that even in the setting where the knowledge is scarce, the acceptance of emergency contraception might be relatively high, Nevertheless, the study also revealed that a questionable awareness about EC was also low (25.7%), and attitudes were largely affected by several variables, including religion, level of education and substance use. This highlights the multidimensional character of attitudes towards ECPs and indicates that the positive attitudes as being experienced in the present study could also be influenced by socio-demographic

and contextual variables and not solely by the appropriate understanding [14].

Conversely, the proportion of students with positive attitudes towards EC (50%), and extremely low utilization rates (2.7%), despite moderate levels of awareness, was lower in the study of another author. In comparison to these results, the larger percentage of positive attitudes in the current study can be a sign of the improvement in the acceptability of ECPs among students. However, the study carried out by the researcher also noted that knowledge and utilization were highly related, which supports the idea that attitudes may play a significant role, but are useless without proper knowledge to be transformed into practical applications. The existence of negative attitudes in the given study could, nevertheless, be a contributing factor towards the suboptimal utilization provided there is no proper resolution of the misconceptions and fears [15].

This interpretation is further supported by the findings of the other Ethiopian study where 73.0% of the participants who were aware of EC showed positive attitudes, but the knowledge about the right time to use and the actual use of EC were not good and the general use of EC was low. This is similar to the implication of the present study that there are positive attitudes that are in the presence of informational gaps. The use of the mass media as the main source of information in that study also implies that the awareness can be high but the quality and depth of the information can be low, which can continue to cause a lack of understanding and negative attitude towards a group of students [16].

Thus, the recent results correlate quite well with the existing literature, which suggests that the positive perceptions of emergency contraception are widespread among students even in the environments that have minimal knowledge and usage. The greater number of positive attitudes found in this study as compared to the previous studies might be a result of gradual changes in the reproductive health discourse and the availability of information. Nevertheless, the fact that negative attitudes persist is consistent with findings of other studies that the cultural, religious, and informational barriers still play an important role. These results highlight the importance of promoting and implementing an in-depth and institution-based sexual and reproductive health education interventions that should not only inform positive attitudes but also deal with misconceptions, improve accurate knowledge and encourage the use of emergency contraceptive pills in an informed and responsible manner.

Perception of Female Students Regarding Emergency Contraceptive Pills Utilization

The present research revealed that a significant percent of students in Lusaka Apex Medical University (65% of the students) had positive views about the use of emergency contraceptive pills (ECPs) and a very significant minority of the students (35 percent of the students) had negative views. Such a positive balance of perceptions indicates that overall attitudinal orientation to the use of ECP is positive in this academic and clinical training setting. This could be an indication of exposure to more information about reproductive health, clinical practice environments, and health practitioners that are likely to improve knowledge of ECPs in unintended pregnancies as a result of unprotected sex or contraceptive failure. However, the continued existence of negative perceptions in more than one-third of the respondents points out to persistent attitudinal and socio-cultural impediments that could hamper an ideal use of ECPs with its availability and awareness.

The results of Lusaka Apex medical University seem to be more positive when compared to those of Malaysia as far as perception is concerned. According to one line of research, it was found that, the majority of pharmacy students in Malaysian universities had merely average attitudes towards emergency contraception, and the level of their knowledge is also inadequately low. Although both studies present the significance of the educational exposure in the formation of the perceptions, the proportion of positive perceptions presented in the current study is relatively higher, which can be explained by the effects of the context, namely, the curriculum content, clinical exposure, and the sociocultural norms on the use of contraceptives. Unlike the scenario in the Malaysian study, where knowledge gaps were significant and could possibly limit the perception levels, the Zambian university situation could provide a closer contact with the reproductive health services, and, consequently, develop more positive attitudes toward ECP use [17].

On the contrary, the results reported by another investigator offer a more critical outcome against the present results. It turned out that they had limited knowledge about contraceptives and mostly held negative perceptions especially those that were unmarried using contraceptives. These moralistic and even social restrictive views are opposed to the predominantly positive attitudes found in the present research. This divergence could be indicative of institutional environmental and target population differences with medical university students potentially having more exposure to biomedical views on contraception than the general population in universities. The negative images observed in the minority of those who participated in the current study, however, have some similarity with the Ghanaian ones, and hint to a possibility that the moral judgment and social norms of sexuality and contraceptive use are still being in effect across different sub-Saharan African settings [18].

In comparison with results from another qualitative study done in Uganda, there are both similarities and differences. Like the subgroup of the current study that had negative perceptions, Ugandan university students also reported ambivalence with ECPs, which were linked with abortion and fears of side effects. Nevertheless, compared to the predominantly favorable perceptions in Zambian study, the perceptions in Uganda were rather conditional, as the use of ECP was acceptable only under certain conditions, especially to certain groups of people, especially adults of 18 years and over. The explanation as to why this difference may exist is the variance of policy settings, overall discourse, and access to reproductive health information. Nevertheless, the two articles emphasize that the misconceptions and the moral issues are still influential in the perceptions and might hinder the access to ECPs equitably [19].

The results of another research carried out in Ghana also help to put the current findings into an overall knowledge–perception-practice setting. Although the awareness and the right knowledge

on the ECP timing were reported to be high, a considerable percentage of the participants conceived ECP use to be either morally wrong or even encouraging promiscuity. These and these negative perceptions relate well with the negative attitudes witnessed among the minority in the present research. Nevertheless, the general increasing percentage of positive perceptions in the Zambian setting indicates slow increase in attitudinal acceptance, perhaps due to the increased sexual and reproductive health education in the medical schools. In spite of this development, the current incidence of moral objections and stigma highlights the necessity of specific interventions that would be focused not on the factual knowledge only but also on some deeply ingrained socio-cultural beliefs [20].

To conclude, the present evidence is similar to that of the region and other countries: although the awareness and acceptance rates of emergency contraception are increasing, the perception is seen to be heterogeneous and situation-specific. The prevalence of positive perceptions among students at Lusaka apex medical university is positive as compared to the Mediterranean Malaysia, Ghana and Uganda. Nevertheless, the fact that the negative perceptions still exist highlights the importance of long-term, interdisciplinary and culturally sensitive sexual and reproductive health education. These interventions are not only supposed to strengthen the right knowledge but also to contravene the misconception and moral stigmas that can inhibit informed and fair use of emergency contraceptive pills.

Recommendations

1. It is recommended that Lusaka Apex Medical University, in collaboration with the Ministry of Health, the Ministry of Higher Education, and international partners such as WHO and UNESCO, strengthens and institutionalizes targeted reproductive health promotion programs on emergency contraceptive pill (ECP) utilization. These programs should incorporate comprehensive health education, social mobilization, health communication, and awareness campaigns aimed at enhancing knowledge and informed decision-making on ECP use among female students in institutions of higher learning.
2. The investigator also recommends that, Lusaka Apex Medical University management should set-up youth friendly Conner within the campus in order to increase the accessibility and utilization of emergency contraceptive services for youth university students.
3. The author further suggests that the management of Lusaka Apex Medical University should develop peer education and counseling programs across its campuses to promote positive perceptions and strengthen attitudes toward the use of Emergency Contraceptive Pills (ECPs) among female students
4. The researcher further recommends that, Lusaka Apex Medical University should promote collaboration between university health services, student leadership, and faith-based groups to address misconceptions, reinforce positive attitudes, and ensure equitable access to accurate information, thereby improving informed decision-making and optimal utilization of emergency contraceptive pills.
5. The researcher recommends that there is a need to assess the influence of peers and family on the attitudes and perceptions of female students toward emergency contraceptive pills utilization in institutions of higher learning in Zambia.

Conclusion

The research draws in determining that there are generally positive knowledge, attitudes, and perceptions towards the use of emergency contraceptive pills by female students at Lusaka Apex Medical University. The socio-demographic characteristics of the respondents show a significant amount of diversity regarding age, marital status, and employment status, which indicates the heterogeneity of the backgrounds in which the students are originated. Although these variances existed, most of the participants revealed a sufficient level of awareness on the use of emergency contraceptive pills, which implies that the influence of reproductive health education in the university and clinical training settings is significant towards the development of informed knowledge on the use of ECPs.

Significantly, the knowledge levels were heavily correlated with socio-demographic attributes like age, marital status, religion, level of education, and occupation, which implies that social and contextual attributes still play a significant part in determining who gets access to reproductive health information and who better understands it. Besides knowledge, the majority of respondents had positive attitudes and perceptions toward the use of ECP, which is an overall approval of the emergency contraception as one of the effective means of not getting pregnant. However, the existence of minority with negative attitudes and perceptions highlights the existence of socio-cultural, moral, and informational obstacles that can be a critical hindrance to optimum utilization. The author suggests that the university should introduce specific reproductive health education to overcome the challenging socio-cultural, moral, and informational barriers. The programs are to be aimed at correcting the misconceptions, positive attitude and culturally sensitive guidance so that all the students are empowered to make sound decisions on the use of emergency contraceptive pill.

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Conflicts of Interest

The authors declare that there are no conflicts of interest, whether financial, personal, professional, or institutional, that could have influenced the design, conduct, analysis, interpretation, or reporting of the findings of this study.

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References

1. WHO. Contraception. 2024.
2. Cleland J. Sexual and reproductive health, family planning: The unfinished agenda, Lancet. 2016. 368: p.1810-1817.

3. Hoque ME, Ghuman S. Knowledge, practices, and attitudes of emergency contraception among female university students in KwaZulu-Natal, South Africa. PLoS ONE. 2012. 7: e46346.
4. Kwame KA, Bain LE, Manu E, Tarkang EE. Use and awareness of emergency contraceptives among women of reproductive age in sub-Saharan Africa: A scoping review. Contraception and Reproductive Medicine. 2022. 7:1.
5. Nibabe WT, Mgutshini T. Emergency contraception amongst female college students-knowledge, attitude and practice. African Journal of Primary Health Care and Family Medicine. 2014. 6: 1-7.
6. Mulenga MM, Jacobs C, Simbeye TS, Chikoya MM. Magnitude and determinants of pregnancy induced hypertension in selected general hospitals in Lusaka, Zambia: A cross-sectional study. International Journal of Science & Healthcare Research. 2024. 9: 297-309.
7. Kgosiemang B, Blitz J. Emergency contraceptive knowledge, attitudes and practices among female students at the University of Botswana: A descriptive survey. African journal of primary health care and family medicine. 2018. 10: 1-6.
8. Tilahun D, Assefa T, Belachew T. Knowledge, attitude and practice of emergency contraceptives among Adama University female students, Ethiopia. Ethiopian journal of health sciences. 2010. 20.
9. Ahmed FA, Moussa KM, Petterson KO, Asamoah BO. Assessing knowledge, attitude, and practice of emergency contraception: a cross-sectional study among Ethiopian undergraduate female students. BMC public Health. 2012. 12: 110.
10. Nsubuga H, Sekandi JN, Sempeera H, Makumbi FE. Contraceptive use, knowledge, attitude, perceptions and sexual behavior among female University students in Uganda: a cross-sectional survey. BMC women's health. 2015. 16: 1-11
11. Davis P, Sarasveni M, Krishnan J, Bhat LD, Kodali NK. Knowledge and attitudes about the use of emergency contraception among college students in Tamil Nadu, India. Journal of the Egyptian Public Health Association. 2020. 95: 1.
12. Tajure N. Knowledge, attitude and practice of emergency contraception among graduating female students of Jimma University, Southwest Ethiopia. Ethiopian journal of health sciences. 2010. 20.
13. Miller LM. College student knowledge and attitudes toward emergency contraception. Contraception. 2011. 83: 68-73.
14. Desta B, Regassa N. On emergency contraception among female students of Haramaya University, Ethiopia: surveying the level of knowledge and attitude. Educational research. 2011. 2: 1106-1117.
15. Worku A. Knowledge, attitude and practice of emergency contraceptives among female college students in Arba Minch Town, Southern Ethiopia. Ethiopian Journal of Health Development. 2011. 25: 176-183.
16. Tesfa A, Bizuneh AD, Tesfaye T, Gebru AA, Ayene YY, et al. Assessment of knowledge, attitude and practice towards emergency contraceptive methods among female students in Seto Semero high school, Jimma town, south west Ethiopia. Science Journal of Public Health. 2015. 3: 478-486.
17. Jalil AAA, Asarani AM, Zulkifli NW, Hussin NSM. Knowledge and Perception on Emergency Contraception Among Undergraduate Pharmacy Students in Malaysia. Malaysian Journal of Medicine & Health Sciences. 2025. 21.
18. Appiah-Agyekum NN, Kayi EA. Students' perceptions of contraceptives in University of Ghana. Journal of family & reproductive health. 2013. 7: 39.
19. Byamugisha JK, Mirembe FM, Gemzell-Danielsson K, Faxelid E. Faced with a double-edged risk: Ugandan university students' perception of the emergency contraceptive pill in Uganda. African Journal of Reproductive Health. 2009. 13: 47–59.
20. Mohammed S, Abdulai AM, Iddrisu OA. Pre-service knowledge, perception, and use of emergency contraception among future healthcare providers in northern Ghana. Contraception and Reproductive Medicine. 2019. 4