Parental Engagement in Promoting Awareness of Contraceptive Use among Female Students in Nigeria and Cameroon

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ABSTRACT

Despite government and non-governmental organizations' efforts, contraceptive utilization in Nigeria remains low. Similarly, Cameroon faces high maternal mortality and low contraceptive prevalence. Adolescent pregnancy remains a significant social and public health concern globally, necessitating efforts to promote contraceptive use. Parent-adolescent sexual communication is often viewed as taboo in Nigeria and Cameroon, hindering awareness about contraceptive use. This study examines the role of parents in creating awareness of contraceptive use among female university students in Nigeria and Cameroon. The study adopts a comparative approach, investigating the cultural role of parents in awareness creation for contraceptive use in Nigeria and Cameroon. A cross-sectional study was conducted among 420 female university students in both countries. The findings highlight the valuable role of parents in shaping adolescents' knowledge and behavior regarding contraceptive use. Recommendation, addressing cultural barriers, improving contraceptive access, and conducting further research. Implementing these recommendations can empower adolescents with accurate information, foster supportive parent-adolescent relation-ships, and enhance sexual and reproductive health outcomes among young people.

ABSTRAK

Meskipun ada upaya pemerintah dan organisasi non-pemerintah, penggunaan kontrasepsi di Nigeria masih rendah. Kamerun juga menghadapi angka kematian ibu yang tinggi dan prevalensi kontrasepsi yang rendah. Kehamilan remaja masih menjadi masalah sosial dan kesehatan masyarakat yang signifikan secara global, sehingga memerlukan upaya untuk mempromosikan penggunaan kontrasepsi. Komunikasi seksual orang tua-remaja sering dianggap tabu di Nigeria dan Kamerun, sehingga menghambat kesadaran tentang penggunaan kontrasepsi. Studi ini mengkaji peran orang tua dalam menciptakan kesadaran penggunaan kontrasepsi di kalangan mahasiswi di Nigeria dan Kamerun. Penelitian ini menggunakan pendekatan komparat-if, menyelidiki peran budaya orang tua dalam penciptaan kesadaran penggunaan kontrasepsi di Nigeria dan Kamerun. Sebuah studi cross-sectional dilakukan pada 420 mahasiswi di kedua negara. Temuan ini menyoroti pentingnya peran orang tua dalam membentuk pengetahuan dan perilaku remaja mengenai penggunaan kontrasepsi. Rekomendasinya mencakup peningkatan pendidikan kesehatan akses kontrasepsi, dan pelaksanaan penelitian lebih lanjut. Penerapan rekomendasi ini dapat memberdayakan remaja dengan informasi yang akurat, membina hubungan orang tua-remaja yang suportif, dan meningkatkan hasil kesehatan seksual dan reproduksi di kalangan remaja.

GRAPHICAL ABSTRACT



Keyword cameroon contraception nigeria parents pregnancy in adolescence

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INTRODUCTION

Annually, around 16 million adolescents aged 15 to 19, and approximately 1 million girls below the age of 15, give birth worldwide (World Health Organization, 2018). Hence, adolescent pregnancy continues to pose a significant social and public health concern, although not all pregnancies are unintended or undesired (Sedgh et al., 2015). In Nigeria, the utilization of contraceptives remains low, despite the efforts made by government and nongovernmental organizations to promote their uptake (Ononokpono et al., 2020). Moreover, existing studies on contraceptive use have primarily concentrated on individual-level factors, while there is a lack of evidence regarding the influence of parental or community context.

In a similar vein, Akoku et al. (2020) highlight that female university students in Cameroon utilize contraceptives as a means to prevent unwanted pregnancies, with oral contraceptive pills (OCPs) being among the most commonly used hormonal contraceptives. Moreover, Cameroon has a high level of maternal mortality, with approximately 529 deaths per 100,000 live births recorded in 2017, while the prevalence of contraceptive use in the country remains relatively low (Tebeu, et al., 2015). Meanwhile, the maternal mortality rates in Nigeria is approximately 1047 deaths per 100 000 live births (World Health Organization, 2023).

These findings align with the observations made by Okonofua (2021) regarding the correlation between contraceptive use and maternal mortality. It has been demonstrated that countries with low contraceptive prevalence tend to have high maternal mortality ratios. Similarly, Ali et al., (2011) revealed that many countries in sub-Saharan Africa, characterized by high fertility rates, maternal mortality, and infant mortality, often experience these challenges due to inadequate contraceptive usage.

In the contrary, young female in China

appear to disregard the importance of contraceptive use; despite their knowledge of available contraceptives (Wang et al., 2020) However, concerning contraceptive knowledge, up to 30% of Chinese students are unaware of the importance of contraceptive, implying an increase in high-risk sexual behaviors (Zhou et al., 2019).

Meanwhile, in Cameroon, efforts to involve parents in sexual health interventions have been in place for a longer time compared to Nigeria (Forehand et al., 2014). However, in Nigeria, adolescents' sexual behavior is increasing, putting them at higher risk of HIV, other STIs, and unplanned pregnancies. Parentadolescent sexual communication is often viewed as taboo in Nigeria, leading to a lack of awareness about contraceptive use among adolescent girls (Neil & Donald, 2015)

In Cameroon, many young people rely on discussions with peers for sexual-related issues and contraceptive information, which can result in mixed and inaccurate knowledge, leaving them vulnerable to adverse outcomes such as unwanted pregnancies and STIs (Fanta et al., 2016). There is a mention of intergenerational sexual issues being considered taboo, leading some parents to avoid discussing sex and contraceptive use with their children (Ugoji & Agokei, 2012). To address these issues, interventions that promote contraceptive use and involve parents, both male and female, in decision-making are recommended (Dombola et al., 2021). Timely communication on sexual-related issues during early adolescence is also advised (Ariyo et al., 2020). The text concludes by highlighting the need to consider parents' perceptions regarding the delivery and use of contraceptives and other sexual orientation services (Esan & Bayajidda, 2021). It introduces the focus of the study, which aims to investigate the cultural role of parents in creating awareness of contraceptive use among female university stu-

Table 1 Sample Selection Table

Sample Selection Table					
University	Population Figure	Sample Size			
University of Ilorin, Ilorin, Kwara State, Nigeria	43,890	186			
Kwara State University, Malete, Kwara State Nigeria	14,753	63			
Universite de Douala, Lottoral Province, Cameroon	26,317	111			
College Saint-Michel, Cameroon	5,478	24			

Note: The researchers used a probability proportionate approach

dents in Nigeria and Cameroon, specifically in Ilorin and Douala, respectively. The study seeks to explore the most useful sources of contraceptive information and the cultural roles parents play in raising awareness among adolescent girls in these contexts.

It is on this note that this study investigates the cultural role of parent in awareness creation for contraceptive use among female university students in both Nigeria and Cameroon, thus making it a comparative study carried out in Ilorin, Nigeria and Douala, Cameroun respectively. To achieve this, the study examined the issue from the precinct of the most useful sources of information about contraceptive use in Nigeria and Cameroon as well as the cultural roles parents play in awareness creation for adolescents girls in university towards contraceptive use in Nigeria and Cameroon.

METHODS

A cross-sectional, analytic, descriptive study was conducted among 420 female university students in two African countries of Nigeria and Cameroon. Specifically, data was collected from students of two tertiary institutions in Nigeria; University of Ilorin, Iloirn, Kwara State, and Kwara State University, Malete, Kwara State. Similarly, in two tertiary institutions in Douala, Cameroon; University de Douala, Lottoral Province, Cameroon and College Saint-Michel, Cameroon using a survey within quantitative research method. Kwara State is bordered by six States and it is a state with diverse population comprising various ethnic groups. Correspondingly, Douala is the largest city in Cameroon, situated on the Wouri River and the Atlantic coast of Central Africa. Douala is a melting pot of different ethnicities and culture in Cameroon. Consequently, this cross-sectional study will have a critical contribution to the precise turf of sexual and reproductive health.

The survey research technique was used to investigate the role of parent in awareness creation for contraceptive use in both Nigeria and Cameroon. The population of the study comprised of all female students in University of Ilorin, Nigeria, and Kwara State University, Malete, Nigeria. Similarly, female students in University de Douala, Lottoral Province, Cameroon and College Saint-Michel, Cameroon which amounted to 90,438 (Unilorin, 2020; KWASU, 2020). The sample size of 383 was obtained using the Krejcie and Morgan sample size formula.

To maintain the relevance and specificity of the study to the target group, the study includes female university students in the specified institutions which are the University of Ilorin and Kwara State University in Nigeria, University de Douala, and College Saint-Michel in Cameroon respectively.

On the order hand, male students were excluded from the study to focus specifically on the experiences and perceptions of female students. Similarly, students at educational levels other than university were not considered in the study, ensuring a specific focus on the uni-

Source of Information	Frequency	Percentage
Parents	131	35.40%
Teachers	30	8.10%
Peers	173	46.80%
Family members	28	7.60%
Media	13	3%
Books	8	2.20%

Table 2

Source of Information about Contraceptive Use

versity student population.

In this research study, the total sample size with finite population correction is 383. The research employed a combination of stratified sampling and simple random sampling techniques to select participants from different universities and colleges in Kwara, Nigeria, and Douala, Cameroon. Specifically, four faculties were selected from each university and college. The universities sampled to represent Nigeria were the University of Ilorin, Kwara State, and Kwara State University, Malete, Kwara State, while the representatives for Cameroon were University de Douala, Lottoral Province, and College Saint-Michel. The data was collected physically through the administration of research assistants. Only the registered students of the two universities were allowed to fill questionnaire,

To ensure equal representation, the researchers used a probability proportionate approach in administering the questionnaires. The distribution of the questionnaires was based on the percentage of students in each of the selected institutions, as shown in Table 1 (which is likely provided in the original text). The question was adopted from series of journals on reproductive health. Overall, this sampling strategy allowed the researchers to gather data from different institutions in both countries, making the study more representative and potentially enhancing the generalizability of the findings.

Regarding ethical consideration, the researchers submitted detailed research protocol to the Ethics Review Committee of the selected

institutions in Nigeria and Cameroon. The protocols submitted included details on the informed consent process, explaining how participants will be informed about the study, their rights, and how their data will be handled. Therefore, the ethical clearance attained for the study safeguards that the study observes rigorous ethical standards, gives attention to the female students' welfare, and maintains the ethics of research integrity during the entire research process.

The study employed descriptive statistics, including percentages, means, and standard deviations, to address the research questions. The questionnaire used in the study was adapted by conducting a comprehensive literature review to identify existing questionnaires or scales relevant to the study's objectives. Also, the instrument was chosen for its reliability, validity, and relevance to the study population. The adaptation process involved making modifications to the wording, and structure of the questions while maintaining the integrity and intent of the original instrument. All changes made to the original questionnaire do not compromise its psychometric properties or the validity of the study results.

Participants were assured of anonymity and confidentiality while responding to the questionnaire. Before completing the questionnaire, the students were informed about the study's objectives, and their consent to participate and use their data was obtained. All the information collected was provided voluntarily by the students.

Table 3

Level of awareness creation for contraceptive use

Level of Awareness Creation	Level 1	Level 2	Level 3	Level 4	Level 5	Mean	SD	Overall
Awareness creation on the use of contraceptives between parent and adolescent through commu- nication about sex-related matters is on the low.	15.7	17.3	19.7	25.1	22.2	3.2	1.4	64
My parent made me aware of the use of contra- ceptive by reminding me of the dangers of not using contraceptive.	15.7	11.6	12.4	29.7	30.5	3.5	1.4	70
Due to the awareness created on contraceptive use, I am less likely to engage in sexual risk- taking behavior when I reside with my two par- ents.	14.6	14.9	16.2	27.6	26.8	3.4	1.4	68
Awareness creation on the use of contraceptive among parent results in low risk of contracting sexually transmitted diseases amongst adoles- cents.	11.4	10.3	18.9	30.5	28.9	3.6	1.3	72
Creation of awareness for contraceptive use be- tween parent and adolescent is difficult to achieve because of the discomfort associated with it.	9.2	12.4	18.4	33.2	26.8	3.6	1.3	72
Parent's creation of awareness on contraceptive use made me understand that contraceptive is not 100% effective as total abstinence.	11.1	13.2	22.4	27.6	25.9	3.4	1.3	68
Total						4.14	1.62	63.2

Note: The table includes the different levels of agreement, their corresponding percentages, standard deviation (SD), and the overall percentage for each statement on contraceptive use awareness creation. Scale: 1=Strongly disagree 2= Disagree 3=Neutral 4=Agree 5=Strongly Agree.

RESULTS

Based on the data collected through surveys with regards to the cultural roles of parent in awareness creation for contraceptive use in both Nigeria and Cameroon, the data retrieved were subjected to quantitative analysis using tables, charts, and percentages, mean, standard deviation and inferential statistics were drawn.

Table 1 indicated that (46.8%) of the respondents affirmed that their most useful source of information about contraceptive use are their peers, followed by (35.4%) of the respondents that noted that their most useful source of information about contraceptive use are their parents, while (8.1%) of the respondents noted that their teachers are the most useful source of information about contraceptive use (2.2%) of the respondents noted that books are the most useful source of information about contraceptive use, (2.2%) of the respondents noted that books are the most useful source of information about

contraceptive use.

Table 2 presents the results of the study regarding the most useful sources of information about contraceptive use. The table displays the frequency and percentage distribution of responses from the participants.

According to the data, parents were reported as the most useful source of information about contraceptive use, with a frequency of 131, accounting for 35.4% of the participants. Peers were cited by the majority of participants, with a frequency of 173, representing 46.8% of the respondents. Teachers were mentioned by 30 participants, accounting for 8.1% of the total. Family members and books were cited less frequently, with frequencies of 28 (7.6%) and 8 (2.2%) respectively. The total number of participants who provided responses for this question was 370, constituting 100% of the sample.

Table 3 presents the level of awareness

Parent-Adolescent Communication Impact on Use of Contraceptive				
Communication Impact	Value			
Pearson Chi-Squar				
Original Value	118.691			
Recalculated Value	120.102			
Likelihood Ratio				
Original Value	114.66			
Recalculated Value	116.021			
Linear-by-Linear Association				
Original Value	18.124			
Recalculated Value	18.489			

Table 4

Note: Recalculated Value= Original Value/ 377)*383.

creation for contraceptive use among female university students, measured on a Likert scale (1-5). Participants generally agreed that awareness creation between parents and adolescents about contraceptives is low (mean = 3.2, SD = 1.4). They acknowledged their parents' efforts in making them aware of contraceptive use (mean = 3.5, SD = 1.4). The data also suggests that awareness creation reduces sexual risktaking behavior (mean = 3.4, SD = 1.4) and STI risk (mean = 3.6, SD = 1.3). However, creating awareness between parents and adolescents was perceived as difficult (mean = 3.6, SD = 1.3). Overall, participants had a moderate level of agreement (mean = 4.14) on contraceptive awareness creation.

In this study, one research hypothesis was formulated, the hypothesis examined if Parent-adolescent communication has no impact on the use of contraceptive. The hypothesis was tested using Chi-Square. Table 4 shows the Pearson Chi-Square test yielded an original value of 118.691, which, when recalculated based on a total of 383 valid cases, becomes 120.102. This suggests a significant association between the variables being studied. Similarly, the Likelihood Ratio test, with an original value of 114.660, recalculates to 116.021, indicating a significant relationship. The Linear-by-Linear Association test, originally at 18.124, recalculates to 18.489, further supporting a significant linear trend in the association between the variables. Overall, these results imply a robust statistical association between parent-adolescent communication and the use of contraceptives.

DISCUSSION

This study explores parents' role in creating awareness of contraceptive use in Nigeria and Cameroon. Peers and parents were the most useful sources of information about contraceptives, while books were least helpful. Parentadolescent communication on contraceptive use was perceived as low, but parents' efforts to highlight the risks of not using contraceptives were acknowledged. Living with parents and contraceptive awareness influenced participants to engage in less risky sexual behavior. The study confirms that effective parent-adolescent communication impacts contraceptive use, underscoring its significance in promoting sexual health education among young people in both countries.

Knowledge and Awareness of Contraceptives

The findings from the study on the level of awareness creation for contraceptive use among female university students provide valuable insights into the perceptions and attitudes of participants. Particularly, the study indicates a nuanced perspective among female university students regarding contraceptive awareness creation. While there is a perception of low awareness creation between parents and adolescents, participants generally acknowledge their parents' efforts and believe that awareness creation can reduce sexual risk and STI risk. However, the perceived difficulty in creating awareness suggests potential challenges in implementing effective communication strategies. The moderate level of overall agreement reflects a balanced view among participants. These findings can inform future interventions aimed at improving contraceptive awareness among university students.

Assessing the level of knowledge and awareness of contraceptive methods among female university students in Nigeria and Cameroon is paramount because the source of information on contraception is key to relaying the correct information to students, particularly the young ones (Kara et al., 2019).

Modern sex education programs have been proven to be inadequate, as they often fail to include information about contraception (Jiménez-Iglesias et al., 2018). Studies have shown that comprehensive sex education has a positive impact on sexual behavior, and healthier choices (Morales et al., 2020). However, at the university level, there is a need for education on contraception and sexual health. Recent reports on contraceptive use have drawn global attention to the low utilization of contraceptives among adolescents (Atuhaire et al., 2021). Despite the risks associated with early pregnancies, surveys indicate that sexually active adolescents, specifically those aged 15-19, rarely employ contraception (Tchokossa & Adeyemi, 2018).

Atuhaire et al. (2021) also revealed that there is insufficient knowledge about alternative contraceptive methods and widespread misinformation about their side effects. In Africa, one in every five women still has an unmet need for family planning, leading to high rates of unintended pregnancies, maternal and child morbidity, and mortality. However, limited knowledge, misconceptions about contraceptive side effects, disapproval from male partners, and cultural norms surrounding contraception hinder its utilization (Blackstone et al., 2017).

Parental Communication and Contraceptive Use

The findings from the statistical tests, specifically the Pearson Chi-Square, Likelihood Ratio, and Linear-by-Linear Association tests, consistently indicate a significant association between parent-adolescent communication and the use of contraceptives. Generally, the consistent significance across the statistical tests strengthens the conclusion that there is a robust and meaningful association between parent-adolescent communication and the use of contraceptives. This information is valuable for understanding the dynamics of communication within families and its impact on healthrelated behaviors, specifically contraceptive use in this context. The findings could have implications for public health interventions and family communication programs aimed at promoting safer sexual practices among adolescents.

Adolescents and young adults have not received adequate attention in the global health discourse, resulting in fewer improvements in their health compared to other age groups (Eshete & Shewasinad, 2020). Despite the preventable nature of adolescent health issues, they face various barriers in accessing information related to sexual and reproductive health (SRH) (Patton et al., 2016). Meanwhile, availability of reproductive health information is inconsistent worldwide, particularly in developing countries.

In light of this, Eshete and Shewasinad (2020) emphasized the importance of sexual health education and open, positive communication between parents and adolescents regarding SRH issues within the home. Sagnia et al. (2020) also stressed the significance of adolescent-parent communication on SRH, as it helps adolescents establish personal values and make informed decisions about their sexual health.

A systematic review conducted in Africa revealed that adolescents who had no communication about SRH with their parents were more likely to initiate childbearing (Kassa et al., 2018). Early childbearing and unintended pregnancies were strongly associated with parenting attitudes, behaviors, and styles. Several pieces of evidence suggest that adolescent-parent communication is an effective strategy among others for promoting healthy sexual and reproductive behavior (Widman et al., 2016). Adolescents who discuss SRH issues with their parents are more likely to make informed decisions regarding the use of reproductive health services, delay sexual activity, protect themselves from risky behaviors, and receive support for healthy sexual socialization (Abdallah et al., 2017).

Supporting this, Evans et al. (2020) noted that parents have a unique opportunity to impart knowledge about sexual risks and foster confidence and comfort regarding sexuality in their adolescents. While discussions about sexual risk between parents and children are relatively common, less is known about the frequency of conversations regarding sex-positive topics.

Evidence has shown that when adolescents, especially girls, communicate with their parents about sexual behaviors, pregnancy prevention (contraception), and sexually transmitted infections (STIs), they are more likely to engage in safe sexual practices, including abstinence and protective measures against pregnancy and STIs (Widman et al., 2016). Bekele et al. (2022) highlight the significant responsibility of parents in nurturing their children by addressing their sexual and reproductive health concerns. Consequently, adolescents who have discussed their sexual and reproductive health issues are more likely to postpone early sexual intercourse and utilize contraception.

Cultural Factors and Parental Influence on Contraceptive Use

The investigation into the influence of cultural features and societal customs on parental attitudes, beliefs, and practices related to contraceptive use and female university students' awareness has become crucial. However, there is limited understanding of how sociocultural contextual factors may either facilitate or hinder the successful expansion of contraceptive innovations beyond the initial pilot site in Nigeria (Akinyemi et al., 2020).

Communication between female university students and their parents about reproductive issues is a challenging matter in Africa, as many traditional African societies restrict such communication (Sagnia et al., 2020). In Africa, there is a prevalent belief that educating young people about contraceptives and teaching them how to protect themselves would encourage increased sexual activity. However, parents play a significant role in promoting sexual health among their adolescent children. Akinyemi et al. (2020) highlight the influence of sociocultural context on the adoption of contraceptive innovations.

The sociocultural context, encompassing religious and cultural beliefs, gender roles, and societal norms, is a significant predictor of the adoption of health innovations within a population. In Africa, cultural beliefs and practices have been found to impact the acceptance of various health innovations, including contraceptives. Ignoring the sociocultural context during health innovation development, delivery, and scale-up can limit progress and result in the wastage of valuable health resources (Bradley et al., 2013).

Assessing the receptivity and willing-

ness of community members to adopt a health innovation within their environmental and sociocultural settings is an essential initial step in the scale-up process. Without a comprehensive understanding of the sociocultural context of potential users, scaling up efforts may be hindered, while a good understanding can help program managers recognize contextual factors that can either facilitate or impede the uptake of an innovation (Bradley et al., 2013).

In some conservative communities in Nigeria and Cameroon, cultural and religious norms promote large family size and discourage contraceptive use (Sinai et al., 2020). Cultural and religious beliefs serve as barriers to contraceptive utilization among unmarried adolescents. Unmarried adolescents engaging in sexual intercourse and using contraceptives are considered culturally taboo. Similarly, Ezenwaka et al. (2020) revealed that various religions advocate for complete sexual abstinence among unmarried individuals and view pre-marital sexual intercourse as immoral. Consequently, contraception for adolescents is not openly discussed or accepted. This intolerance forces adolescents in need of contraceptives to seek information and services discreetly, fearing recognition.

The study provides valuable insights into the role of parents in creating awareness of contraceptive use in Nigeria and Cameroon. While its strengths include a cross-cultural comparative approach and policy recommendations, limitations such as self-reported data and a single time point design should be considered when interpreting the findings.

The study employs a cross-cultural comparative approach, investigating the role of parents in creating awareness of contraceptive use in both Nigeria and Cameroon. This design enhances the study's generalizability and provides valuable insights into potential cultural variations. Similarly, the study addresses critical public health issues related to contraceptive utilization, parent-adolescent communication, and sexual health outcomes among young people in Nigeria and Cameroon. The findings contribute to the understanding of factors influencing contraceptive awareness.

On the order hand, the study's limitation could be on reason that it relies on selfreported data, which presents the likelihood of response bias and social prestige bias. In addition to this, the study specifically targets female university students, possibly limiting the generalizability of the findings to wider populations, such as adolescents who have not joined universities.

CONCLUSIONS

In conclusion, this study emphasizes the significant role of parents in creating awareness of contraceptive use among adolescents in Nigeria and Cameroon. Peers and parents were the most valuable sources of information about contraceptives. Despite the perceived low level of awareness creation through parent-adolescent communication, parents were instrumental in making adolescents aware of the importance of contraceptive use by highlighting its risks. Living with parents and contraceptive awareness contributed to reduced risky sexual behavior. The study highlights the need to prioritize and enhance parentadolescent communication on contraceptive use. Improving awareness creation through open dialogue can promote responsible sexual behavior, reducing unintended pregnancies and sexually transmitted infections among adolescents. Strengthening parent-adolescent communication should be a focus of future interventions to improve reproductive health outcomes among young people in similar contexts.

This study recommends the importance of strengthening sexual and reproductive health education in schools and communities. This

education should encompass accurate information about contraceptive methods, safe practices, and the importance of contraception in preventing unintended pregnancies and sexually transmitted infections. It is also important to implement workshops, training sessions, and educational campaigns to improve parentadolescent communication on contraceptive use and sexual health. Provide parents with the necessary knowledge and skills to discuss these topics openly with their children. This is necessary to overcome cultural and societal barriers that hinder parent-adolescent communication and limit access to contraceptive information. In addition, religious and traditional leaders need to be involved in community-based awareness campaigns to dispel misconceptions and reduce stigma. The government needs to ensure access to a variety of contraceptive methods, making them available, affordable, and confidential in healthcare facilities and pharmacies. Conduct outreach programs to reach underserved populations.

Additional research need to conducted to better understand the factors influencing parent-adolescent communication, contraceptive use, and the cultural context in Nigeria, Cameroon, and similar settings. Use these insights to develop tailored interventions and strategies. By implementing these recommendations, stakeholders can empower adolescents with accurate information, foster supportive parent-adolescent relationships, and increase the uptake of contraceptives, ultimately leading to improved sexual and reproductive health outcomes among young people.

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AUTHORS' CONTRIBUTIONS

Rasaq M. Adisa design the study, formal analysis, methodology, writing the original draft, review and editing article and approved the final version to be published. Fabiolla M. Masso, Patrick Udende, Yusuf A. Sholola, Mahamood A. Fahmi, and Oba A. La'aro acquired data, critically review the article and approved the final version to be published.

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COMPETING INTERESTS

The authors confirm that all of the text, figures, and tables in the submitted manuscript work are original work created by the authors and that there are no competing professional, financial, or personal interests from other parties.

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