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Attitudes and Awareness of Female Teenagers towards Sex Education in a Secondary School in Abeokuta, Ogun State, Nigeria

Onigbanjo RO[1], Olu-Abiodun O[2]
1 Department of Nursing, Crescent University, Abeokuta, Ogun State, Nigeria

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Abstract

Introduction: Sex education remains a controversial topic across many regions of Nigeria despite its vital role in promoting adolescent sexual and reproductive health. Understanding the perspectives of female adolescents is essential for designing effective school-based interventions.

Methods: A descriptive cross-sectional study was conducted between June and August 2024 among 100 female secondary school students aged 13–19 years in Abeokuta, Ogun State, Nigeria. A stratified random sampling technique was employed to select participants from the SS1 to SS3 classes. Data were collected using a pre-tested structured questionnaire with a 4-point Likert scale. Descriptive statistics summarised socio-demographic characteristics, awareness, and attitudes toward sex education.

Results: Respondents demonstrated high awareness, with 84% acknowledging that sex education improves self-esteem and 82% affirming that it enhances communication skills. Attitudes were generally positive, as 79% recognized that teenagers hold varying perspectives on sex education, and 74% agreed it promotes responsible behaviour. However, major barriers included inadequate parent-child communication (97%), insufficiently trained teachers (89%), religious opposition (94%), and overloaded curriculum (74%).

Conclusion: Female secondary school students exhibit high awareness and positive attitudes toward sex education, yet institutional and sociocultural barriers impede effective implementation. Multi-level interventions addressing teacher training, parental engagement, and culturally sensitive curriculum integration are urgently needed.

Keywords: Attitude, Awareness, Adolescents, Sex Education, Secondary School, Nigeria

Introduction

Sex education encompasses an age-appropriate, culturally relevant approach to educating young people about sexuality, relationships, and reproductive health using scientifically accurate and non-judgmental information. It extends far beyond biological knowledge to include emotional, social, and behavioural dimensions of sexuality, thereby equipping adolescents with essential skills to make informed and responsible decisions throughout their lives (1).

Globally, adolescents continue to experience unmet sexual and reproductive health needs, creating significant public health challenges. Limited access to accurate information and adolescent-friendly services has been consistently associated with increased risks of sexually transmitted infections, unintended pregnancies, and unsafe abortion among young people (2, 3). These challenges are particularly pronounced in developing countries, including Nigeria, where deeply entrenched sociocultural norms often discourage open discussions about sexuality between adults and adolescents (4).

In the Nigerian context, sex education remains a highly sensitive issue, profoundly influenced by religious beliefs, cultural values, and widespread parental reluctance to discuss sexual matters with teenagers. Consequently, many adolescents rely on peers, social media, and other informal information sources, which frequently provide inaccurate or misleading content (5). This lack of reliable knowledge contributes directly to risky sexual behaviours and adverse reproductive health outcomes among Nigerian youth (6).

Despite growing recognition of the importance of sexuality education, limited research has specifically examined female adolescents' perspectives in Abeokuta, Ogun State. Understanding their attitudes and awareness is essential for designing targeted interventions that address their unique needs, concerns, and the specific barriers they face in accessing quality information. Ogun State continues to grapple with adolescent reproductive health challenges, particularly among secondary school students, making context-specific evidence crucial for informing policy and practice (7).

Therefore, this study aimed to assess the attitudes and awareness of female teenagers toward sex education in a secondary school in Abeokuta, Ogun State, Nigeria. Specifically, the study sought to: (1) determine the level of awareness of sex education among female secondary school students; (2) examine their attitudes toward sex education; and (3) identify factors affecting their access to quality sex education.

Methods

Study Design and Setting

A descriptive cross-sectional study was conducted between June and August 2024 at Comprehensive High School, Lafenwa, Abeokuta, Ogun State, Nigeria. This co-educational public secondary school was purposively selected due to its mixed socioeconomic student population and its location in an urban area with diverse cultural and religious representation, making it suitable for examining adolescent awareness and attitudes toward sex education. The school operates under the Nigerian secondary education system, offering both junior and senior secondary education, with the senior secondary section (SS1-SS3) comprising approximately 450 students annually.

Study Population

The study population comprised female secondary school students enrolled in SS1–SS3 classes during the 2024 academic session.

Inclusion and Exclusion Criteria

The study included female secondary school students aged between 13 and 19 years who were currently enrolled in SS1, SS2, or SS3. Eligible participants were required to provide written assent, along with written consent from their parents or guardians. Students were excluded from the study if they were absent during the data collection period, if they declined to participate, or if their parents or guardians did not provide consent. A total of 134 eligible students were invited to take part in the study.

Sample Size Determination

Sample size was calculated using Taro Yamane's formula for finite populations:

$n = N / (1 + N e^2)$

Where:

N = Total number of eligible female students (134)
e = Margin of error (0.05)
1 = Constant

Calculation:

$n = 134 / (1 + 134 \times 0.05^2)$
$n = 134 / (1 + 134 \times 0.0025)$
$n = 134 / (1 + 0.335)$
$n = 134 / 1.335$
$n = 100.4 \approx 100$

All 134 eligible students were invited to participate to maximise response rate, and 100 completed the questionnaire fully, yielding a response rate of 74.6%.

Sampling Technique

A stratified random sampling technique was employed to ensure adequate representation across class levels. Students were stratified by class (SS1, SS2, and SS3), and proportional allocation was applied based on the number of female students in each stratum. From each stratum, simple random sampling using the balloting method was used to select participants until the desired sample size was achieved.

Instrument for Data Collection

Data were collected using a pre-tested, semi-structured, self-administered questionnaire written in English (the official language of instruction in Nigerian secondary schools). The instrument was developed following an extensive literature review and consisted of four sections:

Section A: Socio-demographic characteristics (age, class, religion, tribe, living arrangement)
Section B: Attitudes toward sex education (5 items)
Section C: Awareness of sex education (5 items)
Section D: Factors affecting access to quality sex education (6 items)

Responses were measured using a 4-point Likert scale to avoid neutral responses: Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD).

Validity and Reliability

Content validity was ensured through expert review by specialists in school health, adolescent reproductive health, and research methodology from Crescent University, Abeokuta. The questionnaire was reviewed for clarity, relevance, comprehensiveness, and cultural appropriateness. Pilot testing was conducted among 15 female students from a neighbouring secondary school with similar characteristics; these students were excluded from the final study. Based on pilot feedback, minor modifications were made to improve clarity, particularly in question wording and formatting.

Internal consistency reliability was assessed using Cronbach's alpha coefficient. The attitude scale yielded $\alpha = 0.78$, while the awareness scale yielded $\alpha = 0.81$, indicating acceptable reliability for both scales.

Data Analysis

Data were entered, cleaned, and analysed using the Statistical Package for Social Sciences (SPSS) version 29. Descriptive statistics, including frequencies and percentages, were used to summarise socio-demographic characteristics, awareness levels, attitudes, and barriers to sex education. Results were presented in tables and narrative form.

Ethical Considerations

Ethical approval was obtained from the Departmental Research Ethics Committee, Crescent University, Abeokuta (Approval Number: CU/DREC/2024/027, dated May 15, 2024). Permission was also obtained from the Ogun State Ministry of Education and the school principal.

Written informed consent was obtained from parents or guardians of participants under 18 years, and written assent was obtained from all participating students. Participants were assured of voluntary participation, confidentiality, and anonymity. Questionnaires contained no identifying information and were stored securely. Participants were informed they could withdraw at any point without consequence.

Results

Socio-Demographic Characteristics of Respondents

A total of 100 female secondary school students participated in the study. The majority (67%) were aged 15–17 years, while 15% were aged 13–14 years and 18% were aged 18–19 years. The mean age was 16.2 years (SD = 1.4). Regarding class distribution, 38% were in SS1, 23% in SS2, and 39% in SS3.

In terms of religious affiliation, half of the respondents (50%) were Muslim, 40% were Christian, and 10% practiced traditional African religion. The ethnic composition was predominantly Yoruba (80%), reflecting the demographic profile of Ogun State, with smaller proportions of Hausa (12%) and Igbo (8%). Most respondents (70%) lived with both parents, while 15% lived with their mother only, 5% with their father only, and 10% with grandparents or other relatives.

Table 1: Socio-demographic Characteristics of Respondents (n = 100)

Characteristic	Category	Frequency (n)	Percentage (%)
Age	13-14 years	15	15
	15-17 years	67	67
	18-19 years	18	18
Class	SS1	38	38
	SS2	23	23
	SS3	39	39
Religion	Islam	50	50
	Christianity	40	40
	Traditional	10	10
Tribe	Yoruba	80	80
	Hausa	12	12
	Igbo	8	8
Living Arrangement	Both parents	70	70
	Mother only	15	15
	Father only	5	5
	Grandparent(s)	5	5
	Other relatives	5	5

Attitudes of Female Teenagers Toward Sex Education

Respondents demonstrated varied but generally positive attitudes toward sex education. The majority (79%) strongly agreed that teenagers hold different attitudes toward sex education, acknowledging the diversity of perspectives within their peer group. Interestingly, 69% strongly agreed that teenagers often hold negative attitudes toward sex education, suggesting awareness of resistance or discomfort among some peers.

A substantial proportion (74%) strongly agreed that many teenagers do not receive formal sex education, highlighting a perceived gap in provision. Similarly, 74% strongly agreed that sex education helps adolescents develop responsible attitudes, indicating recognition of its potential benefits. Regarding religious influences, 69% strongly agreed that religion forbids teaching sexual matters to adolescents, reflecting the perceived tension between faith and sexuality education.

Table 2: Attitude of Female Teenagers toward Sex Education (n = 100)

Statement	SA n(%)	A n(%)	D n(%)	SD n(%)
Teenagers have different attitudes toward sex education	79(79.0)	11(11.0)	8(8.0)	2(2.0)
Teenagers often have negative attitudes toward sex education	69(69.0)	16(16.0)	2(2.0)	13(13.0)
Many teenagers do not receive formal sex education	74(74.0)	10(10.0)	11(11.0)	5(5.0)
Sex education helps adolescents develop responsible attitudes	74(74.0)	15(15.0)	10(10.0)	1(1.0)
Religion forbids teaching sexual matters to adolescents	69(69.0)	10(10.0)	11(11.0)	10(10.0)

SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree

Awareness of Sex Education Among Female Teenagers

Awareness of sex education was notably high across all measured domains. Most respondents (70%) strongly agreed that sex education involves acquiring knowledge about intimacy, relationships, and identity, demonstrating a comprehensive understanding beyond mere biological information.

Regarding parental communication, 63% strongly agreed that parents find it difficult to teach their adolescents about sex, while 73% strongly agreed that discussions between parents and adolescents often take the form of commands without proper explanation. These findings reveal perceived communication barriers within families.

Encouragingly, 84% strongly agreed that sex education helps increase self-esteem, and 82% strongly agreed that it helps develop effective communication skills. These high percentages suggest that respondents recognise the broader psychosocial benefits of sexuality education.

Table 3: Level of Awareness of Female Teenagers toward Sex Education (n = 100)

Statement	SA n(%)	A n(%)	D n(%)	SD n(%)
Sex education involves acquiring knowledge about intimacy, relationships, and identity	70(70.0)	17(17.0)	7(7.0)	6(6.0)
Parents find it difficult to teach their adolescents about sex	63(63.0)	16(16.0)	7(7.0)	14(14.0)
Discussions about sex between parents and adolescents are often commands without proper explanation	73(73.0)	17(17.0)	3(3.0)	7(7.0)
Sex education helps to increase self-esteem	84(84.0)	9(9.0)	5(5.0)	2(2.0)
Sex education helps to develop effective communication skills	82(82.0)	10(10.0)	2(2.0)	6(6.0)

SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree

Factors Affecting Access to Quality Sex Education

Multiple barriers to quality sex education were identified. Nearly all respondents (98%) perceived sex education as a sensitive topic, reflecting the broader sociocultural context. Regarding institutional factors, 89% agreed that the lack of adequate teaching staff affects implementation, while 88% cited insufficient teacher training as a limiting factor. The overloaded curriculum was identified by 74% as a constraint on delivering comprehensive sex education.

Parent-child communication emerged as a critical concern, with 97% of respondents agreeing that the lack of effective parent-child communication significantly hinders access to appropriate sex education. Religious opposition was identified by 94% as a major barrier. Interestingly, peer pressure was acknowledged by 80% as a factor, though this was slightly lower than other barriers.

Table 4: Factors Affecting Access to Quality Sex Education (n= 100)

Factor	Agree n(%)	Disagree n(%)
Sex education is a sensitive topic	98(98.0)	2(2.0)
Lack of adequate teaching staff	89(89.0)	11(11.0)
Insufficient teacher training	88(88.0)	12(12.0)
Overloaded curriculum	74(74.0)	26(26.0)
Lack of effective parent-child communication	97(97.0)	3(3.0)
Religious opposition	94(94.0)	6(6.0)
Peer pressure	80(80.0)	20(20.0)

Discussion

Attitudes of Female Teenagers Toward Sex Education

This study revealed that female teenagers at Comprehensive High School, Abeokuta, demonstrated generally positive yet varied attitudes toward sex education. The finding that 79%

of respondents acknowledged adolescents hold differing perceptions of sex education aligns with the understanding that attitudes toward sexuality are shaped by multiple factors, including family background, religious upbringing, peer influences, and personal experiences. This diversity of perspectives underscores the need for sex education programs that are flexible enough to address varied concerns and comfort levels among students.

The study found that 74% of respondents strongly agreed that many teenagers do not receive formal sex education, which is concerning given that these same students recognised the benefits of such education. This gap between perceived need and actual provision reflects findings from previous Nigerian studies documenting inconsistent implementation of sexuality education across schools (6, 8). The fact that students themselves are aware of this deficit suggests that current policies are not translating into practice effectively.

Importantly, 74% of respondents strongly agreed that sex education promotes responsible sexual attitudes and behaviours. This positive orientation is encouraging and consistent with previous research showing that exposure to comprehensive sexuality education improves adolescents' knowledge, confidence, and decision-making regarding sexual health (7, 9). When young people understand the purpose and potential benefits of sex education, they may be more receptive to such programs when offered.

However, the finding that 69% strongly agreed that teenagers often hold negative attitudes toward sex education, and a similar proportion (69%) agreed that religion forbids teaching sexual matters, reveals underlying tensions. These results suggest that while respondents personally recognised the value of sex education, they perceived resistance among peers and within their religious communities. This dual awareness, personal acceptance alongside perceived social opposition, highlights the complex sociocultural environment in which Nigerian adolescents navigate sexuality education. Similar tensions have been documented in other Sub-Saharan African contexts where modernisation and traditional values coexist (10, 11).

Level of Awareness of Female Teenagers

The high level of awareness demonstrated by respondents is a notable finding of this study. Most participants understood that sex education extends beyond biological facts to encompass knowledge about intimacy, relationships, and identity, a comprehensive understanding that aligns with international definitions of comprehensive sexuality education (1). This suggests that despite limited formal instruction, students have absorbed information about what sex education entails, likely through media, peers, and occasional school discussions.

The finding that 84% of respondents recognised that sex education enhances self-esteem, while 82% acknowledged its role in developing communication skills, indicates awareness of the broader psychosocial benefits of sexuality education. These perceptions are consistent with previous studies reporting that comprehensive sexuality education improves confidence, interpersonal communication, and health knowledge among Nigerian adolescents (6, 12). When students understand these holistic benefits, they may be more motivated to engage with and advocate for such programs.

Particularly striking was the awareness regarding parent-child communication barriers. Over 60% strongly agreed that parents find it difficult to discuss sex with adolescents, and nearly three-quarters agreed that such discussions often consist of commands without proper explanation. This finding resonates with earlier research identifying adult discomfort and communication style as significant barriers to effective sexuality education within families (13, 14). Adolescents perceive not only the absence of discussion but also the poor quality of communication when it does occur, characterised by directives rather than open dialogue. This insight from young people themselves should inform interventions aimed at improving parent-adolescent communication about sexual health.

The high awareness levels observed may reflect the increasing availability of information through digital media, even when formal school-based education remains limited. However, as previous research has cautioned, information from informal sources may be inaccurate or incomplete (5). Therefore, high awareness should not be equated with accurate knowledge, and schools remain essential for providing structured, evidence-based information.

Factors Affecting Access to Quality Sex Education

This study identified multiple interrelated barriers to quality sex education, spanning individual, family, school, and community levels. The near-universal perception (98%) of sex education as a sensitive topic reflects the deeply entrenched cultural norms surrounding sexuality in Nigerian society. This sensitivity creates a climate of silence and avoidance that permeates both home and school environments.

At the institutional level, the lack of qualified teachers (89%) and insufficient teacher training (88%) emerged as critical barriers. These findings align with previous research documenting that even when sex education policies exist, implementation fails due to inadequate teacher preparation (15, 16). Teachers who feel uncomfortable, untrained, or unsupported are unlikely to deliver sexuality education effectively, and may avoid sensitive topics altogether. The overloaded curriculum (74%) compounds this problem, as teachers prioritise examinable subjects over topics perceived as non-academic.

The most striking finding was that 97% of respondents identified a lack of effective parent-child communication as a barrier, the highest of all factors measured. This near-unanimous recognition underscores the critical role families play in adolescents' sexual health education and the widespread failure of parent-child communication in this domain. Previous Nigerian studies have similarly documented parental reluctance, embarrassment, and lack of

skills in discussing sexual matters (17, 18). When parents cannot or will not discuss sexuality, adolescents are left to navigate this crucial aspect of development with inadequate guidance.

Religious opposition (94%) was also identified as a major barrier, reflecting the powerful influence of faith-based perspectives on sexuality education in Nigeria. Some religious teachings explicitly oppose comprehensive sex education, viewing it as encouraging promiscuity or contradicting moral values (19). This creates tension for schools attempting to implement programs and for adolescents navigating messages from religious institutions versus public health recommendations.

The finding that 80% identified peer pressure as a factor, while still substantial, was lower than other barriers, suggesting that respondents view institutional and family factors as more significant constraints than peer influences. This is noteworthy because peer pressure is often emphasised in discussions of adolescent sexual behaviour, but adolescents themselves identify adult-level barriers as more fundamental obstacles to accessing quality information.

These multiple, reinforcing barriers, cultural sensitivity, inadequate teacher preparation, overloaded curriculum, poor parent-child communication, and religious opposition create a formidable obstacle course for adolescents seeking reliable sexual health information. Addressing any single barrier in isolation is unlikely to succeed; comprehensive, multi-level interventions are required (20).

Implications for Policy and Practice

The findings of this study carry important implications for improving sex education in Nigerian secondary schools. First, the high awareness and positive attitudes among female students provide a foundation upon which to build. Students are not resistant to sex education; rather, they recognise its value and desire access to quality information. Interventions should leverage this positive orientation by involving students as partners in program design and peer education initiatives.

Second, the critical barriers identified, particularly poor parent-child communication and religious opposition, require interventions that engage families and faith communities. Schools cannot succeed alone; parents need support to develop communication skills and comfort in discussing sexuality with their adolescents. Faith leaders need opportunities to understand that comprehensive sex education, when delivered appropriately, supports rather than undermines the values they seek to promote.

Third, teacher training must be prioritised. The finding that nearly 90% of respondents identified inadequate teacher preparation as a barrier suggests that students are perceptive observers of teacher discomfort and incompetence in this area. Pre-service and in-service training should address not only knowledge but also attitudes, communication skills, and strategies for handling sensitive topics.

Fourth, curriculum overload must be addressed through policy advocacy. If sex education remains an add-on topic squeezed into an already crowded timetable, implementation will continue to fail. Dedicated time within the school schedule, recognition of sexuality education as a priority area, and integration across relevant subjects are needed.

Limitations of the Study

Several limitations should be considered when interpreting these findings. First, the study was conducted in a single secondary school in Abeokuta, which limits the generalizability of findings to other schools, regions, or populations. The school's specific characteristics (urban location, predominantly Yoruba student population) may have influenced results.

Second, the cross-sectional design captures attitudes and awareness at a single point in time and cannot establish causal relationships or track changes over time. Longitudinal research would provide valuable insights into how attitudes evolve with age and experience.

Third, data were collected through self-report questionnaires, which are subject to social desirability bias. Respondents may have provided answers they perceived as acceptable rather than their true attitudes or experiences. The use of anonymous questionnaires likely mitigated but did not eliminate this bias.

Fourth, the relatively small sample size (n=100) may have limited statistical power for subgroup analyses. The response rate of 74.6%, while acceptable, raises the possibility of non-response bias if non-participants differed systematically from participants.

Fifth, the 4-point Likert scale (without a neutral option) may have forced respondents toward agreement or disagreement, potentially not capturing genuinely neutral perspectives. This design choice was made to avoid the central tendency bias common with 5-point scales, but may have its own limitations.

Sixth, the study did not explore the content or quality of sex education respondents had received, nor did it assess knowledge accuracy. High awareness of what sex education *is* does not necessarily mean respondents possess accurate knowledge about sexual health topics. Future research should assess both awareness and knowledge.

Finally, the study focused exclusively on female students, limiting understanding of male adolescents' perspectives. Given that sex education concerns both genders, research including male students is essential.

Despite these limitations, the study provides valuable insights into female adolescents' perspectives in an under-researched context and identifies specific barriers that can inform intervention design.

Conclusion

This study demonstrates that female secondary school students in Abeokuta possess high awareness and generally positive attitudes toward sex education. They recognise its

comprehensive nature, encompassing intimacy, relationships, and identity, and appreciate its potential to enhance self-esteem, communication skills, and responsible behaviour. This positive orientation provides a strong foundation for school-based interventions.

However, the study also reveals formidable barriers that currently impede effective implementation. Poor parent-child communication, religious opposition, inadequate teacher training, insufficient staffing, and an overloaded curriculum collectively create an environment where adolescents' desire for information goes unmet. The near-universal recognition of these barriers by respondents themselves underscores their significance and urgency.

The disconnect between adolescents' positive attitudes and the barriers they face highlights a missed opportunity. Young women in Nigerian secondary schools want and need comprehensive sexuality education, yet cultural sensitivity, institutional constraints, and family dynamics prevent them from accessing it. Addressing this gap requires moving beyond simply acknowledging the importance of sex education to implementing concrete, multi-level interventions that engage families, train teachers, allocate curriculum time, and work constructively with religious communities.

Without such comprehensive efforts, female adolescents will continue to navigate the critical transition through puberty and into sexual maturity with inadequate information and support, placing them at increased risk of negative sexual and reproductive health outcomes. The voices of the young women in this study are clear: they are ready and willing to learn; it is the adults and institutions around them that must rise to meet their needs.

Based on the findings of this study, the following recommendations are proposed for different stakeholders:

For Schools and Educational Authorities

Comprehensive Teacher Training: Develop and mandate pre-service and in-service training programs on comprehensive sexuality education for all secondary school teachers. Training should address knowledge, attitudes, communication skills, and strategies for handling sensitive topics. Given that 89% of respondents identified inadequate teaching staff and 88% cited insufficient training, this is a priority intervention.

Dedicated Curriculum Time: Advocate for dedicated time within the school timetable for age-appropriate sexuality education, rather than treating it as an add-on topic. With 74% of respondents citing curriculum overload as a barrier, integration across relevant subjects (biology, social studies, civic education) with protected time is essential.

School-Based Support Systems: Establish school health clubs, peer education programs, and access to school counsellors or nurses who can provide accurate information and support. Students need trusted adults within the school environment with whom they can discuss sensitive topics.

Gender-Inclusive Programming: While this study focused on females, programs should be designed for and include male students, addressing their specific needs and perspectives while promoting gender-equitable attitudes.

For Parents and Families

Parent Education Programs: Develop community-based programs that equip parents with knowledge, skills, and confidence to discuss sexual health topics with their adolescents. Given that 97% of respondents identified poor parent-child communication as a barrier, this is the most critical area for intervention.

Open Communication Training: Provide specific guidance on moving from directive communication ("commands without explanation," reported by 73%) to open, age-appropriate dialogue that invites questions and respects adolescents' growing autonomy.

Intergenerational Dialogue: Facilitate community dialogues that bring parents, adolescents, and community leaders together to discuss sexuality education, address concerns, and build consensus on appropriate approaches.

For Religious and Community Leaders

Engagement and Dialogue: Engage faith leaders in understanding that comprehensive sexuality education, when delivered appropriately, supports adolescent well-being without undermining religious values. With 94% identifying religious opposition as a barrier, constructive engagement with faith communities is essential.

Faith-Based Approaches: Develop and support faith-based approaches to sexuality education that integrate religious teachings with accurate health information, recognising that many adolescents and families prefer information delivered within their faith framework.

Community Mobilisation: Mobilise community leaders as champions for adolescent sexual health, helping to address the perception of sex education as a sensitive topic (98%) and reducing stigma around adolescent access to information.

For Policymakers

Policy Implementation Support: Move beyond policy formulation to active implementation support, including funding, monitoring, and accountability mechanisms for school-based sex education.

Multi-Sectoral Collaboration: Foster collaboration between education, health, and youth development sectors to ensure comprehensive, coordinated approaches to adolescent sexual health.

Research and Evaluation Funding: Allocate resources for ongoing research to monitor adolescent sexual health indicators, evaluate intervention effectiveness, and track changes in attitudes and awareness over time.

For Future Research

Mixed-Methods Studies: Conduct qualitative research (focus groups, in-depth interviews) to explore the meanings behind quantitative findings and understand the lived experiences of adolescents navigating sexuality education.

Inclusive Sampling: Include male students, out-of-school adolescents, and diverse geographical locations to provide a comprehensive understanding of adolescent perspectives across Nigeria.
Intervention Research: Design and evaluate interventions addressing the multiple barriers identified, particularly parent-child communication and teacher training, to identify effective strategies.
Longitudinal Studies: Track changes in attitudes and awareness as adolescents mature and as policies and programs evolve, providing evidence for causal relationships and developmental trajectories.

Abbreviations

A: Agree
AIDS: Acquired Immunodeficiency Syndrome
CSE: Comprehensive Sexuality Education
D: Disagree
HIV: Human Immunodeficiency Virus
N: Frequency/Number
N: Total Sample Size
SA: Strongly Agree
SD: Strongly Disagree
SD: Standard Deviation
SPSS: Statistical Package for Social Sciences
SS1: Senior Secondary School Class 1
SS2: Senior Secondary School Class 2
SS3: Senior Secondary School Class 3
UNESCO: United Nations Educational, Scientific and Cultural Organisation
%: Percentage

Declarations

Ethics Approval and Consent to Participate: Ethical approval for the study was obtained from the Administration and Research Ethics Committee of the selected secondary school in Abeokuta, Ogun State. A formal proposal was submitted through the Department of Nursing, Crescent University, Abeokuta, after obtaining approval from the research supervisor. Participation in the study was voluntary, and written informed consent was obtained from all student respondents and their guardians where applicable. Confidentiality and anonymity of participants were ensured, as no personal identifying information was collected.
Data Availability: Data supporting this study are available upon request.
Competing Interests: None declared.
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Author contributions: OOO conceived the study, performed data curation and investigation, and prepared the original draft. OOO also led supervision and validation efforts. ORO contributed to the study methodology, managed project administration, and provided resources and visualisation. Both OOO and ORO critically revised and edited the manuscript. All authors approved the final version of the manuscript and agree to be accountable for all aspects of the work.
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