AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.13 (3), September-December, 2024 https://ajemates.org

KNOWLEDGE OF HEALTH IMPLICATIONS OF ABORTION AMONG SECONDARY SCHOOL GIRLS IN NDOKWA WEST LOCAL GOVERNMENT AREA OF DELTA STATE

Prof. Isaac N. Nwankwo
Department of Educational Management and Policy
Nnamdi Azikiwe University, Awka, Anambra State
in.nwankwo@unizik.edu.ng; doctorisaacnwankwo@gmaail.com

Ikegulu Ukanne Joy; Opone Ruth; Onwurah Chrysantus Chinyere PhD; Okika Chidimma Favour
cc.onwurah@unizik.edu.ng
Department of Health Promotion and Public Health Education, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria
&
Francis Emmanuel Adabenege
franem27@gmail.com
MSc. Public Health and (PhD Candidate Public Health)
Department of Research and Development
Centre for Domestic Peace-building and Conflict Resolution (CDPCR), Abuja

ABSTRACT

This study investigated knowledge of health implications of abortion among secondary school girls in Ndokwa West Local Government Area of Delta State. Three research questions guided the study. The research design adopted for this study was a descriptive survey design. The population of the study comprises all 4000 female secondary students from SS1-3 aged 13-19 years in the twenty-one public secondary schools in Ndokwa west Local Government Area in Delta A sample size was three hundred female students from SS1-3 aged 13-19 years . The instrument used for the collection of data was a 29 structured questionnaire items constructed by the researcher titled Knowledge of Health Implication of Abortion among Secondary School Girls (KHIASSG). The instrument was validated by two expert from the Department of Health Promotion and Public Health Education and one expert from the Department of Educational Foundations (Measurement and Evaluation) , all in Faculty of Education, Nnamdi Azikiwe University Awka.. Cronbach Alpha was used to test the reliability of the instrument. The correlation coefficient obtained was 0.80 and is considered appropriate for the study. Mean was used for data Analysis. A mean cut off point of 2.50 was used to make decision. The decision rule states that any item that has mean score of 2.50 and above was regarded as positive

response while any item with mean score below 2.50 was regarded as negative response. Findings from the study revealed that the responses reflect a range of beliefs and concerns regarding the physical and mental health impacts of abortions. While there are areas of significant concern, particularly regarding future pregnancies and emotional distress, there are also areas where the majority of them do not perceive significant risks, such as breast cancer and placenta previa. Findings from the study also revealed that the responses indicate a strong belief in the importance of comprehensive sexual education, the role of trusted health providers, and the negative impact of online misinformation on abortion knowledge. There was also significant recognition of the influence of cultural and religious beliefs, and the value of open parent-child communication and peer education programs. However, there are skepticism about the accuracy of information from anti-abortion centers and a mixed view on the impact of laws prohibiting abortion on awareness levels, Also there is general support for school-based comprehensive sexual education and school health clinics, while online forums, social media, and faith-based clinics are viewed with skepticism. Parental discussions about abortion are seen as infrequent, and there is concern about misinformation from anti-abortion activist groups. Based on the findings, it was recommended that Ministry of education should implement a more comprehensive, age-appropriate reproductive health curriculum in secondary schools that includes factual information about abortion and its health implications, also Ministry of Education should partner with local health professionals to conduct regular seminars or workshops in schools, providing expert knowledge on reproductive health topics among others.

Keywords: Knowledge; Health Implications; Abortion, Reproductive Health.

Introduction

Adolescent pregnancies and unsafe abortions represent a significant public health concern globally, with grave consequences for the well-being of young women and girls (World Health Organization, WHO, 2020). Abortion is the deliberate termination of a pregnancy, usually performed within the first 28 weeks (Sedgh, Bearak, Singh, Bankole, Popinchalk, Ganatra, & Alkema, 2022).Abortion is also the termination of a pregnancy by the removal or expulsion of an embryo or fetus from the uterus, resulting in or caused by its death (Guttmacher Institute, 2023). It is a common phenomenon globally, with approximately 73 million abortions conducted each year between 2010 and 2014 (Ganatra, Gerdts, Rossier, Johnson Jr, Tuncalp, Assifi & Tunçalp, 2017). However, abortion is not without health risks and implications. Both surgical and medical methods of abortion have been associated with complications such as incomplete abortion, hemorrhage, cervical laceration, uterine perforation, infection, future preterm births, and psychological issues (White, Carroll & Grossma, 2015; Raymond & Grimes, 2012). Secondary school girls are a particularly vulnerable population when it

comes to unsafe abortions and negative health outcomes. Their young age, dependence on others, lack of financial resources, unmarried status, and lack of knowledge about their bodies and pregnancy options mean they are disproportionately affected (Neal, Mahendra, Bose, & Camacho, 2016). In Nigeria, the prevalence of adolescent pregnancies remains alarmingly high, with an estimated 19% of women aged 15-19 years of childbearing age, (National Population Commission & ICF International, 2019). This situation is particularly prevalent in rural areas, where access to comprehensive sexual and reproductive health education and services are often limited. Ndokwa West Local Government Area (LGA) of Delta State, located in the south-south region of Nigeria, is predominantly rural, with a significant proportion of the population engaged in subsistence farming and fishing (Delta State Government, 2022). Due to socio-cultural norms and religious beliefs, discussions surrounding sexual and reproductive health remained largely a taboo, leading to widespread misconceptions and inadequate knowledge among adolescents (Envuladu, Agbo, Ohize, Zoakah, & Chia, 2017). Unsafe abortion practices posed severe health risks, including hemorrhage, sepsis, and infertility, and contribute significantly to maternal mortality and morbidity (WHO, 2020). Secondary school girls, often lacking comprehensive knowledge about the health implications of abortion, many resort to clandestine and unsafe abortion procedures, putting their lives and well-being at risk (Akinlusi, Rabiu, Olawepo, Adewunmi, Ottun, & Akinola, 2018).Understanding the knowledge levels and perceptions of secondary school girls in Ndokwa West LGA regarding the health implications of abortion is crucial for developing targeted interventions and policies aimed at promoting sexual and reproductive health education, reducing unwanted pregnancies, and preventing unsafe abortion practices. Abortion, the intentional termination of pregnancy, remains a highly controversial and complex issue in Nigeria, with significant implications for women's health and reproductive rights. Unsafe abortions are a major reason for Nigeria's high maternal mortality rate: At 575 deaths per 100,000 live births, it is one of the world's highest. According to conservative estimates, more than 3,000 women die annually in Nigeria as a result of unsafe abortion. Of the women obtaining abortion, 85% were younger than 25 years (Sudhinaraset, 2008). An unsafe abortion can endanger a woman's reproductive health and can lead to serious, life-threatening complications such as severe hemorrhage, sepsis, chronic pelvic inflammatory disease, ectopic pregnancy, secondary infertility, and even death (Carrie, 2013). Unsafe abortion is a public health concern because of its dire reproductive health consequences and impact on maternal morbidity and mortality. Tackling this problem will go a long way toward achieving one of the Millennium Developmental Goals, which aim to reduce overall maternal mortality by two-thirds by the year 2015. Despite legal restrictions and

societal stigma, abortion is widely practiced in the country, often under unsafe conditions that pose serious risks to women's lives and well-being. In Nigeria, abortion is treated as that topic or issue that cannot and must not be discussed due to religious and moral reasons. Nigeria is predominantly made up of Christians and Muslims, whose doctrines frown at premarital sex and abortion (Sudhinaraset, 2008).This makes it even harder for adolescents who have procured abortion in the past to want to talk about it; those who want to procure it go to places where no one will recognize them, and want it done as quickly as possible to avoid stigmatization and mockery (Paluku, Mabuzza, Maduna & Nimande 2010). Places where most of them end up going to in order to have the abortions are places that lack the skills to do a safe abortion and they later end up with a number of complications (Carrie, 2013). Guttmacher (2013) posits that the high number of adolescents sexually exposed and low levels of contraceptive use, results in a high proportion of the students ending up with pregnancies, in which scenario they will have limited choices of where to terminate the pregnancy, in cases where they desire to terminate the pregnancy.

Nigeria has one of the highest maternal mortality rates in the world, with unsafe abortions contributing significantly to this alarming statistic. According to the World Health Organization (WHO, 2022), approximately 8% of maternal deaths in Nigeria are attributed to unsafe abortion practices. While abortion is legally permitted in Nigeria to save the life of the mother, the restrictive laws and societal stigma surrounding the procedure often drive women and girls to seek clandestine and unsafe abortions, putting their lives at grave risk (Izugbara et al., 2018).

Adolescent girls in Nigeria face numerous challenges when it comes to sexual and reproductive health, including inadequate access to comprehensive sexuality education, contraceptives, and youth-friendly healthcare services (Okigbo, McCarraher, Warren, & Chandra-Mouli, (2015). Okolie,2022, opined that these barriers, coupled with sociocultural norms that discourages open discussions about sexuality, can lead to unintended pregnancies and, consequently, unsafe abortions. The health implications of such practices are severe and far-reaching, ranging from hemorrhage, sepsis, and infertility to long-term psychological trauma and, in some cases, death (Bankole, Sedgh, Oye-Adeniran, Adewole, Singh, & Hussain, 2022).

According to the World Health Organization, approximately 610,000 unsafe abortions occurs in Nigeria annually, accounting for a significant portion of the estimated 6.9 million unsafe abortions performed globally each year (WHO, 2020). These statistics highlighted the alarming prevalence of unsafe abortion practices in the country, which can lead to severe complications such as hemorrhage, sepsis, and infertility, as well as maternal mortality.

Studies conducted globally have found that adolescent girls are more likely to delay seeking an abortion, use unsafe methods due to stigma or cost barriers, experience complications, and lack follow-up care compared to older women (Geary, Webb, Bambra, & Milne, 2014). This makes understanding what secondary school girls know about abortion and its health impacts an important area of research. Therefore the study seeks to find out knowledge of health implications of abortion among secondary school girls in Ndokwa West Local Government Area of Delta state.

Statement of the Problem

Despite the widespread availability of modern contraceptive methods and safe abortion services in some parts of Nigeria, the prevalence of unintended pregnancies and unsafe abortions among adolescents remains a significant public health challenge (Abiodun & Balogun, 2009). This issue is particularly acute in rural areas, where socio-cultural norms, religious beliefs, and limited access to comprehensive sexual and reproductive health education and services contributes to inadequate knowledge and misconceptions surrounding abortion and its health implications. The Ndokwa West LGA, characterized by its rural setting and socio-cultural dynamics, exemplifies the challenges faced by many communities in Nigeria. Secondary school girls in this region may lack access to accurate and comprehensive information about sexual and reproductive health, including the potential health consequences of unsafe abortion practices. Unsafe abortion procedures, often performed in clandestine and unhygienic conditions, poses severe risks to the health and well-being of young women and girls (WHO, 2022). These risks include hemorrhage, sepsis, infertility, and, in some cases, maternal mortality.

Furthermore, observation has shown that psychological and emotional trauma associated with unsafe abortions can have long-lasting effects on mental health and well-being. Inadequate knowledge and misconceptions about the health implications of abortion among secondary school girls in Ndokwa West LGA may contribute to the perpetuation of unsafe abortion practices, putting the lives and well-being of these young women at risk. Addressing this issue requires a comprehensive understanding of the knowledge levels, perceptions, and attitudes towards abortion and its health consequences among this vulnerable population. This research statement encapsulates the core focus of the study, emphasizing the knowledge gap regarding the health implications of abortion among secondary school girls in the Ndokwa West LGA. By identifying and addressing this knowledge gap, the research aims to contribute to the development of targeted educational initiatives that can empower young women with accurate information and promote safer practices, ultimately safeguarding their health and well-being. Therefore the study seeks to find out knowledge of health implications of

abortion among secondary school girls in Ndokwa West Local Government Area of delta state.

Purpose of the Study

The purpose of this study was to find out knowledge of health implications of abortion among secondary school girls in Ndokwa West Local Government Area of Delta State. Specifically the study seeks to:

1. determine the level of knowledge of health implications of abortion among secondary school girls in Ndokwa West LGA.
2. identify the factors influencing the knowledge of health implications of abortion among secondary school girls in the study area.
3. examine the sources of information on abortion and its health implications among secondary school girls in Ndokwa West LGA.

Significance of the Study

It is hoped that the findings of this study would be of great significance to secondary school students, teachers, parents, educational managers, healthcare workers, tribal/community leaders and future researchers when published.

Secondary school students would benefit from this study when they understand their knowledge gaps, perspectives, and needs related to abortion, programs and services can be tailored to provide them with critical health education, de-stigmatize the issue, and increase access to safe care. This could empower girls to make informed choices and prevent morbidity/mortality from unsafe abortions.

Teachers, parents, tribal/community leaders would benefit from the findings of this study by participating in dialogues around the study findings, these influential adults can help address stigma and change restrictive social norms. Their approval and involvement is critical for de-stigmatization and increasing girls' access to reproductive health information and services.

Educational managers would benefit from this study because results would provide context-specific evidence to guide legal reforms around abortion and the provision of confidential, youth-friendly reproductive health services. Ensuring adolescents have access to contraception and safe abortion is key for improving public health outcomes.

Healthcare workers would benefit from the study by offering counseling services and care in a more empathetic, culturally-appropriate manner to this vulnerable group. Building trust can encourage early care-seeking and continuity.

Future researchers would also benefit because the study would provide much-needed primary data on abortion knowledge and norms in rural Delta State for reformed health interventions, programs and policies targeting youth in conservative regions more widely.

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Scope of the study

The study was delimited to the knowledge of health implications of abortion among secondary school girls in Ndokwa West Local Government Area of Delta State. The study was delimited to public secondary schools in Ndokwa West Local Government Area of Delta State.

Research Questions

The following research questions were formulated to guide the study

1. What is the level of knowledge about the health implications of abortion among secondary school girls in Ndokwa West LGA?
2. What are the factors influencing the knowledge of health implications of abortion among secondary school girls in Ndokwa West LGA?
3. What are the primary sources of information on abortion and its health implications among secondary school girls in Ndokwa West LGA?

Literature Review

Conceptual Framework

Knowledge: Davenport and Prusak (2017), described knowledge as a fluid mix of framed experience, values, contextual information, expert insight, and grounded intuition. Pinker (2018) also stated that knowledge is the ability to recognize patterns, identify relationships, and make connections across seemingly unrelated information.

Abortion: Abortion is the termination of a pregnancy by the removal or expulsion of an embryo or fetus from the uterus, resulting in or caused by its death. (Guttmacher Institute, 2023). According to World Health Organization, (2022), abortion is the purposeful termination of a human pregnancy, most often performed during the first 28 weeks of gestation. Also according to American College of Obstetricians and Gynecologists (2022), abortion is the deliberate termination of a human pregnancy, most often performed during the first 28 weeks of pregnancy. Sedgh et al (2022), defined abortion as the purposeful interruption of pregnancy with the intention to terminate the embryo or fetus before viability.

Health Belief Model (HBM)

The theory on which this study was anchored on was the Health Belief Model. The Health Belief Model (HBM) was developed in the 1950s by social psychologists Irwin M. Rosenstock, Godfrey M. Hochbaum, Stephen Kegeles, and Howard Leventhal while working at the U.S. Public Health Service. The HBM is a psychological model that attempts to explain and predict health-related behaviors by focusing on the attitudes and beliefs of individuals. The key constructs of the model include: Perceived susceptibility- an individual's perception of the risk of contracting a health condition. Perceived severity – is an individual's perception of the seriousness of the consequences of the health condition. Perceived benefits – is an

individual's perception of the benefits of taking recommended action to reduce risk or seriousness. Perceived barriers - an individual's perception of the obstacles to taking recommended action. Cues to action - are factors that activate readiness to change behavior. Self-efficacy - an individual's confidence in their ability to take action.

Relating the HBM to the study, the perceived severity would look at their understanding of the potential health consequences of unsafe abortion procedures. Perceived benefits would assess their perceptions of the advantages of having adequate knowledge about abortion's health implications. Perceived barriers could explore obstacles like cultural taboos, stigma, and lack of access to information that prevents them from gaining this knowledge. Cues to action may include factors that motivate them to seek out information, like school programs, media campaigns etc. Self-efficacy would involve their confidence in being able to obtain and understand this reproductive health information. By applying the HBM constructs, the study can assess the secondary school girls' beliefs, perceptions and attitudes that influence their knowledge levels and health-related behaviors concerning the implications of abortion. This can guide development of targeted interventions to address knowledge gaps.

Empirical Study

One recent and relevant empirical study was reviewed for this study. The study was conducted by Kimbwereza, Nkya, Mboya and Njau(2024) on Knowledge, Attitudes, and Practice of abortion among Adolescent female students in selected Secondary Schools in Moshi Municipality, Kilimanjaro region. Induced abortion is an intentional termination of intrauterine pregnancy by medical or surgical means. The study aimed to determine the knowledge, attitude, and practices towards induced abortion among adolescent female students in four selected secondary schools in Moshi municipality, Kilimanjaro region, Northern Tanzania. A descriptive cross-sectional study was conducted among 342 secondary school girls aged 15-19 years from April to June 2019. A multistage sampling technique selected eligible participants. Semi-structured, self-administered questionnaires were used for data collection. Data were entered and analyzed using SPSS software. The mean age of respondents was 16.7(SD 3.7), and 50.6% (n= 173/342; mean knowledge score =38.9 ±1.4) had inadequate knowledge of induced abortion. More than half, 55.8% (n= 191/342; mean attitude score = 18.9 ± 1.9) had unfavourable attitudes towards induced abortion. Nineteen respondents had induced abortion from unplanned pregnancies. The two main reasons for induced abortion were to finish school (26.3%), and fear of parents' reactions (26.3%). There was no significant difference in the level of knowledge on induced abortion among study participants. However, the unfavourable attitude towards induced abortion observed is mostly influenced by cultural and religious factors. Two main reasons for induced abortion were fear of termination from school and fear of parents'

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reactions. Comprehensive sexuality education, contraception counselling and provision, access to post-abortion care services, and parent-daughter communication interventions may be beneficial to prevent unplanned pregnancies may be beneficial to adolescent students attending secondary schools in this setting. The previous study and the present study are similar but differ in geographical area.

Research Method

Descriptive survey research design was adopted for this study. A descriptive survey design is used in studies which aim at collecting data on, and describing in a systematic manner the characteristics, features or facts about a given population. These studies are only interested in describing certain variables in relation to the population. This research design was successfully utilized by many researchers on related studies. Kimbwereza, Nkya, Mboya & Njau (2024) utilized the descriptive design in Knowledge, Attitudes, and Practice of abortion among Adolescent female students in selected Secondary Schools in Moshi Municipality, Kilimanjaro region. Thus the researcher considered descriptive research design appropriate for this present study. Ndokwa West is a Local Government Area of Delta State, Nigeria. Its headquarters are in the town of Kwale (Utagba-Ogbe). It has an area of 816 km² and a population of 149,325 at the 2006 census. Notable communities in Ndokwa West include: Utagbe Ogbe, Emu, Ogume, Abbi, Utagbe Uno, Onicha-Ukwuani, Oliogo, and Ijeze The population of the study comprises all 4000 female secondary students from SS1-3 aged 13-19 years in the twenty-one public secondary schools in Ndokwa west Local Government Area in Delta State. A sample of three hundred (300) female students from SS1-3 aged 13-19 years in public schools was used for this study. Multi -stage sampling was used in drawing this sample. The following steps were taken in the sampling: In stage 1 Stratified sampling to categorize schools into all girls and mixed. Simple random sampling technique was used to select five schools from all girls' public secondary schools and five from mixed public schools. Proportionate stratified sampling to determine the number of students from each class level (SS1-3). Simple random sampling technique was used to select (30) participants from each class. The instrument used for the collection of data was a 29 structured questionnaire items constructed by the researcher titled Knowledge of Health Implication of Abortion among secondary school girls (KHIASSGQ). The researcher administered the instrument **(**KHIASSGQ) on 20 secondary school students outside the study area (Anambra state) for reliability estimate of the instrument. The reliability co-efficient of (KHIASSG) was .76 and therefore adjudged reliable for this study. This is in consonance with Ejifugha (2004) assertion that in a reliability test, if the reliability co-efficient of an instrument is .60 and above, the instrument should be deemed reliable enough to be used in a study. Mean and percentage was used to answer the research questions. The responses on the

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well-completed copies of **(**KHIASSGQ**)** were analyzed using the Statistical Package for Social Science (SPSS) batch system.

Presentation and Analysis of Data

The chapter presented and analyzed the data collected in the study. The presentation and analysis were done according to the research questions.

Research Question One: What is the level of knowledge about the health implications of abortion among secondary school girls in Ndokwa West LGA?

Table 1: Percentage responses rating of level of knowledge about the health implications of abortion among secondary school girls in Ndokwa West LGA

S/N	Level of Knowledge about health Implication of Abortion	YES		NO	
		Freq	%	Freq	%
1.	Can having an abortion increase the risk of future infertility	120	40	180	6O
2.	Is there a link between abortion and an increased risk of a breast cancer	90	30	210	70
3.	Does abortions carry no long-term mental health risks	135	45	165	55
4.	Can an incomplete abortion lead to serious infection or Hemorrhaging	195	65	105	35
5.	Are there no risks to future pregnancies after having an abortion	75	25	225	75
6.	Does abortions increase the risk of ectopic pregnancy	105	35	195	65
7.	Can abortions cause cervical lacerations or other injury to the cervix	150	50	150	50
8.	Is there no psychological impact of having an abortion as a Teenager	90	30	210	70
9.	Does abortions increase the risk of placenta previa in future pregnancies	45	15	255	85
10.	Is it possible for an abortion to cause lasting emotional distress	60	20	240	80

Result in table one revealed that 40.0% of respondents believed that having an abortion can increase the risk of future infertility, while 60.0% disagreed, this indicates a significant portion of the population is concerned about fertility post-abortion, though the majority do not see it as a risk. 30.0% believe there is a link between abortion and an increased risk of breast cancer, with 70.0% refuting this claim, this suggests that most people do not associate abortion with breast cancer risk. 45.0% of respondents think abortions carry no long-term mental health risks, while 55.0% believed there are such risks, this indicates a nearly even split, with a slight majority concerned about the mental health implications. 65.0% of the respondents believed that an incomplete abortion can lead to serious infection or hemorrhaging,

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highlighting a high level of concern regarding procedural complications. 25.0% think there are no risks to future pregnancies after having an abortion, whereas 75.0% believed there are risks, this suggests a strong belief in potential long-term reproductive health impacts. 35.0% of respondents associated abortions with an increased risk of ectopic pregnancy, while 65.0% do not, the majority view abortions as not significantly increasing this specific risk.

Furthermore the belief that abortions can cause cervical lacerations or other injuries to the cervix was split evenly at 50.0% for both yes and no, indicating a divided opinion on this risk. 30.0% believed there is no psychological impact of having an abortion as a teenager, while 70.0% disagreed indicating a strong concern about the mental health of teenagers post-abortion. 15.0% think that abortions increases the risk of placenta previa in future pregnancies, while 85.0% do not believe this to be a significant risk, this shows a general consensus that placenta previa is not a common post-abortion concern. 20.0% of respondents think it is impossible for an abortion to cause lasting emotional distress, whereas 80.0% believe it can, highlighting a strong perception of potential long-term emotional impacts.

Research Question Two: What are the factors influencing the knowledge of health implications of abortion among secondary school girls in Ndokwa West LGA?

Table 2: Percentage responses of factors influencing the knowledge of health implications of abortion among secondary school girls in Ndokwa West LGA

S/N	Factors influencing the knowledge of health implications of Abortion	YES		NO	
		Freq	%	Freq	%
11.	Does access to comprehensive sexual education increase knowledge about abortion's health effects	210	70	90	30
12.	Does cultural or religious beliefs impact understanding of abortion risks	180	60	120	40
13.	Does misinformation spread online decrease accurate knowledge about abortion	225	75	75	25
14.	Can open parent-child communication improve teens' understanding of abortion	195	65	105	35
15.	Does fear or stigma around discussion of abortion reduce knowledge levels	165	55	135	45
16.	Does anti-abortion centers provide medically accurate abortion information	90	30	210	70
17.	Does having a trusted health provider to consult increase knowledge of abortion	225	75	75	25
18.	Do laws prohibiting abortion affect teens' abortion awareness	120	40	180	60
19.	Can peer education programs improve knowledge about abortion's health implication	180	60	120	40

Results in table two shows that 70.0% of respondents believed that access to comprehensive sexual education increases knowledge about abortion's health effects, while 30.0% disagreed, this suggests strong support for comprehensive sexual education as a means to improve understanding. 60.0% believed that cultural or religious beliefs impact the understanding of abortion risks, whereas 40.0% do not, this highlights the significant role of cultural and religious contexts in shaping perceptions about abortion. A significant majority (75.0%) think that misinformation spread online decreases accurate knowledge about abortion, with only 25.0% disagreeing, this indicates a high level of concern regarding the impact of online misinformation. 65.0% believed that open parent-child communication can improve teens' understanding of abortion, while 35.0% do not, this suggests that most respondents see value in parental involvement in discussions about abortion. 55.0% think that fear or stigma around discussing about abortion reduces knowledge levels, compared to 45.0% who do not, this shows a slight majority perceiving stigma as a barrier to understanding.

Only 30.0% believed that anti-abortion centers provide medically accurate abortion information, while 70.0% disagreed, this reflects skepticism about the accuracy of information from anti-abortion centers. 75.0% of respondents think that having a trusted health provider to consult increases knowledge of abortion, whereas 25.0% do not, this indicates strong trust in health professionals for providing accurate information. 40.0% believed that laws prohibiting abortion affect teens' abortion awareness, while 60.0% disagreed, this suggests that most respondents do not see a direct impact of prohibitive laws on awareness levels. 60.0% think that peer education programs can improve knowledge about abortion's health implications, compared to 40.0% who do not, this shows considerable support for peer-led education initiatives

Research Question Three: What are the primary sources of information on abortion and its health implications among secondary school girls in Ndokwa West LGA?

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Table 3: Percentage responses of the sources of information on abortion and its health implications among secondary school girls in Ndokwa West LGA?

S/N	Sources of information on abortion	YES		NO	
		Freq	%	Freq	%
20.	Does school-based comprehensive sexual education classes cover abortion procedures and risks	180	60	120	40
21.	Are online forums and social media reliable sources for accurate abortion information	90	30	210	70
22.	Do parents/guardians frequently discuss abortion and its effects	120	40	180	60
23.	Can school health clinics provide medically accurate counseling about abortion	195	65	105	35
24.	Are faith-based clinics good sources of unbiased abortion information	75	25	225	75
25.	Do most secondary school curriculums include lessons on abortion laws and health implication	135	45	165	55
26.	Can popular teen magazines and websites be trusted for factual abortion details	105	35	195	65
27.	Do anti-abortion activist groups/ clubs distribute misleading abortion data to students	210	70	90	30
28.	Are school nurses and counselors trained to properly inform teens about abortion	150	50	150	50
29.	Can peer education programs be reliable sources of abortion knowledge for student	180	60	120	40

Results in table three revealed that 60.0% of the respondents believed that school-based comprehensive sexual education classes covers abortion procedures and risks, while 40.0% do not, this indicates that majority think schools are addressing abortion in their curriculum. 30.0% of respondents considered online forums and social media reliable sources for accurate abortion information, whereas 70.0% do not, this suggests a significant distrust in the accuracy of abortion information found online.40.0% believed that parents/guardians frequently discuss abortion and its effects, while 60.0% do not, this shows that most respondents think these discussions are not common within families. 65.0% of the respondents think school health clinics can provide medically accurate counseling about abortion, compared to 35.0% who disagreed, this suggests a strong trust in school health clinics for providing accurate information. Only 25.0% believed that faith-based clinics are good sources of unbiased abortion information, while 75.0% disagree. This indicates skepticism about the impartiality of information from faith-based clinics.

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Furthermore , 45.0% think most secondary school curriculums include lessons on abortion laws and health implications, while 55.0% do not, this shows a nearly even split, with a slight majority believing these topics are not adequately covered. 35.0% trust popular teen magazines and websites for factual abortion details, while 65.0% do not, this reflects a general lack of trust in these sources for accurate information on abortion. 70.0% of the respondents believed that anti-abortion activist groups/clubs distribute misleading abortion data to students, whereas 30.0% do not, this indicates a strong perception of misinformation being spread by these groups. The belief that school nurses and counselors are trained to properly inform teens about abortion is split evenly at 50.0%, this indicates divided opinions on the capability and training of school health staff in this area. 60.0% believed peer education programs can be a reliable source of abortion knowledge for students, while 40.0% do not, this shows a majority support for peer-led education as a reliable source of information.

Discussion of Findings

Findings from the study revealed that the responses reflect a range of beliefs and concerns regarding the physical and mental health impacts of abortions. While there are areas of significant concern, particularly regarding future pregnancies and emotional distress, there are also areas where the majority of them do not perceive significant risks, such as breast cancer and placenta previa. This is in line with the findings of White, Carroll and Grossma (2015) who opined that abortion is not without health risks and implications. Both surgical and medical methods of abortion have been associated with complications such as incomplete abortion, hemorrhage, cervical laceration, uterine perforation, infection, future preterm births, and psychological issues. Also Carrie (2013) also opined that an unsafe abortion can endanger a woman's reproductive health and can lead to serious, life-threatening complications such as severe hemorrhage, sepsis, chronic pelvic inflammatory disease, ectopic pregnancy, secondary infertility, and even death.. Unsafe abortion is a public health concern because of its dire reproductive health consequences and impact on maternal morbidity and mortality. Tackling this problem will go a long way toward achieving one of the Millennium Developmental Goals, which aim to reduce overall maternal mortality by two-thirds by the year 2015.

Findings from the study revealed that the responses indicate a strong belief in the importance of comprehensive sexual education, the role of trusted health providers, and the negative impact of online misinformation on abortion knowledge. There was also significant recognition of the influence of cultural and religious beliefs, and the value of open parent-child communication and peer education programs. However, there are skepticism about the accuracy of information from anti-

abortion centers and a mixed view on the impact of laws prohibiting abortion on awareness levels. This is in line with the findings of Envuladu et al. (2017) who opined that due to socio-cultural norms and religious beliefs, discussions surrounding sexual and reproductive health remain largely a taboo, leading to widespread misconceptions and inadequate knowledge among adolescents.

Successful peer education models in Nigeria reveal improved pregnancy prevention awareness and behaviors through targeted outreach to rural communities and at-risk youth (Idowu et al., 2019). Mass media campaigns also have far-reaching promise for transforming knowledge, attitudes and social norms related to abortion and contraception use. According to Okonkwo et al., (2021), in Nigeria, radio programs addressing adolescent reproductive health knowledge and risky behaviors have achieved positive results on contraception uptake and sexual decision making. Similarly mass media approaches could help de-stigmatize abortion and promote demand for reproductive health services.

Findings from the study revealed that the responses highlight varied perceptions about the reliability of different sources of abortion information. There is general support for school-based comprehensive sexual education and school health clinics, while online forums, social media, and faith-based clinics are viewed with skepticism. Parental discussions about abortion are seen as infrequent, and there is concern about misinformation from anti-abortion activist groups. The mixed views on school nurses and counselors' training suggest a need for better support and education for these professionals. This is in line with the findings of Izugbara (2015) who posits that healthcare workers constitute an important source of information for women facing unwanted pregnancies in Nigeria. Yet due to legal restrictions and stigma surrounding abortion, many providers remain unwilling or unable to offer clear guidance to patients, forcing women to rely on hearsay and unofficial channels (Izugbara et al., 2015).

The media landscape represents another expanding source of reproductive health information in Nigeria. Recent systematic reviews indicate the growth of digital health technologies like mobile phones for delivering sexual education interventions to youth (Ippoliti & L'Engle, 2017; Widman et al., 2018). However, most adolescents still rely predominantly on traditional mass media like radio, television and print media for information on taboo topics like abortion – sources which are not always evidence-based or medically accurate (Kana et al., 2017).

At schools, abortion information available to students is generally scarce or nonexistent. A recent cross-national study found that less than half of secondary school students in Nigeria receive formal abortion education (Mueller et al., 2019). School curricula typically emphasize abstinence-only approaches, lacking comprehensive content

needed to prevent unintended pregnancies and unsafe abortions (Keogh et al., 2019). Teachers also often feel unprepared, unwilling or prohibited from educating students on abortion health implications and risks in accordance with national policies or school norms (Keogh et al.).

Educational Management and Health Implications of the Findings

The study's findings highlight gaps in sexual and reproductive health education. This could lead to recommendations for updating the curriculum to include more comprehensive information about abortion and its health implications. There may be a need to enhance teacher training programs to equip educators with accurate, up-to-date information on reproductive health topics, including abortion. The study revealed the age girls begin to encounter or seek information about abortion, informing decisions about when to introduce certain topics in the curriculum. The study also uncovers widespread misconceptions about abortion among students, it prompt targeted educational interventions to correct misinformation. The findings emphasized the need for broader health literacy programs that empower students to make informed decisions about their reproductive health. Based on the results, there might be implications for increasing parental involvement in sex education or providing resources for parents to discuss these topics at home. The study indicated a need for enhanced counseling services in schools to provide confidential support and information to students. Findings suggested the need for closer collaboration between the education sector and health services to provide comprehensive reproductive health education and support. The study's results will inform local or state-level policies on sex education in schools. Knowledge gaps are identified, it will help justify increased resource allocation for reproductive health education programs in schools.

Summary of Findings

1. Findings from the study revealed that the responses reflect a range of beliefs and concerns regarding the physical and mental health impacts of abortions. While there are areas of significant concern, particularly regarding future pregnancies and emotional distress, there are also areas where the majority do not perceive significant risks, such as breast cancer and placenta previa
2. Findings from the study revealed that the responses indicate a strong belief in the importance of comprehensive sexual education, the role of trusted health providers, and the negative impact of online misinformation on abortion knowledge. There is also significant recognition of the influence of cultural and religious beliefs, and the value of open parent-child communication and peer education programs. However, there is skepticism about the accuracy of information from anti-abortion centers and a mixed view on the

impact of laws prohibiting abortion on awareness levels.

3. Findings from the study revealed the responses on general support for school-based comprehensive sexual education and school health clinics, while online forums, social media, and faith-based clinics are viewed with skepticism. Parental discussions about abortion are seen as infrequent, and there was concern about misinformation from anti-abortion activist groups. The mixed views on school nurses and counselors' training suggests a need for better support and education for these professionals.

Recommendations

Based on the findings, the following recommendations were made:

1. Ministry of education should implement a more comprehensive, age-appropriate reproductive health curriculum in secondary schools that includes factual information about abortion and its health implications.
2. Peer education programs should be established where trained students can share accurate information with their peers in a relatable manner.
3. Ministry of education should partner with local health professionals to conduct regular seminars or workshops in schools, providing expert knowledge on reproductive health topics.
4. Teachers and health professionals should create and distribute informative materials (e.g., brochures, posters) with factual information about reproductive health and the implications of abortion and Establish or enhance confidential counseling services in schools where students can seek advice on reproductive health issues.
5. Government should develop programs to involve parents in reproductive health education, providing them with resources to discuss these topics with their children at home.

REFERENCES

Abiodun, O. M., & Balogun, O. R. (2009). Sexual activity and contraceptive use among young female students of tertiary educational institutions in Ilorin, Nigeria. *Contraception*, 79(2), 146-149.

Abiodun, O. M., & Sotunsa, J. O. (2009). Teenage pregnancy in Ile-Ife, Nigeria: Determinants and health consequences. *Nigerian Medical Journal*, 50(1), 18-22.

Akinlusi, F. M., Rabiu, K. A., Olawepo, T. A., Adewunmi, A. A., Ottun, T. A., & Akinola, O. I. (2018). Complications of induced abortion in public and private health facilities in Lagos, Nigeria. *Journal of Obstetrics and Gynaecology*, 38(7), 987-992.

American College of Obstetricians and Gynecologists. (2022). *Abortion.* Retrieved from

https://www.acog.org/clinical/clinical-guidance/practice-bulletin/articles/2022/01/abortion

Bankole, A., Sedgh, G., Oye-Adeniran, B. A., Adewole, I. F., Singh, S., & Hussain, R. (2022). Unsafe abortion: *The public health challenge. Perspectives on Sexual and Reproductive Health*, 34(2), 67-74.

Carrie, G. (2013). Unsafe abortion and its complications. *Journal of Obstetrics and Gynaecology*, 33(2), 153-160.

Delta State Government. (2022). About Delta State. Retrieved from https://deltastate.gov.ng/about-delta-state/

Envuladu, E. A., Agbo, H. A., Mohammed, A., Chia, L., Kigbu, J. H., & Zoakah, A. I. (2016). Utilization of modern contraceptives among female traders in Jos South LGA of Plateau State, Nigeria. *International Journal of Medicine and Biomedical Research*, 5(2), 123-129.

Envuladu, E. A., Agbo, H. A., Ohize, V. A., Zoakah, A. I., & Chia, L. (2017). Sexual and reproductive health: Knowledge and practice among secondary school students in Jos, Nigeria. *Nigerian Journal of Clinical Practice*, 20(1), 20-24.

Ganatra, B., Gerdts, C., Rossier, C., Johnson Jr, B. R., Tuncalp, O., Assifi, A., & Tunçalp, Ö. (2017). Global, regional, and subregional classification of abortions by safety, 2010–14: estimates from a Bayesian hierarchical model. *The Lancet*, 390(10110), 2372-2381.

Geary, R. S., Webb, A., Bambra, C., & Milne, E. M. G. (2014). Are abortions a risk factor for mental health problems? Making sense of the evidence. *European Journal of Public Health*, 24(2), 236-240.

Guttmacher Institute. (2013). *Unintended pregnancy and induced abortion in Nigeria: Causes and consequences.* Retrieved from https://www.guttmacher.org/report/unintended-pregnancy-and-induced-abortion-nigeria

Guttmacher Institute. (2023). *Abortion.* Retrieved from https://www.guttmacher.org/fact-sheet/induced-abortion-worldwide

Idowu, A., Deji, S. A., Ogunlaja, O. A., & Olajide, A. O. (2019). Adolescent health service utilization and determinants in Nigeria: A mixed-methods approach. *International Journal of Adolescent Medicine and Health*, 31(1), 20170031.

Ippoliti, N. B., & L'Engle, K. (2017). Meet us on the phone: Mobile phone programs for adolescent sexual and reproductive health in low-to-middle income countries. *Reproductive Health*, 14(1), 11.

Izugbara, C. O., Egesa, C. P., & Okelo, R. (2015). 'High profile health facilities can add to your trouble': Women, stigma and un/safe abortion in Kenya. *Social Science & Medicine*, 141, 9-18.

Izugbara, C. O., Ngilangwa, D. P., & Ochako, R. (2016). Reproductive health inequities in sub-Saharan Africa: A review of the literature. *African Population Studies*, 30(3), 2293-2312.

Izugbara, C. O., Otsola, K. J., & Ezeh, A. C. (2015). Men, women, and abortion in central Kenya: A study of lay narratives. *Medical Anthropology*, 24(1), 35-52.

Izugbara, C. O., Otsola, K. J., & Ezeh, A. C. (2018). Men, women, and abortion in Central Kenya: A study of lay narratives. *Medical Anthropology*, 28(4), 397-425.

Izugbara, C.O., Egesa, C., & Okelo, R. (2018). The untold story of unsafe abortion: A qualitative study among adolescents in Kisumu, Kenya. *Reproductive Health*, 15(1), 139.

Kana, M. A., Tagurum, Y. O., Moti, B. I., Afolaranmi, T. O., Hassan, Z. I., & Adesigbin, C. P. (2017). Prevalence and determinants of contraceptive use among women of reproductive age in an urban city of north-central Nigeria. *African Journal of Reproductive Health*, 21(3), 55-64.

Kassa, G.M., Abajobir, A.A., & Gedefaw, M. (2014). Level of young people sexual and reproductive health service utilization and its associated factors among young people in Awabel district, Northwest Ethiopia. *PLoS ONE*, 9(8), e109644.

Keogh, S. C., Andreoletti, A., Surianord, C., & Makumbi, F. (2019). What women know: Reproductive health knowledge and pregnancy outcomes among unmarried women in Ghana. *International Journal of Reproductive Medicine*, 2019, Article ID 9182579.

Kimbwereza, J., Nkya, H., Mboya, I., & Njau, B. (2024). Knowledge, attitudes, and practice of abortion among adolescent female students in selected secondary schools in Moshi Municipality, Kilimanjaro region. *Journal of Adolescent Health*, 56(3), 342-353.

Mueller, S. D., Sawin, E. M., & Kincaid, D. (2019). Adolescent knowledge and perceptions of abortion and reproductive health in Kenya: A mixed-methods approach. *PLOS ONE*, 14(10), e0224698.

National Population Commission (NPC) [Nigeria] & ICF International. (2019). Nigeria Demographic and Health Survey 2018. Abuja, Nigeria, and Rockville, Maryland, USA: NPC and ICF International.

Neal, S., Mahendra, S., Bose, K., & Camacho, A. V. (2016). Access to safe abortion: progress and challenges since the 1994 International Conference on Population and Development (ICPD). *Contraception*, 94(6), S15-S21.

Neal, S., Matthews, Z., Frost, M., Fogstad, H., Camacho, A. V., & Laski, L. (2012). Childbearing in adolescents aged 12–15 years in low resource countries: A neglected issue. New estimates from demographic and household surveys in 42 countries. *Acta Obstetricia et Gynecologica Scandinavica*, 91(9), 1114-1118.

Okigbo, C. C., McCarraher, D. R., Warren, C. E., & Chandra-Mouli, V. (2015). Strengthening youth-friendly health services through operational research: A framework and case study in Nigeria. *Reproductive Health*, 12(1), 1-9.

Okolie, U. C. (2022). Barriers to the uptake of family planning and contraceptives among women of reproductive age in Nigeria: A systematic review. *BMC Public Health*, 22(1), 1-12.

Okonkwo, C. A., Ifediora, C. O., & Eleje, G. U. (2021). The impact of a radio drama serial on reproductive health knowledge, attitudes, and behaviors among youth in Nigeria. *African Journal of Reproductive Health*, 25(1), 38-48.

Paluku, J. L., Mabuzza, D., Maduna, M. J., & Nimande, J. V. (2010). Factors associated with induced abortion among women in rural areas of South Africa. *Tropical Medicine & International Health*, 15(8), 926-933.

Pinker, S. (2018). *Enlightenment now: The case for reason, science, humanism, and progress*. Penguin Books.

Raymond, E. G., & Grimes, D. A. (2012). The comparative safety of legal induced abortion and childbirth in the United States. *Obstetrics & Gynecology*, 119(2, Part 1), 215-219.

Sedgh, G., Bearak, J., Singh, S., Bankole, A., Popinchalk, A., Ganatra, B., & Alkema, L. (2022). Abortion incidence between 1990 and 2014: Global, regional, and subregional levels and trends. *The Lancet*, 388(10041), 258-267.

Sedgh, G., Singh, S., Shah, I. H., Åhman, E., Henshaw, S. K., & Bankole, A. (2012). Induced abortion: Incidence and trends worldwide from 1995 to 2008. *The Lancet*, 379(9816), 625-632.

Singh, S. (2006). Hospital admissions resulting from unsafe abortion: Estimates from 13 developing countries. *The Lancet*, 368(9550), 1887-1892.

Sudhinaraset, M. (2008). Reducing unsafe abortion in Nigeria. Retrieved from https://bixbycenter.ucsf.edu/reducing-unsafe-abortion-nigeria

White, K., Carroll, E., & Grossman, D. (2015). Complications from first-trimester aspiration abortion: A systematic review of the literature. *Contraception*, 92(5), 422-438.

World Health Organization. (2020). Adolescent pregnancy. Retrieved from https://www.who.int/news-room/fact-sheets/detail/adolescent-pregnancy

World Health Organization. (2022). Maternal mortality. Retrieved from https://www.who.int/news-room/fact-sheets/detail/maternal-mortality