

Assessment of the Causes and Effects of Induced Abortion among Women of Reproductive Age

Oluwaseun R Omole¹, Edmund O Ezirim², Isaiah O Abali³, Patricia I Ejikem⁴, Debra U Okeh⁵, Lisa I Eweputanna⁶, Olufunmi AI Otuka³, Folasade Bello⁷ and Augustine I Airaodion^{8*}

¹Department of Community Health Nursing, West African College of Nursing and Midwifery, Lagos State, Nigeria

²Department of Obstetrics and Gynecology, Abia State University, Uturu, Nigeria

³Department of Surgery, Abia State University, Uturu, Nigeria

⁴Department of Community Medicine, Abia State University Teaching Hospital, Aba, Nigeria

⁵Department of Community Medicine, Federal Medical Centre, Umuahia, Abia State, Nigeria

⁶Department of Radiology, Abia State University Uturu, Abia State, Nigeria

⁷School of Nursing, Midwifery and Paramedic Practice, Robert Gordon University Aberdeen, Scotland, United Kingdom

⁸Department of Biochemistry, Federal University of Technology, Owerri, Imo State, Nigeria

***Corresponding Author:** Augustine I Airaodion, Department of Biochemistry, Federal University of Technology, Owerri, Imo State, Nigeria.

Received: March 17, 2023; **Published:** March 29, 2023

Abstract

This study was aimed at assessing the causes and effects of induced abortion among women of reproductive age. This was a cross-sectional study conducted in the Surulere local government area of Oyo State, Nigeria. The researcher used a randomized survey research design for this investigation. The study involved women aged 15 to 49 who met the inclusion requirements. A total of 383 questionnaires were administered to respondents and were all retrieved. Out of these, 370 questionnaires were valid. This was due to irregular, incomplete and inappropriate responses to some questions. These 370 questionnaires were validated for the analysis. The results showed that 78.11% of the respondents had aborted pregnancies in the past with 42.70% aborting once, and 26.49% having aborted twice. The results also showed that 67.84% of the respondents agreed that lack of funds was mainly responsible for women's engagement in abortion, 83.24% of the respondents agreed that unwanted pregnancy was mainly responsible for women's engagement in abortion, all the respondents agreed that rape or incest could make a woman abort her pregnancy, 74.32% of the respondents agreed that child spacing could make a woman abort her pregnancy while 72.17% of the study's population agreed that sex preference can make a woman abort her pregnancy. It was observed that 75.40% of the respondents agreed that induced abortion could lead to death among women, 63.25% of the respondents agreed that abortion could lead to secondary infertility among women, 69.46% of the study's respondents agreed that abortion could lead to ectopic pregnancy in subsequent pregnancies while 59.46% of the respondents agreed that abortion could cause damage to a woman's womb. The study's findings indicated that Nigeria has a very high rate of induced abortion. Unsafe abortion has life-threatening consequences for women, their families, and society as a whole.

Keywords: Abortion; Causes and Effects; Health Complications; Secondary Infertility; Unwanted Pregnancy

Introduction

Abortion is a significant contributor to maternal death statistics in Nigeria and is regarded as a serious public health issue [1]. Studies on this topic are numerous and rank highly on national and worldwide agendas due to the size of the field. Although abortion is common among underprivileged women and affects all social classes, young women are particularly at risk [2].

When they receive care tainted by prejudice and cruel treatment, women seeking abortions frequently travel a lengthy and lonely route, which corresponds to the heightened misery they endure in maternity hospitals [3]. Women with better socioeconomic standing typically choose safer medical procedures in private clinics; in contrast, impoverished women find it more difficult to get the assistance and knowledge offered by the public health network and also have less negotiating leverage with their intimate partners. When women are exposed to unhygienic conditions, the high hospitalization rate linked to abortion becomes a reality [4].

Unsafe abortion is a major issue that requires an immediate response. It significantly affects a woman's life and reproductive health [5]. The World Health Organization (WHO) defines an unsafe abortion as "a procedure for terminating an unintended pregnancy either by a person lacking the essential skills or in a setting lacking the minimal standard, or both" [5]. It is a major contributor to maternal morbidity and mortality worldwide, particularly in underdeveloped nations like Nigeria. Over 20 million unsafe abortions are carried out each year, the majority of them in poor nations with tight abortion legislation [6]. Every day, 550 unsafe abortions are carried out, according to the WHO [5].

Unsafe abortion is a big issue in Nigeria and accounts for 30 - 40% of the nation's maternal death rate. Even though there are no official statistics on abortion because of the restricted law, many women get abortions each year in the nation, and many of them end in death owing to complications [7,8]. Over 60% of abortions are performed by non-physicians, and most of those are carried out at private medical facilities or homes [6]. Nigeria only allows abortions if the woman's life is in danger; otherwise, both the lady and the abortionist risk serving a predetermined amount of time in prison. This rule implies that a woman who becomes pregnant unintentionally cannot have a safe abortion in a government facility; instead, she must employ the services of unlicensed quacks, which frequently have catastrophic unintended effects [6].

Serious medical effects from unsafe abortion, such as sepsis, bleeding, and damage to the uterus, intestines, or genital organs, are common [9]. If the woman survives, she may experience some severe connected issues, such as secondary infertility, persistent pelvic pain, and ectopic pregnancy, endangering her ability to conceive in the future and, consequently, her ability to support herself financially. Most of these issues are brought on by the fact that most abortions (68%) are performed in the second and late first trimesters, and just 20% are performed early in the first three months [10].

In Nigeria, unsafe abortion is a significant issue that doesn't get the attention it needs. It's important to fully comprehend the causes of unsafe abortion, reveal its social and health repercussions on a woman's life, and come up with solutions that work. Nonetheless, we must recognize the efforts made by a small number of pro-choice activists who are pushing for the state-by-state liberalization of abortion laws and the promotion of safer practices. Yet, due to Nigeria's strong religious tradition, even proponents of reproductive rights are wary of bringing up the subject for fear of jeopardizing the advancements made in other areas, such as access to contraception [11].

Sociocultural and religious views in Nigeria that consider abortion to be murder and subject those who perform it to severe punishments are additional aggravating factors [12]. These elements contribute to women seeking covert abortion services from private providers who, for the most part, lack training and use risky intrusive methods while performing procedures in unsafe settings [13]. Notwithstanding the harsh abortion restrictions in Nigeria, it was projected that 33 out of every 1000 women of reproductive age had an induced abortion in 2012 [14]. A pooled examination of the Nigerian Demographic and Health Survey (NDHS) data for the years 2011 - 2018 revealed that 3.8% of married women have ever had a pregnancy terminated. While numerous studies have examined women's knowledge,

attitudes, behaviors, and prevalence of abortion in Sub-Saharan Africa, particularly in Nigeria [14,15], fewer studies have examined the causes and effects of induced abortion among Nigerian women of reproductive age. Thus, this study tends to fill this gap.

Research Methodology

Study area

Surulere Local Government Area (LGA) in Oyo State served as the study's location. The former Ogbomoso local government was divided into three autonomous local government areas, namely Ogbomoso, Surulere, and Ogo Oluwa, on May 11, 1989, leading to the creation of the LGA. The local government is bordered by the local governments of Ifelodun and Orolu in Osun State, Asa in Kwara State, and Orire, Ogbomoso North and South in Oyo State [16]. Surulere local government is made up of roughly 260 settlements and has its administrative headquarters in Iresaadu, a town on kilometer 15 of the main Ogbomoso-Ikirun Road. Iresaadu, Oko, Iresa-apa, Iregba, Orile igbon, Gambari, Gbede, Ajase, Iwofin, Arolu, Ilajue, Bade-oba, Baayaoje, Mayin, and Iware are a few of them. Surulere Local Government has an area of around 975 km², and according to the 2006 census, there were 142,070 residents there, a number that is now getting near 200,000 [16].

Research design

This cross-sectional study was conducted in the Surulere local government area of Oyo State, Nigeria. The researcher used a randomized survey research design for this investigation. This is true because the study's design included a sampling of people's opinions and viewpoints. The causes and effects of abortion among women of reproductive age were examined in this study. The Kibuacha method [17] was used to determine the sample size, which came to 383 people. Women aged 15 to 49 were required to meet the inclusion requirements. A questionnaire was the research tool used in this study. It was determined whether the research tool was valid. The reliability of the instrument was assessed using the Pearson Correlation Coefficient. The study instrument's co-efficient value of 0.68 demonstrated that it was somewhat reliable. Suitable dependability ranges from 0.67 to 0.87, according to Omole, *et al* [18]. Each interviewee was chosen at random and in proportion to the local population of women who are of childbearing age. Three sections make up the questionnaire, with section A containing the participants' demographic data. While section C asked about the impact of induced abortion on women's health, section B asked about the reasons why women have abortions. Questions in sections B and C were structured using a 4-point Likert scale. For each question in the questionnaire, participants must check the corresponding box in the column. The replies were examined using SPSS (version 21), and frequency tables were used to present the findings. Before they participated in the study, each participant submitted their informed consent. To secure approval for the study, the necessary authorities were approached. It was predetermined which day would be used to visit the study sites and hand out the questionnaire.

Limitations of Study

This research has some limitations. The data are based on a single period because this was a cross-sectional study, which is the first drawback. The second is the nature of the investigated events and the accuracy of the information provided by the respondents, primarily regarding historical events that are subject to interpretation. In this way, a face-to-face interview conducted in a serene setting may have mitigated this problem while still producing findings that are in line with those of other studies.

Results

A total of three hundred and eighty-three (383) questionnaires were administered to respondents and were all retrieved. Out of these, three hundred and seventy (370) questions were valid. This was due to irregular, incomplete and inappropriate responses to some questions. These 370 questions were cleansed for analysis.

The results for the demographic distribution of the respondents as presented in table 1 revealed that 168 representing 45.41% of the respondents were between the age categories of 30 - 39 years, 122 (32.97%) of the respondents were between the ages of 20 and 29

years, and the least age category was 5.14% of the respondents (below 20 years). The majority of the respondents (54.32%) were married. Only 84 (22.70%) of the respondents had tertiary education. According to the occupation of the respondents, 104 (28.11%) were students, 31 (8.38%) were housewives, 157 (42.43%) were traders/farmers and 78 (21.08%) were civil servants. It can be seen that 131 (35.41%) were Muslims, 89 (24.05%) were Catholics, 66 (17.84%) were Orthodox, 74 (20.00%) were Pentecostals and 10 (2.70%) chose others as their religion.

Demographic information	Frequency	Percentage (%)
Age (in years)		
Below 20	19	5.14
20 - 29	122	32.97
30 - 39	168	45.41
Above 39	61	16.49
Marital Status		
Single	98	26.49
Married	201	54.32
Divorced/Widowed	71	19.19
Level of Education		
No formal education	11	2.97
Primary	79	21.35
Secondary	196	52.97
Tertiary	84	22.70
Occupation		
Students	104	28.11
Housewife	31	8.38
Farming/Trading	157	42.43
Civil servant	78	21.08
Religion		
Muslim	131	35.41
Catholics	89	24.05
Orthodox	66	17.84
Pentecostals	74	20.00
Others	10	2.70

Table 1: Demographic distribution of respondents.

The participants’ response on the causes of abortion is presented in table 2. It showed that 289 (78.11%) of the respondents had aborted pregnancies in the past with 158 (42.70%) aborting once, 98 (26.49%) aborting twice, 29 (7.84%) aborting thrice while 4 (1.08%) aborted more than three pregnancies. The results also showed that 67.84% of the respondents agreed that lack of funds was mainly responsible for women engagement in abortion, 83.24% of the respondents agreed that unwanted pregnancy was mainly responsible for women’s engagement in abortion, 76.76% of the study’s participants disagreed that health complications in women were mainly

responsible for their engagement in abortion, 79.46% of the respondents disagreed that the use of illicit drugs was mainly responsible for women’s engagement in abortion, 55.40% of them disagreed that fear of social reprisal from an out-of-wedlock pregnancy was mainly responsible for women’s engagement in abortion, all the respondents agreed that rape or incest could make a woman abort her pregnancy, 74.32% of the respondents agreed that child spacing could make a woman abort her pregnancy while 72.17% of the study’s population agreed that sex preference can make a woman abort her pregnancy.

Variable	Frequency (n)	Percentage (%)
Have you ever aborted a pregnancy before?		
Yes	289	78.11
No	81	21.89
How many pregnancies have you aborted?		
None	81	21.89
1	158	42.70
2	98	26.49
3	29	7.84
More than 3	4	1.08
Lack of funds is mainly responsible for women’s engagement in abortion		
Strongly agree	84	22.70
Agree	167	45.14
Disagree	67	18.11
Strongly disagree	52	14.05
Unwanted pregnancy is mainly responsible for women’s engagement in abortion		
Strongly agree	125	33.78
Agree	183	49.46
Disagree	49	13.24
Strongly disagree	13	3.51
Health complications are mainly responsible for women’s engagement in abortion		
Strongly agree	35	9.46
Agree	51	13.78
Disagree	147	39.73
Strongly disagree	137	37.03
The use of illicit drugs is mainly responsible for women’s engagement in abortion		
Strongly agree	27	7.30
Agree	49	13.24
Disagree	192	51.89
Strongly disagree	102	27.57
Fear of social reprisal from an out-of-wedlock pregnancy is mainly responsible for women’s engagement in abortion		
Strongly agree	69	18.65
Agree	96	25.95
Disagree	122	32.97

Strongly disagree	83	22.43
Rape and incest can make a woman abort her pregnancy		
Strongly agree	170	45.95
Agree	200	54.04
Disagree	00	0.00
Strongly disagree	00	0.00
Child spacing can make a woman abort her pregnancy		
Strongly agree	123	33.24
Agree	152	41.08
Disagree	63	17.03
Strongly disagree	32	8.65
Sex preference can make a woman abort her pregnancy		
Strongly agree	99	26.76
Agree	168	45.41
Disagree	71	19.19
Strongly disagree	32	8.65

Table 2: Causes of abortion among women of reproductive age.

Table 3 shows the responses of the respondents on the effect of abortion on women of reproductive age. It was observed that 63.52% of the study’s participants agreed that abortion causes health complications, 75.40% of the respondents agreed that abortion could lead to death among women, 63.25% of the respondents agreed that abortion could lead to secondary infertility among women, 54.86% of the study’s population agreed that abortion could cause maternal morbidity, 69.46% of the study’s respondents agreed that abortion could lead to ectopic pregnancy in subsequent pregnancies while 59.46% of the respondents agreed that abortion could cause damage to a woman’s womb.

Discussion

According to this study’s findings, 78.11% of the respondents had previously aborted pregnancies (Table 2). In a study of women visiting fertility clinics in southeast Nigeria, Eyo, *et al.* [19] found that just 4% of their respondents had never had a pregnancy terminated. This demonstrates how widespread induced abortion is in Nigeria. According to published data, socially disadvantaged women are more likely to have unwanted pregnancies and have a greater rate of abortion. This is confirmed by a Brazilian study, which found that women 35 and older, who are past the age of fertility, have an increased rate of abortions with age [14]. In this age range, married women predominate, along with more frequent sexual activity and higher exposure to pregnancy. This is consistent with the results of the current investigation. The fact that women struggle to decide whether to have an induced abortion should also be taken into account. Prejudice, moral principles, and punitive regulations contaminate this issue, making it difficult for women to use their right to procreation and for them to withhold information [20].

Christian or Muslim individuals make up the majority of this study’s participants (Table 1). We can state with confidence that there is an overlap between the circumstances under which pregnancies occur and religious dogmas due to the high rate of abortion among the respondents in this study. This agrees with the conclusions reached by dos-Santos, *et al.* [21]. This was in contrast to the findings of

Variable	Frequency (n)	Percentage (%)
Abortion causes reproductive health complications		
Strongly agree	101	27.30
Agree	134	36.22
Disagree	89	24.05
Strongly disagree	46	12.43
Abortion causes death among women		
Strongly agree	123	33.24
Agree	156	42.16
Disagree	38	10.27
Strongly disagree	53	14.32
Abortion causes secondary infertility among women		
Strongly agree	139	37.57
Agree	95	25.68
Disagree	68	18.38
Strongly disagree	68	18.38
Abortion causes maternal morbidity		
Strongly agree	92	24.86
Agree	111	30.00
Disagree	108	29.19
Strongly disagree	59	15.95
Abortion causes ectopic pregnancy in subsequent pregnancies		
Strongly agree	88	23.78
Agree	169	45.68
Disagree	70	18.92
Strongly disagree	43	11.62
Abortion causes damage to the womb		
Strongly agree	121	32.70
Agree	99	26.76
Disagree	64	17.30
Strongly disagree	86	23.24

Table 3: Effects of abortion on women of reproductive age.

a prospective and case-controlled study carried out by Borsari, *et al.* [22], in which the group of Evangelical women had no reports of induced abortion. This information does, however, represent a limitation of our study because we did not confirm the religion at the time of the abortion.

The study’s findings indicated a high rate of abortions, which follows a high percentage of unintended pregnancies. For a variety of circumstances, many women got pregnant before they were ready. Some of the causes include the absence of sexual education in schools,

which would have taught young girls how to deal with their sexuality and reproductive difficulties, sexual violence (rape and forceful sex), and the high unmet demand for contraception in the nation [23-25]. Due to extreme poverty, particularly in rural regions, teenage girls are also encouraged to become pregnant for material gain. According to a study done in Anambra state of Nigeria, more than 98% of teenagers engaged in sexual activity or had children for material gains [25]. Nigeria has a relatively low overall prevalence of contraception, which is only 10% for modern methods and 5% more for traditional methods [23,26]. Between rural and urban areas, different methods of modern contraception are used. Just 7% of people in rural areas use modern procedures, compared to roughly 17% in urban areas. According to reports, Surulere LGA in Oyo State, where this study was done, is located in a rural area [18]. As a result, there are many pregnancies due to the low use of contemporary contraceptives.

Given the significant link between abortion and maternal illness and mortality, particularly in Nigeria, it is a disturbing event. Women turn to abortions for a variety of reasons [27]. Being single is one of the most frequent justifications given by women for ending a pregnancy [28]. According to a survey by the Guttmacher Institute in Nigeria, 31% of 15 to 19-year-old teenagers cited being unmarried as their primary motivation for seeking an abortion [26]. While 30% claimed that they were either enrolled in school or too young to produce children [29]. 26.49% of the participants in the current study were single.

The cost of having children while pursuing one's education is another reason why women wish to end their pregnancies [10,29]. In this study, 67.84% of the participants admitted that financial constraints led to their having an abortion. The majority of these young females attends a school or has no reliable source of income. As a result, they will find it challenging to support themselves and the child(ren) without any financial help, and as a result, they prefer to abort the pregnancy [27].

One of the reasons young girls in schools choose to have abortions is because they are afraid of being expelled from school. When a school in Nigeria learns that a student is pregnant, she is immediately expelled, especially from private secondary schools. Moreover, she is frequently not allowed to return to school after giving birth to finish her education [30]. And for young girls, education is the only way to ensure their future, particularly in southern Nigeria, where the importance of girl child education is highly regarded [27]. The young, unmarried woman decides to have an abortion in order to continue her school out of fear and a desire to guarantee a better future [28,30].

In this study, 44.60% of the respondents agreed that women's use of abortion was primarily driven by their fear of social rejection as a result of an unplanned pregnancy (Table 2). Young females may choose to abort their pregnancies out of the dread of their parents. Another justification for pregnancy termination is the young girl's parents' potential disapproval of the pregnancy. A young girl who is pregnant would typically want to hide the pregnancy from her parents out of fear that they will disapprove of her for bringing dishonor to the family [9,30]. Also, there are occasions when her parents will stop paying her tuition. In other cases, even though it goes against her will, she will be compelled to marry the baby's father to preserve the family's honor and the child's [30].

According to this study's outcome, rape or incest can cause a woman to terminate her pregnancy. This is consistent with the findings of the research by Okonofua, *et al.* [30] and Otoide, *et al* [7]. According to a report from the IPAS national director for Nigeria, the majority of rape victims will take the precautions necessary to end any pregnancy if it has already been conceived [31,32].

The young woman must demonstrate her fertility in some southern Nigerian regions before being accepted as a wife. In this way, many young girls were coerced into sexual activity by men who promised to marry them, but when they became pregnant and were rejected, they were forced to abort the child [7,33]. The majority of young girls share some of the guilt since they will go to great lengths to seduce wealthy men into having intercourse with them to get pregnant and tie them to marriage; if the wealthy man declines, the pregnancy would be terminated [33].

In this study, 83.24% of the participants felt that women's use of abortion was primarily caused by unintended pregnancy. Both married and unmarried women may not desire to get pregnant for a variety of reasons. One of the reasons why married women end pregnan-

cies is infidelity, which can come from either the husband or the wife, as well as the husband's incapacity to care for the family, financial difficulties, and social stigma associated with many pregnancies [28].

About 76.76% of those who took part in this study disagreed that women's health issues were mostly to blame for their engagement in abortion (Table 3). The reports of Orisaremi [31] and Sedgh, *et al.* [28] that many women terminate their pregnancies if they are too ill and the continuation of the pregnancy is risky for their lives are in direct conflict with this.

According to the study's findings, 74.32% of respondents felt that spacing out children could lead to a woman aborting her unborn baby (Table 3). This is consistent with the findings of Sedgh, *et al.* [28], who claimed that many women, particularly older women between the ages of 35 and 40, abort to space out their children. According to Sedgh, *et al.* [28], the causes also vary amongst different groups. For example, among Catholics, not being married is the primary cause of pregnancy termination, whereas for the majority of Muslims, spacing and preventing births are the primary causes. The husband's decision to continue the pregnancy is exclusively his to make because the majority of women in Nigeria are not financially independent. Some people worry about the financial costs of caring for the child [10]. Women in some southern Nigerian societies feel humiliated if they become pregnant too soon after giving birth, hence they frequently choose to end the pregnancy [28].

In addition, 72.17% of those who participated in the study agreed that a woman's sex preference could lead her to abort her unborn child (Table 3). In some regions of Nigeria, there is a clear preference for a boy child. The majority of men and women hold the opinion that a girl's only purpose in life is to marry and have children, whereas a boy is more likely to care for her parents when they get older. If the woman or the man learns that the child is a girl for these reasons, especially if the family is already all female, the pregnancy may be terminated [30].

Concerning the effects of induced abortion among women of reproductive age, 63.52% of the study's participants agreed that abortion could result in health complications in women of reproductive age. Abortions performed in secret and in a dangerous manner pose serious risks to the women who undergo them. Chronic female ill health, sexually transmitted diseases, the providers' training and experience, the methods used, hygienic conditions, gestational age of the pregnancy, and the procedure's legality are the main causes of the majority of issues [5]. According to a study by the Guttmacher Institute in Nigeria, one in four women who had abortions experienced complications of some kind [26]. With 25% of them experiencing a severe, potentially fatal complication, such as severe bleeding, high fever, or damage to the visceral organs [27]. About 10% of these complications have been reported to necessitate abdominal surgery [9]. As the gestational age of the pregnancy increases, the complications become more severe. Abbas [27] noted that complications affect 58% of women if the procedure is carried out after 12 weeks of pregnancy, but only 20% of women if the pregnancy is under 12 weeks. Similar findings from other studies have been reported [9,10]. The techniques and expertise of the providers have an impact on both the degree and severity of the complications. The complications are more severe in women who use conventional treatments and less severe in women who use injections or tablets, according to Bankole, *et al.* [9]. The most frequent early complication of unsafe abortion is sepsis [27]. Normal symptoms include a high-grade fever and a purulent, unpleasant vaginal discharge. It typically develops as a result of quacks' or the women's own use of non-sterilized instruments. About 50 - 80% of all complications resulting from illegal abortions in the nation are attributable to this.

It was observed that 75.40% of the participants in this study agreed that abortion could result in a woman's death. Induced unsafe abortions are a significant cause of death for women of childbearing age in Nigeria. Although only a small portion (9%) of those complicated cases are presented to hospitals, the true scope of the issue can only be estimated [27]. Additionally, since abortion is illegal in Nigeria, the majority of pregnancy terminations are performed either by women themselves or by unlicensed quacks. The terminations are by using all sorts of instruments in dirty environments [30]. Unfortunately, sometimes even the nation's licensed medical profession-

als lack the abilities and drive needed to carry out the procedures in a safe manner. The worst part is that most hospitals lack the tools and the trained staff needed to deal with these complications when they occur [30].

According to the study's findings, 63.25% of respondents agreed that abortion could cause secondary infertility in women. Secondary infertility is one of the severe complications of unsafe abortions worldwide, according to a previous report by Abass [27]. The WHO estimates that 20 - 30% of unsafe abortions result in infections of the reproductive tract, and 20 - 40% of these lead to upper genital tract infections and secondary infertility [34]. In addition, the study found that unsafe abortions cause infertility in 22% of women between the ages of 15 and 49 who are capable of having children [34]. Despite Nigeria having a high fertility rate [23], infertility is still widespread and varies by ethnic group. Infertility is the failure of a couple to conceive within a year of regular, unprotected sexual intercourse [35,36]. It could be that there hasn't been any pregnancy in the case of primary infertility, but there has been one in the past that was either delivered or aborted in the case of secondary infertility [37,38]. The varied techniques employed by both trained and untrained illegal abortionists, such as placing various tools in the uterus, have been blamed for the rising rate of secondary infertility caused by abortion. Alternative methods of inducing abortions include cervical dilatation, using drugs, or using conventional methods. Occasionally, foreign bodies like needles, bones, and the back of trees are introduced. They cause several damages to the reproductive organs, including the uterus, tubes, and vagina. Such injuries result in a variety of long-term consequences, including full tubal obstruction, vaginal atresia, uterine synechiae, cervical incompetence, and cervical fibrosis [19]. When the uterus is completely removed to manage complications from unsafe abortions, infertility can occur [30]. According to a research done in the southwest of Nigeria, 37% of the women diagnosed with secondary infertility had never given birth to a child after having an induced abortion [33].

Also, 69.46% of the research's respondents agreed that abortion could result in ectopic pregnancy in subsequent pregnancies among women who had a pregnancy termination. Ectopic pregnancy, which is a pregnancy that develops outside of the uterus (womb), is thought to be fatal to the mother [39]. The Guttmacher Institute claims that unsafe abortion increases the likelihood of ectopic pregnancy, early labor, and recurrent spontaneous abortion in subsequent pregnancies [30,34]. Another study found that women who experienced pelvic abscesses and adhesions due to a difficult unsafe abortion had a five-fold increased risk of ectopic pregnancy as a result of post-abortive infection [40].

Conclusion

Despite not being legalized, the study's findings indicated that Nigeria has a very high rate of induced abortion. In Nigeria, unsafe abortion is a serious public health crisis that calls for coordinated action from all necessary parties (government, healthcare professionals, non-governmental organizations, the media, religious organizations and other professionals). Unsafe abortion has life-threatening consequences for women, their families, and society as a whole. To achieve the goal of lowering maternal mortality, the Nigerian government must handle abortion as a national priority. In addition to lowering maternal morbidity and mortality, combating this silent killer would enhance the socio-economic wellbeing of families and the country as a whole.

Availability of Data and Material

On reasonable request, the corresponding author will make the datasets used and/or analyzed during this study available.

Conflict of Interests

The authors declare that they have no conflict of interest.

Funding Support

There was no governmental, private, or nonprofit funding provided for this research in the form of a grant.

Bibliography

1. Diniz NMF., *et al.* "Voluntary abortion and domestic violence among women attended at a public maternity hospital of Salvador-BA". *Revista Brasileira de Enfermagem* 64.6 (2021): 1010-1015.
2. Sell SE., *et al.* "Reasons and meanings attributed by women who experienced induced abortion: an integrative review". *Revista da Escola de Enfermagem da USP* 49.3 (2015): 495-501.
3. Schwandt HM., *et al.* "Pathways to unsafe abortion in Ghana: the role of male partners, women and health care providers". *Contraception* 88.4 (2013): 509-517.
4. Kapp N., *et al.* "A review of evidence for safe abortion care". *Contraception* 88.3 (2013): 350-363.
5. World Health Organization "Preventing Unsafe Abortion," (2014).
6. Adinma E. "Unsafe abortion and its ethical, sexual and reproductive right implication". *West African Journal of Medicine* 30.4 (2021): 245-249.
7. Otoide VO., *et al.* "Why Nigerian adolescents seek abortion rather than contraception, evidence from focus group discussions". *International Family Planning Perspective* 27.2 (2021): 77-81.
8. Henshaw SK., *et al.* "Severity and cost of unsafe abortion complication treated in Nigerian hospitals". *International Family Planning Perspectives* 34.1 (2018): 40-50.
9. Bankole A., *et al.* "Unwanted pregnancy and induced abortion in Nigeria: causes and consequences". *International Family Planning Perspectives* 32 (2016): 175-184.
10. Ibrahim IA., *et al.* "Patterns of complicated unsafe abortion in Niger Delta Teaching Hospital Okolobiri, a four year review". *The Nigerian Health Journal* 11.4 (2021): 78-84.
11. Cordingley K. *Underground Abortions in Nigeria* (2014).
12. Mitsunaga T., *et al.* "Risk Factors for Complications of Induced Abortions in Nigeria". *Journal of Women's Health* 14.6 (2015): 515-528.
13. Ogunniyi SO., *et al.* "Abortion-related deaths in Ile-Ife, Nigeria: A 12-year review". *African Journal of Medicine and Medical Sciences* 19.4 (2020): 271-274.
14. Hobcraft J and Kieman K. *Childhood poverty, early motherhood and adult sexual exclusion (CASE) Paper Case 28 London school of Economics* (2019).
15. Hofferth SL and Reid L. "Early childhood and children's achievement and behaviour over time". *Journal of Perspectives on Sexual and Reproductive Health* 34.1 (2022): 41-49.
16. Ogunleye KY., *et al.* "Marketing Extension Needs for Sustainable Extension Practices among Cassava Farmers in Surulere Local Government Area of Oyo State". *Journal of Agricultural Extension* 14.1 (2010): 105-113.
17. Kibuacha F. "How to determine sample size for a research study" (2021).
18. Omole OR., *et al.* "Awareness and perception on exclusive breastfeeding as a birth control method among pregnant women attending antenatal clinic in rural communities". *Merit Journal of Research in Medicine and Medical Sciences* 11.2 (2023): 059-067.

19. Eyo UE, et al. "Termination of pregnancy (top) related infertility in women in Akwa Ibom State". *Journal of Academic Research International* 3.3 (2022): 120-124.
20. Andreoni S, et al. "Quem está mais propensa a recorrer ao aborto provocado diante de uma gravidez indesejada? Estudo com mulheres em idade fértil residentes em três regiões da cidade de São Paulo". *Brasil Reprodução and Climatério* 27.2 (2022): 41-46.
21. Dos Santos APV, et al. "Factors associated with abortion in women of reproductive age". *Revista Brasileira de Ginecologia e Obstetria* 38. 6 (2016): 273-279.
22. Borsari CMG, et al. "Abortion in women living in the outskirts of São Paulo: experience and socioeconomic aspects". *Revista Brasileira de Ginecologia e Obstetria* 35.1 (2013): 27-32.
23. Nigeria Demographic and Health Survey (2018).
24. Olaitan OL. "Perception of university students on unwanted pregnancy in southwest Nigeria". *American Journal of Social and Management Sciences* 1. 2 (2010): 196-200.
25. Illika A and Anthony I. "Unintended Pregnancy among Unmarried Adolescents and Young Women in Anambra State, South East Nigeria". *African Journal of Reproductive Health* 8.3 (2014): 92-102.
26. Guttmacher Institute. 'Reducing Unsafe Abortion in Nigeria 3 (2018).
27. Abbas YG. "Causes and impact of unsafe abortion in Nigeria. A thesis submitted in partial fulfillment of the requirement for the degree of Master of Public Health". KIT (Royal Tropical Institute)/Vrije Universiteit Amsterdam, The Netherlands (2014).
28. Sedgh G, et al. "Unwanted Pregnancy and Associated Factors Among Nigerian Women". *International Family Planning Perspectives* 32.4 (2016): 175-184.
29. Adebuseye MP, et al. "Nigerian Health Professional's Perceptions About Abortion Practice". *International Family Planning Perspectives* 23 (2017): 155-161.
30. Okunofua EF, et al. "Perceptions Of policy Makers in Nigeria Towards Unsafe abortion and Maternal Mortality". *International Perspectives on Sexual and Reproductive Health* 35.4 (2019): 194-202.
31. Orisaremi TC. "An exploratorative study of abortion among the Tarok in central Nigeria". *African Sociological Review* 16.1 (2022): 61-76.
32. Okoro- Eweka R. "The Magnitude and Burden of Rape in Nigeria". *The Nigerian Observer* (2014).
33. Koster W. "Linking two opposites of pregnancy lost: Induced abortion and infertility in Yoruba society, Nigeria". *Journal of Social Science and Medicine* 71 (2020): 1788-1795.
34. Grimes DA, et al. "Unsafe abortion: the preventable pandemic". *WHO Sexual and Reproductive Health Series* 4 (2016): 1-13.
35. Airaodion AI, et al. "Carica papaya leaves might cause miscarriage". *Asian Research Journal of Gynaecology and Obstetrics* 2.2 (2019): 1-9.
36. Airaodion AI, et al. "Consumption of coconut (*Cocos nucifera* L.) water improved fertility parameters in male Wistar rats". *Asian Journal of Pregnancy and Childbirth* 2.3 (2019): 1-7.

37. Ogbuagu EO, *et al.* "Ethanol extract of *Xylopiya aethiopica* (African negro pepper) fruit adversely perturbed semen qualities in male Wistar rats". *International Journal of Research and Reports in Gynaecology* 5.2 (2022): 44-55.
38. Airaodion AI, *et al.* "Antifertility Propensity of *Jatropha curcas* Linn. Leaves on Male Wistar Rats". *International Journal of Research and Reports in Gynaecology* 3.2 (2020): 21-29.
39. UNDP. Human development report 2008-2009, University of Maryland Medical Center, 'Definition of Ectopic Pregnancy (2008).
40. Chung CS, *et al.* "Induced abortion and ectopic pregnancy in subsequent pregnancies". *American Journal of Epidemiology* 115.6 (2022): 879-887.

Volume 5 Issue 4 April 2023

©All rights reserved by Oluwaseun R Omole, *et al.*