Abortion among adolescents in Africa: A review of practices, consequences, and control strategies

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REVIEW

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Abortion among adolescents in Africa: A review of practices, consequences, and control strategies

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Summary

Background: Developing countries register 98% of unsafe abortion annually, 41% of which occur among women aged between 15 and 25 years. Additionally, 70% of hospitalizations due to unsafe abortion are among girls below 20 years of age.

Purpose: This study unveils abortion practices in Africa, its consequences, and control strategies among adolescents.

Methods: Online databases that provided relevant information on the topic were searched. A Google Scholar search yielded 623 000 results, PubMed yielded 1134 results, African Journals Online yielded 110 results, and PsycINFO yielded eight results. A total of 25 studies published from 2000 to 2018 that met the Critical Appraisal Skills Programme (CASP) standard were thematically reviewed.

Findings: These studies indicated that abortion is a neglected problem in health care in developing countries, and yet decreasingly safe abortion practices dominate those settings. Adolescents who have unintended pregnancies may resort to unsafe abortion practices due to socioeconomic factors and the cultural implications of being pregnant before marriage and the legal status of abortion. Adolescents clandestinely use self-prescribed drugs or beverages, insert sharps in the genitals, and most often consult traditional service providers. Abortion results in morbidities such as sepsis, severe anaemia, disabilities, and, in some instances, infertility and death. Such events can be controlled by the widening availability of and accessibility to

contraceptives among adolescents, advocacy, and comprehensive sexuality education and counselling.

Conclusion: Adolescents are more likely to use clandestine methods of abortion whose consequences are devastating, lifelong, or even fatal. Awareness and utilization of youth-friendly services would minimize the problem.

KEYWORDS

Abortion, adolescents, Africa, maternal health, unsafe abortion

1 | BACKGROUND

Approximately 56 million women of reproductive age undergo induced abortion annually,[1] and of those, 22 to 25 million are unsafe[2,3] contributing to 13% of maternal mortality cases worldwide.[4] Developing countries register 98% of unsafe abortions annually, 41% of which occur among women aged between 15 and 25 years,[5] and the highest ranking regions are Africa and Latin America.[6] In Nigeria, over one-thirds of adolescents procure abortions, in Ghana, abortion is more prevalent among women ranging from 20 to 24 years, while this prevalence level is seen among women aged 20 to 29 years in other African countries.[7] However, in Asia and Europe, women older than those in African countries undergo abortions.[7] In Africa, an increasing rate of early sexual initiation and sexual coercion has been reported.[8,9] More than one in three adolescents or young adults in Uganda between 15 and 24 years of age who are not married and who have never been married have had sexual contact.[9] Another study conducted in Uganda indicated that 46% of adolescents had ever had sex, and 80% were not married. Because pregnancy carries different socio-cultural implications for unmarried adolescents than married women generally, those who unintentionally become pregnant may resort to unsafe methods of inducing abortion.[10] Adolescents generally suffer a greater impact because they are vulnerable, have inadequate sexual and reproductive health information, and are unable to make firm choices.[5,6] As such, a study by the International Planned Parenthood Federation (IPPF)[11] noted that 70% of hospitalizations due to unsafe abortion complications were among women under 20 years of age.[11] This finding makes this study worthwhile for the sake of documenting adolescent abortion practices, their consequences, and control strategies to inform stakeholders about the prevailing situation and to provide a basis for the necessary steps to improve adolescent health.

Abortion is generally defined as the expulsion of the conceptus before 28 weeks of gestation or before it weighs 500 g.[12,13] Induced abortion could be safe or unsafe depending on the procedure taken, the environment in which it is carried out and the service provider. Therefore, safe abortion is one that is carried out by a trained provider following WHO recommended methods suitable for the gestational age. Unsafe abortion, on the other hand, is often carried out to terminate unintended or unwanted pregnancies[14] by unskilled individuals and in an environment that does not meet minimum medical standards.[1,15] Unsafe abortion is categorized by WHO into less safe and least safe. It is less safe when performed using old-fashioned means such as sharp curettage methods, even if by trained personnel, and/or if the individual performing the abortion has limited information regarding the methods and limited access to a skilled medical officer if required. It is least safe when it involves the ingestion of caustic substances, the use of harmful traditional inventions or the insertion of foreign bodies by untrained individuals.[1]

Legal and safe abortion is 14 times safer than childbirth[11]; however, until now, only three African countries have no restrictions regarding abortion, while 41 countries allow abortion to save the mother's life and maintain her physical and mental health, as well as for socio-economic aids. The law also permits induced safe abortion when the

foetus is impaired or when the pregnancy was caused by defilement, rape, or incest; however, abortion is completely illegal in 10 African countries.[3,16]

Abortions induced by oneself or by traditional healers, result in complications, with infections in 81.8% of women and haemorrhage in 68.2% of women,[17] and in some instances, the process results in incomplete abortion.[3] There are higher odds of such complications among unmarried adolescents and non-adolescents than among married women in both categories.[10] Adolescents, especially students, are aware of safe abortion services but may not use them due to costs and associated stigma.[18,19] Women who boldly seek safe abortion are highly stigmatized, as are the clinicians offering it.[16] In fact, any discussion about the topic in developing countries is disrupted owing to its legal status, religious and moral values.[20,21] Surprisingly, even health workers abuse, mistreat and stigmatize women who seek post-abortion care.[9] Therefore, it is still a neglected problem in health care with inadequate information, and yet least safe and less safe abortion practices dominate these settings.

Mothers who unintentionally become pregnant opt for unsafe abortions due to the insufficiency and inaccessibility of safe abortion services, restrictive laws, high costs, and diligent objections by health care providers who observe the professional ethic of do not harm[1,13,22] and due to insufficient knowledge of eligibility for safe abortion care.[23] Nonetheless, in Asia and Europe, older women procure abortion mainly to limit or space births.[7] Adolescents from African countries may particularly pursue abortions because of probable consequences such as stigmatization.[10] It is often procured through clandestine measures and in unhygienic hidden places, offered by untrained practitioners.[22] These abortions are generally unsafe, accounting for 21% of the maternal deaths that occur annually, making it an issue of public health importance in the region. Unveiling abortion practices, its consequences, and control strategies among adolescents is of great significance to policymakers, programme planners, and advocates. If the information provided is well utilized, it could lessen the incidence of unintended pregnancies, unsafe abortions, and maternal and child mortality and morbidity, thus leading to a general increase in the number of healthy women.[24]

2 | METHODS

Online literature published between the years 2000 and 2018 that met the study aim was retrospectively analysed. Google Scholar search yielded 623 000 results, PubMed yielded 1134 results, African Journals Online yielded 110 results, PsycINFO yielded eight results, and international websites such as the WHO, Guttmacher Institute, and UNFPA yielded 67 results. Their titles were read to identify studies with one or two of the keywords, yielding 609 studies. Using the Critical Appraisal Skills Programme (CASP),[25] the abstracts of the 609 identified articles were read. Based on the quality, aim of the study, study site and population, and year of publication, only 25 articles were selected.[26] The selection of these articles is illustrated in Figure 1. The full papers were read and thematically analysed to generate metadata as attached.

3 | RESULTS

Africa has the highest rates of both intended and unintended pregnancies, standing at 136 and 86 per 1000 women of reproductive age, respectively.[27] Central and East Africa registered the highest number of unintended pregnancies in 2010.[28] Women who have unplanned pregnancies may opt for an abortion.[6,9] In fact, one of every five of these women opts for abortion.[6] In 2018, the Southern African region registered the highest abortion rate at 24%, followed by Northern Africa, Eastern Africa, Central Africa, and Western Africa at 23%, 14%, 13%, and 12%, respectively.[5] However, in all regions, adolescents who are sexually active are more vulnerable than women older than 20 years of age with respect to their experiences and needs for and access to safe abortion care.[6,10,11,29] First, they have a higher risk of unintended pregnancy and are unable to recognize it early compared to older women. Second, they are most likely to delay seeking an abortion for socio-economic and cultural reasons[5] and, in some instances, due to policy-related and religious factors.[6]

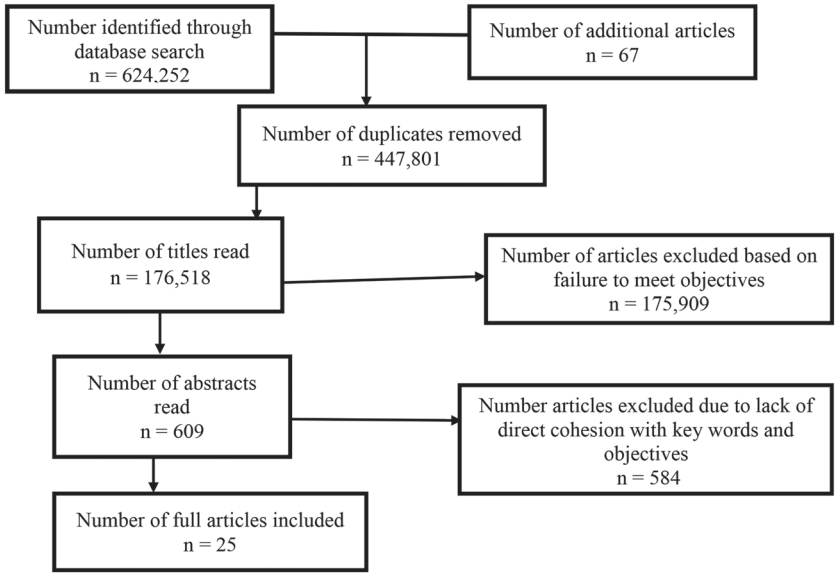

FIGURE 1 PRISMA flowchart indicating the selection of reviewed articles

3.1 | Abortion practices among adolescents in Africa

Abortion is generally more prevalent among women in urban centres globally than those in rural areas.[7] However, rural residents in all age groups are more likely to use traditional methods than are urban residents.[16] Unsafe abortions are also common among poorer, younger, and unmarried women with low socio-economic status than those who are married and/or well-off.[14] Although adolescents undergo a substantial fraction of abortions, they are most frequently performed among women aged 20 to 29 years.[7] Nonetheless, women below 20 years constitute more of those hospitalized for complications.[11] A study conducted by Rasch and Kipingili[30] in rural Tanzania also indicated that women who had an unsafe induced abortion were single, primigravida, and younger than 24 years of age.[30]

Women who procure unsafe abortions often use clandestine methods aided by unskilled attendants[29] who may be a friend, a close relative or a traditional service provider.[17,30] A study performed in Cote d'Ivoire in 2017 among high school students indicated that 70% of them first used a self-prescription, and in case it failed, 56.4% proceeded to use traditional service providers and whenever self-prescription and traditional methods were unsuccessful, approximately 85.7% of them consulted skilled health care providers as the last option. The students cited over-the-counter drugs, herbs, roots, beverages, and in some instances, the insertion of sharps in their genital tract as commonly used procedures.[17] The use of pharmaceutical drugs, catheters, and roots has been cited by several other studies.[18,30,31]

Some girls use battery acid, crushed bottles, pain medication, sedatives, anaesthesia, antibiotics, chlorine, white quinine, cassava-cyanide, aloe vera, castor oil, ashes, ground tobacco, saltwater, sugar solutions, washing powder/soap, and methylated spirits, which are very unsafe.[29]

According to Varga,[19] the commonly used methods of abortion among adolescents in South Africa are backstreet measures, which is attributable to women's inadequate knowledge of their legal status and eligibility for a safe abortion and a complex decision-making process.[19] Another study on abortion among adolescents in developing countries states the same factors.[29] Additional factors include gender inequality, an unmet need for contraceptive use, sexual education, high cost, and restrictive abortion laws.[7,24] The issue of stigma is a serious issue, as highlighted by many other studies.[7,10,14,16,18,19,24,29]

3.2 | Consequences of abortion

Almost all ill health and mortality following unsafe abortion is preventable, [9] and adolescents who are mostly in secondary schools are aware of illegal abortion practices and their consequences,[32] which range from physical, psychosocial to economic in nature. The consequences are borne not only by women who acquire unsafe abortion but also by their families and the health care system.[6] Both adolescents and non-adolescents suffer the consequences of abortion, [6] but the impact is greater among adolescents.[11,33]

Adolescents present with morbidities such as haemorrhage, severe anaemia, trauma, foreign body, sepsis, or mortality. These are frequently associated with the procedure used, for instance, women who use herbs to induce abortion are less likely to present with trauma, foreign body, or sepsis than are women who use surgical abortion, roots, or catheters. Similarly, women who use herbs are less likely to obtain blood transfusions than those who use any other method.[30]

Haemorrhage is primarily the reason for admission among women who are having or have had an unsafe abortion. In a study by Ouattara et al,[34] among 111 women who had an unsafe abortion, 75% suffered severe haemorrhage, 11% suffered endometritis, 5% suffered anaemia, and 5% suffered hepatonephritis, while six women died.[34] Others may suffer from infection and infertility.[32] Other effects are lifelong and devastating, such as psychosocial trauma,[29] permanent disability, and infertility, a condition that upends their lives entirely.[6]

3.3 | Control strategies for abortion

As many as 41 African countries have liberalized abortion laws, and three countries have legalized abortion entirely. Still much action is desired to ensure safe abortion and to address the impact of unsafe abortion. There is an urgent need for alternatives to abortion through expanded and enhanced family planning services, and if unintended pregnancy has already occurred for a woman who qualifies for safe legal abortion, then safety should be guaranteed.[6] Additionally, the research agenda needs to be defined and advocacy strategies identified to curb the incidence of unsafe abortion (Table 1).

Abortion mainly unsafe induced abortion cannot be controlled unless unintended pregnancies are mitigated. This goal is achievable via harmonising contraceptive counselling and uptake,[6,17,35] sexuality education, and meeting individual family planning needs.[1,24,33,35] Similarly, better access to safe abortion and post-abortion care is fundamental, especially timely care for plausible complications.[1]

4 | DISCUSSION

4.1 | Abortion practices among adolescents in Africa

Most abortions follow unintended pregnancies, and adolescents are more vulnerable mainly due to socio-economic and cultural connotations, in addition to the harsh social stigma adolescents suffer in cases of premarital pregnancy.[6,10] Therefore, societal norms, economic and legal obstacles have a profound influence on women's decision to have an abortion, especially unsafe abortion.[6] The role of partners in influencing the decision to terminate pregnancy cannot be underrated in addition to whether he supplies funds for an abortion. When partners are supportive, women stand a better chance of retaining pregnancy, and if they should abort, the chance of having a safe abortion is significantly improved.[14]

Abortion practices differ by geographical region and range from traditional to modern methods, with rural teenagers more involved in the use of the former than urban-dwelling teenagers.[14,29] However, modern methods are self-prescribed and are procured over the counter.[29] Herbs and roots are commonly used to induce abortion in 42% of rural and 54% of urban women.[30] Nonetheless, the use of roots is more associated with complications than herbs.[30]

TABLE 1 Abortion practices among adolescents in Africa, consequences, and control strategies

Abortion practices	Consequences	Control strategies
Unsafe backstreet methods include clandestine, self-prescribed pharmaceuticals, battery acid, crushed bottles, pain medication, sedatives, anaesthesia, antibiotics, chlorine, white Quinine, roots (cassava- cyanide), aloevera, castor oil, ashes, ground tobacco, salt water & sugar solutions, parsley oil, laxative, brandy, hot pepper salt, physical removal (with cassava root), chilli, or pawpaw, physical charms, boiled beer, tea, fanta, coca cola, washing powder/soap, and methylated spirit, physical exercises, inserting objects in the va-gina, receiving a heavy massage, receiving an injection, taking oxytocin, inserting a catheter, taking a tablet, taking home remedies, an herbal concoction, or an herbal enema.	Dealing with effects of unsafe abortion, infections, bleeding, trauma, financial costs, infertility, maternal mortality, bereavement, incomplete abortion, tears (vaginal, uterine, and cervical), severe pain, foreign bodies, toxicity by pharmaceuticals, social stigmatization, endometritis, anaemia, hepatonephritis, murder at conception or late, family stress, constrain the health care system, morbidities time wasting.	Addressing unmet need for contraception, programming and designing policy aiming at reducing adolescents' reliance on backstreet abortion procedures, creating a micro-environment conducive to young people's healthy reproductive choices, include household members, improve parents' and health care providers' attitudes towards adolescents sexuality, foster intergenerational communication on reproductive health issues, build strong life skills, and enhance partner communication, include boys and young men in information, education, communication strategy concerning pregnancy termination. Health workers should perform or refer patients for safe abortion under certain circumstances.
Safe methods include dilation and curettage (D&C), man-ual vacuum aspiration (MVA), and taking Cytotec.		Advocacy and sexuality education, counselling services, and logistical support to adolescent and young women. Reach adolescents and those living in rural areas. Provide platforms for adolescents to share their stories. Ending rape impunity and decriminalizing abortion.

4.2 | Consequences of abortion

Following unsafe abortion, 68 000 women die each year globally, while 5.3 million suffer disabilities that may be temporary or permanent[6] and that are more common among women beyond 12 weeks of gestation.[33] The public health burden of abortion remains the highest in developing countries with restrictive laws on abortion that compel women to resort to unsafe abortion, leading to injuries and, in some instances, maternal mortality.[36]

The consequences are not only faced by women and their families but also by service providers. Physicians in countries where abortion is restricted may be surrounded by compromising terms and eventually suffer formidable penalties.[21]

4.3 | Control strategies for abortion

Control strategies to abortion should strive to prevent unintended pregnancies, unsafe abortions, and related complications.[1,6,7,14,16,17,23,33,37] By all means, unintended pregnancies must be prevented, and if they occur, measures should be taken to prevent victims from procuring an unsafe abortion.[6]

These goals can be achieved by providing sexuality education, increasing access to contraception, meeting the family planning needs of individuals, offering and increasing access to safe legal induced abortion, and providing timely care for complications.[1,5,7,14,16,17,38,39] These actions should be taken across various age groups, although special focus should be afforded to those below 25 years of age, given their greater vulnerability.[5] There is also a need to create awareness of the risks associated with unplanned pregnancies and induced abortions mostly by unskilled providers.[17,38,40-42] Understanding the factors behind the persistence of unsafe abortion mostly in developing countries and finding sustainable solutions are equally vital.[6] Women willing to share their stories concerning unwanted or unplanned pregnancies and abortion should be given forums and be protected to facilitate their emotional healing and to enable others to learn from their stories.[16]

Although adolescents and non-adolescents alike suffer similar abortion complications, adolescent-specific reproductive health policies, and particularly their implementation, are critically desired. Targets should be both in-school and out-of-school adolescents.[10] Additionally, policies concerning the respect and protection of women and other vulnerable groups need to be implemented.[14,23,38] Adolescents themselves report the need for adequate information concerning reproductive health issues because in most cases, they are provided with information that is too superficial to help them when confronted with sexual and reproductive health challenges. For example, they have information regarding condom use[29] but do not know how to use them correctly and consistently.[6,29,40]

Adolescents and young adults need varying levels of protection and safety to aid them in making autonomous decisions and to be able to learn and grow. In the case of pregnancy, they need sufficient information, counselling, parental involvement, and contraceptive options.[11,41,42]

Additionally, identifying key areas of research and advocacy are equally important to control strategies.[6,36,37,41] The findings of this study could facilitate policy change and improve practices among countries where unsafe abortion is still a major burden, yet the impact on individuals, families, and the health care system is obvious.

In conclusion, adolescents are mostly likely to use clandestine methods of abortion, the consequences of which are devastating, lifelong, or even fatal. Awareness and the effective utilization of adolescent- and youth-friendly services would minimize the problem. Social and emotional support in the event of unintended pregnancy is necessary. Awareness of who qualifies for a legal safe abortion and where it can be accessed is still low; hence, it should be included in health education if positive adolescent health outcomes should be realized.

AVAILABILITY OF DATA AND MATERIALS

Metadata has been provided as a supplementary file.

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