The Global Burden of Unsafe Abortion and the Need for Improved Access to Safe Reproductive Health Care

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Abstract

Unsafe abortion is a medical crisis and a neglected public health problem. It remains a significant public health issue globally, contributing to high rates of maternal morbidity and mortality that is prevalent in most part of the world and puts women who are of reproductive age in grave danger. Despite being a preventable condition, progress in addressing unsafe abortion remains minimal, highlighting a critical violation of women's human rights. It is deeply intertwined with human rights, social justice, and gender equality. Several factors contribute to the ongoing public health crisis surrounding unsafe abortions which includes restricted abortion law, poor quality of health service, criminalization, stigmatization and low community awareness which prevents women access to proper and safe abortion services. The consequences of unsafe abortions extend beyond immediate health risks, affecting women's long-term physical and psychological well-being, and imposing substantial costs on healthcare systems, with up to 50% of women requiring medical care for complications such as infection, hemorrhage, poison, sepsis, peritonitis, and trauma to the cervix, psychological consequences such as shame and anxiety and other long-term issues like infertility, ectopic pregnancy and pelvic inflammatory disease. Addressing these issues through improved access to safe abortion services and comprehensive reproductive health education is essential for reducing maternal mortality and achieving sustainable development goals globally. Thus, the purpose of this review is to draw attention to the harm that unsafe abortion causes to the world and the necessity of expanding access to quality reproductive health care.

Keywords: Unsafe abortion, maternal mortality, abortion, global abortion

INTRODUCTION

Complications from unsafe abortion have an extremely detrimental impact (Yokoe *et al.*, 2019). Abortion occurs when a pregnancy is terminated before 20 weeks, or when the fetus weighs less than 500 g, or before the time of fetal viability (Unkels *et al.*, 2021). Abortion may occur spontaneously or intentionally which may be either safe or unsafe (Yogi *et al.*, 2018), while the risk that an abortion poses determines how safe it is (Ganatra *et al.*, 2017). According to (Bridwell *et al.*, 2022), the World Health Organization (WHO) defines "safe" abortion as one performed in a setting where abortion laws are not restrictive, or if there is a formal law, safe abortion is still available. Additionally, it also defines an "unsafe" abortion or skills or in an environment not in conformity with minimal medical standards, or both. Unsafe abortions are typically self-induced, carried out by uneducated, unskilled people, or they are carried out in unsanitary settings using improper techniques or drug administration (Zafar *et al.*, 2018), and often involves the use of oral and injectable medications, vaginal preparations, intrauterine foreign bodies, and abdominal trauma (Gebremedhin *et al.*, 2018).

Studies have shown that self-inducing abortions were frequently performed in an unsafe way by using sharp objects like clothes hangers and bicycle spokes, inserting herbal remedies or foreign objects (such as chicken bones or twigs) into the vagina, and jumping from heights to cause blunt abdominal trauma (Akande *et al.*, 2020). According to another study, some women terminate their pregnancies by inducing abortions through risky practices and methods like intensely exercising, starving themselves, vigorously riding a bicycle, using concentrated tea and coffee, overdosing on certain medications, getting their stomachs roughly massaged or stepped on, drinking soot and bleach, and creating mixtures of kerosene, gasoline, and stain removers,

emulsions, and bleaching creams (Izugbara *et al.*, 2015). About half of unsafe abortions took place in unsanitary, unhygienic conditions and occurred outside of healthcare system (Ganle *et al.*, 2016), while well over 50 % of these are carried out by untrained personnel (Funmito *et al.*, 2023). Research has identified patient medicine vendors, auxiliary nurses, health attendants, chemist shops, private homes and unlicensed medical doctors as major culprits in the provision of unsafe abortion services (Akande *et al.*, 2020). Even in cases where medical professionals perform the procedure, there is still a danger associated with an unsafe abortion due to lack of appropriate emergency and post-abortion care (Zafar *et al.*, 2018).

The WHO has created guidelines that suggest the group of medical professionals who can perform abortions in a safe and effective manner and who have the knowledge, resources, and setting necessary to satisfy the standards of medical care for abortions. These guidelines are often revised on a regular basis (Cameron, 2018).

Unsafe abortion is one of the easily preventable causes of maternal mortality and morbidity which poses a public health issue and it is one of the leading causes of the five leading causes of maternal mortality and morbidity (Yokoe et al., 2019). Unwanted or unplanned pregnancies that develop earlier than desired have been found to be one of the main causes of unsafe abortion (Izugbara et al., 2015). Previous study indicates that vulnerable women utilize this practice as a method of controlling their fertility; these women are typically young, single, and economically disadvantaged (Bell et al., 2020). Over one hundred and twelve million unwanted pregnancies are recorded among women who are of reproductive age (Funmito et al., 2023). Patient comorbidities, and provider's clinical experience all contribute to the risk of complications from unsafe abortions (Bridwell et al., 2022). According to (Gebremedhin et al., 2018), a considerable percentage of women (20-50%) who undergo unsafe abortions experience complications like infection, hemorrhage, sepsis, peritonitis, and trauma to the cervix, vagina, uterus, and abdominal organs. These complications are strongly linked to maternal mortality and morbidity. Infections are still associated with a high case fatality rate and are the most prevalent cause of maternal mortality due to abortion. For instance, a facility-based study conducted indicates that post-abortion infections account for 22.1% of difficult maternal infections and 9.5% of all maternal infections globally (Baguiya et al., 2022), with significant proportion of these affecting the reproductive tract leading to infertility (Unkels et al., 2021).

Other Complications that may arise due to unsafe abortion practice includes; retained products of conception, retained cervical dilator, uterine perforation, amniotic fluid embolism, misoprostol toxicity, and endometritis (Bridwell *et al.*, 2022). If untreated or poorly managed, death may result from post-abortion sepsis. Among the leading causes of death due to unsafe abortion practice includes; poisoning from substances used for induced abortion, Gas gangrene from *Clostridium perfringens* following insertion of foreign bodies which increase the risk of tetanus infection, chemical burns, ruptured uterus, gastrointestinal tract injuries, genital tract trauma and infection (Unkels *et al.*, 2021). In addition, many women who do not have these issues experience long term health consequences such as infertility, ectopic pregnancy, secondary amenorrhea, pelvic inflammatory disease, and other connected problems (Halder *et al.*, 2024).

Other consequences of unsafe abortion is psychological disturbance, and includes effect such as feelings of guilt, shame, anxiety, or other negative ideas (Roosbelinda *et al.*, 2018). In addition to the obvious burden of unsafe abortion morbidity and mortality on women and their families, its treatment is associated with a significant cost to the public healthcare system (Bell *et al.*, 2020). Up to 50% of women who have an unsafe abortion will require medical care (Unkels *et al.*, 2021). And an estimated 15%–25% of women requiring medical intervention for complications arising

from abortion are approximately 5 million women (Halder *et al.*, 2024). Additionally, the financial and logistic impact of emergency care can divert limited health resources such as the costs of medical care for longer-term health consequences, lost productivity to the country, the impact on families and the community, and the social consequences that affect women and families (Bell *et al.*, 2020).

Nearly (97%) of all unsafe abortion occur in low-resource settings where safe abortion is legally restricted and post abortion care services are limited (Hinson *et al.*, 2022) As a result, legal constraints account for 8% to 20% of all maternal deaths (Chemlal & Russo, 2019). Gaining access to a safe, timely induced abortion or terminating an unwanted pregnancy within 13 weeks of pregnancy, can potentially spare around half a million women globally from dying and an additional five million from suffering from severe health complication. Increased access to safe abortion is an essential strategy for attaining the sustainable development goals and ensuring that women have universal access to reproductive health care (Dawson *et al.*, 2016). By 2030, the global rate of maternal death is expected to drop from 216 to 70 per 100,000 live births, according to the Sustainable Development Goals (SDG). Thus, it's critical to lower the number of maternal deaths caused by abortion (Gebremedhin *et al.*, 2018).

GLOBAL INCIDENCE AND IMPACT OF UNSAFE ABORTION

Unsafe abortion is a neglected public health issue, and it accounts for 13% of maternal deaths globally. It is the third leading cause of maternal mortality among the 5 leading cause of maternal death worldwide and it also affects the physical, emotional, and social health of women and their families (Abhary *et al.*, 2023).

The WHO predicts that one in ten pregnancies result in an unsafe abortion in 2000. Unsafe abortion rates increased globally from 44% in 1995 to 49% in 2008 (Gebremedhin *et al.*, 2018). Additionally, an estimated 225.1 million (45.1%) of the 55.7 million abortions performed globally between 2010 and 2014 were classified as unsafe (Cameron, 2018). The World Health Organization (WHO) reports that either an unsafe provider, an unsafe procedure, or both were used during the abortions that took place in this year (Willis *et al.*, 2023). With low- and middle-income nations accounting for about 86% of these abortions (Chae *et al.*, 2017). Due to low-skilled medical workers, low rates of contraceptive use, and often stringent abortion regulations, less developed countries of the world bear the highest risk of morbidity and mortality from unsafe abortion (Unkels *et al.*, 2021). Worldwide, 121 million unwanted pregnancies were reported in 2019; of those, 64 pregnancies per 1000 women were documented, with 61% of the pregnancies ending in abortion (Getahun *et al.*, 2023). According to current studies, 210 million are aborted, and 19 million are terminated by unsafe abortion methods (Gebremedhin *et al.*, 2018).

The global incidence of unsafe abortion remains unarguably high (de Vries *et al.*, 2020). An estimated 42 million pregnant women opt to terminate their unintended pregnancy through abortion each year, often utilizing unsafe procedures (Ganle *et al.*, 2016). An estimated 25 million unsafe abortions are performed each year globally, and the complications that follow claim the lives of at least 22,800 women (Stifani *et al.*, 2022). Women ages 20–24 year-old have the highest abortion rate of any age-group (Singh *et al.*, 2017). An estimated 68,000 women are predicted to die and 5.3 million to become permanently disabled annually as a result of unsafe abortion practices (Zafar *et al.*, 2018). Research indicates that complications resulting from unsafe abortions claim the lives of one woman every eight minutes (Shah et al., 2014). Adolescent girl between the

ages of 15 and 19 are not excluded either, since they account for about one-third of all abortion-related fatalities globally (Espinoza *et al.*, 2020).

Access to safe abortion is seemingly limited and not easily accessible (Stifani *et al.*, 2022). The proportion of unsafe abortions is significantly higher in developing countries than developed countries (Ganatra *et al.*, 2017).

In developing nations with limited resources, maternal mortality is a major issue, and unsafe abortion is a neglected aspect of health care (Gebremedhin et al., 2018). An estimated 97% of unsafe abortions are thought to occur in low- and middle-income nations (Footman et al., 2020). South and South-East Asia are said to have the greatest rates of unsafe abortions, followed by Africa, Latin America, and the Caribbean (Zafar et al., 2018). Over 4 million unsafe abortions are performed each year in Africa, and more than 99% of these procedures are unsafe, resulting in an estimated one (1) maternal death for every 150 cases (Gebremedhin et al., 2018). Africa bears a disproportionate burden of death from unsafe abortion, accounting for 62% of global death, while continentally it accounts for roughly 29% with the highest percentage concentrated in South America, Eastern Africa, and Western Africa compared to other regions (Odunvbun & Kollie., 2022). In 1995, 2003, and 2008, it was determined that all abortions performed in West Africa were unsafe (Atakro et al., 2019). According to recent regional estimates of the safety of abortions, it indicates that nearly 85% of abortions in West Africa are considered unsafe as a result of women seeking clandestine procedures or self-termination (Bell et al., 2020). However, according to (Gebremedhin et al., 2018) 2.4 million unsafe abortions took place in Eastern Africa in 2008. Unsafe abortion account for 162,000 maternal deaths in sub-Saharan Africa, and 8,800 deaths of women in Latin America and the Caribbean (Halder et al., 2024). The implementation of safe termination services, particularly in cases where contraceptives fail or for pregnancies resulting from gender-based violence (sexual violence, rape, etc.), and effective post-abortion care can completely eliminate deaths caused by unsafe abortions (Unkels et al., 2021)

STRATEGIES FOR IMPROVING ACCESS TO SAFE ABORTION

The global incidence of unsafe abortion remains unacceptably high. Improved methods for enhancing safe abortion treatment are still necessary, given the great majority of induced abortions result from unplanned pregnancies (de Vries *et al.*, 2020).

Below are few strategies that should be employed to lessen the burden of unsafe abortion globally;

Liberalizing abortion laws and policies to expand legal grounds and remove barriers

Legal limitations play a significant role on the accessibility and availability of abortion services and information (Shukla *et al.*, 2022). Research indicates that as abortion laws are liberalized, the number of safe abortions rises, major complications decline, and the rate of abortion-related morbidity and death decreases (Cameron, 2018). Legalizing abortion and investing in services that prevents unintended pregnancies would allow women to access safe, medically supervised procedures, thereby reducing the incidence of complications (Atakro *et al.*, 2019). Accumulated global studies shows evidence that the removal of restrictions on abortion results in the reduction of maternal mortality (Regmi & Rijal, 2016) as complications are very rare where abortion is legal (Remez *et al.*, 2020). Access to safe abortion services is a critical component of comprehensive reproductive healthcare and legalization would facilitate the integration of abortion services into the broader healthcare system, ensuring that women receive the necessary pre- and post-abortion care which would not only improve immediate health outcomes but also contribute to long-term

reproductive health by preventing complications that can lead to infertility and chronic health issues (Atakro *et al.*, 2019).

To reduce the public health burden, policies are needed to be put in place to help reduce the incidence and consequences of unsafe abortion (Kulczycki, 2016).Well-informed health policies should be put into place to encourage the liberalization of abortion legislation in order to provide access to safe abortion services and so reduce the number of unplanned pregnancies and its related consequences (Chae *et al.*, 2017). By 2030, the global rate of maternal death is expected to drop from 216 to 70 per 100,000 live births, according to the Sustainable Development Goals (SDG). Enacting legislation permitting abortion and enhancing the healthcare system to lower maternal fatalities linked to abortion would contribute to the achievement of SDG (Gebremedhin *et al.*, 2018).

Integrating safe, affordable abortion services in universal health care systems

One of the targets of Sustainable Development Goal (SDG) is to promote well-being and ensure healthy life for all is achieving (Footman *et al.*, 2020). There should be available, quality, and equitable access to post abortion care (PAC), which is the major treatment of complications from unsafe abortion, which can help reduce the case fatality associated with unsafe abortions and improve outcomes for disadvantaged women and well-functioning health system (Kulczycki, 2016). Early diagnosis and effective management of unsafe abortion are essential to lowering the health consequences of abortion (Halder *et al.*, 2024). Enhancing the supply of accessible quality abortion services increases the demand of women and society for safe and respectful care (de Vries *et al.*, 2020). The right to life is violated when a woman experiences maternal morbidity as a result of an unsafe abortion. It is imperative that these unintended consequences be avoided by enhancing the family planning program's quality and offering safe abortion services (Zafar *et al.*, 2018).

Structured health system

According to (de Vries *et al.*, 2020), healthcare facilities should support women's access to safe abortion care. The provision of high-quality abortion treatment and management relies on a well-functioning healthcare system that establishes standards and guidelines for medical professionals and supplies them with the necessities to promote health both within and outside of healthcare facilities (Shukla *et al.*, 2022). A structured health system should include multifaceted approach that includes all health stakeholders in the health systems and organizations, individuals working to promote, restore and maintain health. The government's role can be used to do this, and health ministries can have an impact on how evidence-based policies are formulated (Shukla *et al.*, 2022).

Training and increasing range of providers who offer high-quality abortion care.

One of the major hindrance to accessing safe abortion worldwide is a lack of trained providers, practitioners must receive more training in safer abortion techniques and be able to transfer patients to a medical facility that is capable of providing emergency care when a complication arises (Cameron, 2018). Previous study showed that trained healthcare workers who perform abortions following WHO guidelines record fewer complications than untrained personnel (Unkels *et al.*, 2021). A well-trained health personnel and equipped facilities would result to safe abortion practice, as well as health providers that are sensitive to the social implication of stigmatization and illegal practice (Izugbara *et al.*, 2015). This would increasing use of public sector health facilities by women and reduce unsafe abortion practice (Banerjee *et al.*, 2017).

A broader range of healthcare professionals are needed to address the shortage of abortion providers and increase women's access to safe abortions by ensuring that medical abortion methods are available. These methods can be self-managed, require little training, and increase women's access to safe abortions wherever they are in the world(Cameron, 2018). Guidelines from the World Health Organization (WHO) state that a variety of medical professionals, even those in primary care, are capable of performing abortions. There is proof that community workers with training contribute significantly to the improvement of abortion care safety (Cameron, 2018). In order to record success on this role expansion , program planners must ensure motivation, support and reasonable working conditions are provided affected health workers (Glenton *et al.*, 2017).

Educating communities to improve awareness and demand for safe abortion services.

Educating women regarding their reproductive health and providing adequate information such as discussions about safety and efficacy in the use of contraceptive, medical and technological advancements in abortion care will influence the shift in the public perception of abortion especially for those opting for services outside the health system (Shukla et al., 2022). Attention to other issues that are relevant to woman's health such as medical after-care should also be implored (Dawson et al., 2016). This information exchanged would ensure that women have the necessary information to make informed health decision (Shukla et al., 2022). More emphasize should be made on sensitivity and secretive nature of abortion and raises awareness on safe abortion service (Ganle et al., 2016). Broad range expertise of stakeholders such as international agencies, NGO, women's rights organizations, medical and other professional societies, Ministries of Health should be employed in creating awareness (Chavkin et al., 2018). Proper dissemination of existing guidelines and institutional support should be included to ensure safe abortion service (Aniteye et al., 2016). Harm reduction counseling is another strategy to implore in educating communities to ensure safe access to safe abortion service. It involves the provision of information about safe abortion methods to pregnant persons seeking abortion which often involve risk assessment or screening and follow-up medical care. Evidence showed that this practice helps lower complication rates of abortion and leave patient satisfied (Stifani et al., 2022).

Modern contraceptive and effective technologies

The majority of unsafe abortions occur because of an unintended pregnancy (Cameron, 2018) Effective contraceptive adoption by these patients would help reduces the risks of unintended pregnancy and repeated unsafe abortion practice (Mutua *et al.*, 2019). Studies shows that effective modern contraceptives use have decreased the rate of abortion in countries where modern contraceptives were adopted (Singh *et al.*, 2017). Globally, there has been a decline in abortion-related deaths due to improved abortion related technology (Kulczycki, 2016). Safe and effective technologies for induced abortion should be made available and affordable for women (Shah *et al.*, 2014).

Simple technologies, such as manual vacuum aspiration and medical abortion (with the use of misoprostol even in restrictive settings) should be provided at primary care level and by health workers healthcare professionals, local NGOs, or women's organizations upholding women's rights to information (Ganatra *et al.*, 2017). Mobile phone-based interventions such as textmessage, voice messages, video and smartphone applications may be utilized to reach youth and rural populations, where geographical distances can restrict access to in-person services (Smith *et al.*, 2016). In addition, telemedicine or non-governmental organizational websites such as Women on Web, Women Help Women, and Safe2choose, which provide online consultation and

information's for women such as how to take their medications, the risks, and the signs that indicate the need to seek medical assistance, should be adopted (Cameron, 2018). This two-way communication and information exchange process would, enable women share their doubts, ask questions and ease their anxiety (Shukla *et al.*, 2022). Safe and effective technologies for induced abortion should be made available and affordable for women (Shah *et al.*, 2014).

Enabling socio-cultural environment

A socio-cultural environment that enables quality abortion care to reduce abortion stigma and prioritizes the dissemination of updated scientific information on the use of abortion technologies and processes as well as evidence-based policies and programs in clinical settings, which can further ensure equitable access to quality abortion care (Shukla *et al.*, 2022). Social dimensions that lay emphasis on abortion safety and abortion-seeking behaviors among should be utilized (Izugbara *et al.*, 2015).

Financing

Healthcare systems in many low- and middle-income countries are not well financed to provide the full range of quality SRH services which major obstacles in providing universal access to SRH services. The supply chain and logistics of abortion drugs and associated supplies should be strengthened and made available and accessible to all (Shukla *et al.*, 2022).

Monitoring and evaluation

Unsafe abortions are underreported and data on abortion are limited and incomplete in most settings (Halder *et al.*, 2024). This is due to reporting bias, stigma, and restrictive laws and policies which necessitated the use of indirect approaches to estimate abortion incidence (Bearak *et al.*, 2022). This makes it difficult to ascertain the magnitude of the abortions carried out, identify service gaps, and monitor the improvements implemented to improve care (Shukla *et al.*, 2022). Accurate measurement of abortion related morbidity and mortality would help determine the spectrum of risk associated and assess the impact of changes in abortion-related policy and practices (Calvert *et al.*, 2018).

S/N	IDENTIFIED BARRIERS	EXAMPLES	RE	FERENCES
1.	Legal limitations to abortion access	Abortion remains largely illegal virtually worldwide	Kul	czycki, 2016
2.	Socio-economic conditions	Financial hardships, unemployment, and insufficient financial support.	Ata	kro <i>et al</i> ., 2019
		Variations in the opportunity cost of childbearing, the degree of motivation to delay having children, and the accessibility of abortion services.	Cha	ne <i>et al</i> .,2017
3	Lack of knowledge of safe abortion services	Lack of awareness about safe abortion sources, safe abortion policies, and services.	Ata	kro <i>et al.</i> , 2019
		Lack of comprehensive sexuality education, fear of contraceptive side effects, and poor access to family planning services and products.		gbara <i>et al</i> ., 2015
4	Barriers in the health care system	Few medical practitioners are available to provide safe abortions legally.	Leo	one <i>et al.</i> , 2016
		Poor quality of health service, poor funding and coverage of abortion services, poor provider knowledge and attitudes and low community awareness and information (Footman <i>et al.</i> , 2020).	Foc	otman <i>et al.</i> , 2020
		Stringent facility standards, waiting periods, and legislation requiring parental approval.	Ata	kro <i>et al.</i> , 2019
5	Criminalization and stigmatization	Abortion is often criminalized in most parts of the world.	(De 202	2).
		Stigma around abortion, the related secrecy, moral judgment, and adverse humiliation due to body deformation, character flaw or grouped identity.	Cameron, 2018 Roosbelinda <i>et al.</i> , 2018	
6.	Others	Lack of awareness of the legality of abortion, limited understanding on the implications of unsafe abortion, lack of information on availability of	Bar	nerjee <i>et al.</i> , 2017
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BARRIERS TO SAFE ABORTION ACCESS

safe providers and methods, self-	
efficacy, myths, misconception, and	
social stigma associated with	
abortion and its safety.	

CONCLUSION

This review highlights the critical and urgent issue of unsafe abortion as a significant public health concern that continues to affect millions of women globally. The impact of unsafe abortion impacts dangerously on the physical, mental and social health of women of reproductive age and it is one of the leading causes of maternal mortality.

Unsafe abortion is very preventable but very little progress has been made to end this public health issue. There is an urgent need for collective action to prevent the unnecessary complication often associated with unsafe abortion. To achieve this, a multifaceted approach that addresses the root cause of unsafe abortion, and improve the quality of life of women will be needed. Overall, this will contribute to the achievement of Sustainable Development Goals related to reducing maternal mortality rate.

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