# FROM SUB-SAHARAN AFRICA TO THE UNITED STATES:

# EXAMINING THE IMPACT OF ABORTION POLICY ON MATERNAL HEALTH

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**Abstract**

This literature review explores the global issue of unsafe abortion and the insights it can offer into the effects on women seeking abortions in the United States following the reversal of Roe v. Wade. Sub-Saharan Africa (SSA) is highlighted as a region with one of the highest rates of unsafe abortion due to restrictive laws and underlying social stigma. The findings reveal that most abortions in SSA are unsafe, resulting in high hospitalization and maternal mortality rates. The review also examines policy reforms in Ethiopia and South Africa, which have improved abortion safety and maternal health. However, barriers to accessing safe abortion persist, including community backlash, negative healthcare provider attitudes, misconceptions of abortion, and financial challenges. This review identifies common challenges encountered by women seeking abortions in both SSA and the US. In the US, around 29% of reproductive-age women live in states with restricted or nonexistent abortion access.[1] By examining the situation in SSA, this literature review highlights the potential to gain valuable insights into addressing public health issues associated with abortion and informing policy decisions in the post-Roe era.

## Introduction

Globally, an estimated 73 million abortions occur each year.[2] Across the world, women seeking safe abortions grapple with many factors that complicate their decision, including restrictive laws and social stigma. These barriers can often be too high, causing women to turn to unsafe abortions done in unhygienic settings and by untrained individuals. Unsafe abortion practices are associated with significantly higher complication rates than those performed by trained medical professionals in a safe and regulated environment. These unsafe practices can result in life-threatening complications and even death.

In the summer of 2022, the historic Supreme Court case Roe v. Wade was overturned, effectively ending the constitutional freedom to an abortion in the United States. To better understand the potential consequences women seeking abortions in the US may encounter in the post-Roe era, we will analyze global health data. As a region, Sub-Saharan Africa has one of the highest rates of unsafe abortion in the world due to various factors, including restrictive laws and the social stigma surrounding the practice of abortion.[3] In this paper, we will use data on unsafe abortion and maternal mortality as a metric to analyze the efficacy of certain classes of abortion policy. We will often restrict our attention to the analysis of sub-Saharan African nations to offer a focused lens through which the more subtle nuances of the effect of abortion policy on public health are most apparent.

## Abortion and Global Health

### *The Medical Procedure of Abortion*

Before proceeding with our evaluation of unsafe abortion across the global health landscape, it is helpful to clarify the specifics of the practice of abortion. Abortion is a standard medical procedure that involves the removal of an embryo or fetus, resulting in the termination

of pregnancy. Qualified health professionals perform abortions surgically or medically. Surgical intervention occurs through vacuum aspiration or dilation and evacuation, depending on the gestational age of the fetus. Medication abortion in recent years has begun to climb in use. This trend has been evident, especially in the US, where the percentage of abortions accounted for by medication abortion rose from 0% in 2000 to 53% in 2020.[4] This method uses mifepristone first as a progesterone antagonist, blocking the necessary function of the hormone and subsequently terminating the pregnancy. The second medication is misoprostol, which stimulates uterine contractions and expulsion of the pregnancy tissue. The World Health Organization has determined that these medications are safe to use as abortifacients up until 12 weeks gestation.[2] Both surgical and medical abortion methods are safe and effective when done by a trained healthcare professional, with success rates of 98% and 96%, respectively.[5]

Mid-level healthcare professionals and physicians can provide abortions. There must be a wide range of providers able to provide abortion, as the increased availability of trained providers increases the accessibility for patients to safe abortion. Data compiled from 6 countries in sub-Saharan Africa found no statistically significant evidence that abortions provided by mid-level providers were less effective than ones provided by physicians.[6] In addition to being able to be performed by mid-level providers, safe abortions also have an extremely low maternal mortality rate. Using data from the US between 1998 and 2005, it was found that the mortality rate for abortion was 0.6 deaths per 100,000 abortions.[7] To put this into perspective, the childbirth mortality rate was 8.8 deaths per 100,000 live births.[7] From a public health standpoint, it is feasible to achieve safe abortion as efficient and low-risk methods exist, and a wide range of licensed professionals can offer them.

*The Global Health Landscape of Abortion*

Of the 73 million abortions occurring annually, an estimated 45% are unsafe.[2] The World Health Organization (WHO) categorizes abortions as safe if the procedure is done by a trained individual and in a method recommended by the WHO. If it does not meet one of these criteria, it is categorized as a less safe abortion. If both criteria are not met, it is classified as a least safe abortion. 97% of unsafe abortions (both less and least safe) abortions take place in developing regions of the world.[2] Inadequate access to safe abortion services, particularly in developing nations, frequently compels women to resort to unsafe methods that can significantly endanger their physical and mental health. According to PRB, approximately 7 million women worldwide require medical attention each year due to complications arising from unsafe abortions.[8] Of maternal deaths related to pregnancy and childbirth, 13% are accounted for by complications due to unsafe abortion.[8]

With the advancements in medical technology and the rising use of medical abortion, the accessibility of abortion procedures has improved significantly from a healthcare standpoint. When abortions are done by a trained healthcare provider and in an appropriate manner, they are very safe procedures that have a relatively low risk for the patient.[7] Moreover, non-physician providers have been shown to safely perform abortion procedures, enhancing the accessibility of abortion care. Despite these advancements, women seeking abortions still face difficult decisions, which can result in resorting to unsafe abortion practices due to existing barriers.

The legal status of abortion remains a significant obstacle. An estimated 40% of women of reproductive age (15 - 49 years old) live in a country with restrictive abortion laws.[9] The proportion of unsafe abortions is significantly higher in countries with restrictive abortion laws than in countries with less restrictive laws.[3] In countries that have no restrictions on reasons for

abortion, nearly 90% of them are considered safe.[3] In countries with some restrictions, 41% of abortions are safe.[3]

Conversely, in countries that only allow abortions to protect the woman's physical health or life, only 25% of abortions are considered safe.[3] Between 2010 and 2014, northern Europe and North America subregions showed the highest proportion of safe abortions, with 97.9% and 99% of safe abortions, respectively.[3] Interestingly, those subregions also exhibited the lowest incidence of the procedure, suggesting that the overall less restrictive laws, increased health infrastructure, and high contraceptive use can contribute to high safety and low incidence of abortion.

According to one study, less than half of abortions in south-central Asia were safe, while both Latin America and Africa had only 25% of their abortions to be safe.[3] In Africa, the remaining unsafe abortions were mostly in the least safe category, meaning that untrained individuals did the procedures with an inappropriate method. Countries with high proportions of least safe abortions had high case fatality rates, with the highest at around 450 abortion-related deaths per 100,000 abortions in Western Africa.[3] To put this into perspective, the case fatality rate for abortions in the United States from 2000-2009 was 0.7 deaths per 100,000 abortions.[10] There are significant disparities in the standard of care that patients receive across different regions of the world.

**Unsafe Abortion and Maternal Outcomes in Sub-Saharan Africa**

Despite the potential for abortion to be a safe outpatient procedure, unsafe abortions and associated complications continue. Even with advancements in medicine that have increased abortion safety and effectiveness, unsafe global abortion has not changed substantially. In 1995, unsafe abortions accounted for 44% of total induced abortions worldwide; in 2008, that figure

rose to 49%.[9] Unsafe abortions disproportionately impact developing regions, strongly correlating to areas with restrictive abortion laws, substandard health infrastructure, and poor community understanding of the topic.[3]

Sub-Saharan Africa is no exception to this characterization. An estimated 77% of all abortions performed in Africa are unsafe.[11] The number of unsafe abortions per 1000 women of reproductive age in Africa is 24, while in developed countries, this figure is 2 per 1000 women.[12] An unsafe abortion can be performed by the woman herself, an untrained individual, or a medical provider in substandard, unsanitary conditions. These procedures can involve ingesting dangerous substances, inserting objects into the uterus, and applying force to the uterus.[13] A study conducted in 2020 found that women in Ghana used methods including ingesting chemicals including turpentine, bleach, and mixtures with livestock manure.[14] Other unsafe abortion methods reported in sub-Saharan Africa include herbs, anti-malarial medications, gasoline, and detergents.[15]

### *Complications of Unsafe Abortions*

In regions with inadequate healthcare infrastructure and limited accessibility to care, unsafe abortions can result in severe complications for women. An estimated 20-50% of women in sub-Saharan Africa who have undergone an unsafe abortion are admitted to the hospital.[9] Such procedures considerably raise the risk of incomplete abortion, hemorrhage, infection, uterine perforation, and damage to the genital tract and internal organs.[2]

A study conducted across 11 countries in sub-Saharan Africa analyzed abortion-related complications. Among the women who presented to hospitals with such complications, 2.3% had severe outcomes (death or near-miss events), with cardiovascular dysfunction being the most common complication.[15] According to this study, 7% of patients had potentially life-threatening

complications, 58.2% had moderate complications, and 32.4% had mild complications.[15] Among those with potentially life-threatening, moderate, and mild complications, the most common events were heavy bright bleeding (96%), vaginal bleeding (78%), and severe hemorrhage (73%).[15]

The severity of maternal outcomes varied considerably across the countries studied. In Niger, 5 out of 1000 women experienced severe maternal outcomes, whereas 48 out of 1000 women in Nigeria experienced those same events.[15] In Benin, 795 out of 1000 women had moderate complications.[15] Abortion laws in Niger and Benin allow the procedure to preserve health or for therapeutic reasons.[16] In Nigeria, abortion is only legally allowed when the woman's life is at risk.[16]

A positive association was found between women with little to no education and the likelihood of experiencing potentially life-threatening complications.[15] Additionally, women who had expulsion of products of conception before arriving at the health facility were more likely to have severe abortion-related complications.[15] The complications observed suggest a lack of information regarding the appropriate dosage of abortifacient drugs, when to seek medical attention, and symptoms of potential complications.

Unsafe abortion has also been a public health issue in Kenya. From 2003 to 2008, the estimated maternal mortality rate for women of childbearing age was 740 deaths per 100,000 live births, and 78% of these deaths were believed to be related to unsafe abortion.[17] A considerable proportion of women (77%) presenting to Kenyan health facilities for post-abortion care had moderate to severe complications, ranging from peritonitis, fever, mechanical injury from a foreign body, organ failure, sepsis, and death.[17] At the time when the study was conducted, the

act of obtaining an abortion in Kenya, regardless of the method used, was considered a felony and was punishable by up to 14 years of imprisonment.[16]

The study conducted in Kenya revealed that delays in care significantly increased the risk of complications for patients seeking abortion care. Patients who experienced delays greater than 6 hours before receiving care were twice as likely to have a severe complication than patients who sought treatment earlier.[17] Moreover, the gestational age of the pregnancy impacted the likelihood of complications. Patients whose pregnancies exceeded 12 weeks gestation had a 65% higher chance of having moderate to severe complications than those with pregnancies less than 12 weeks.[17] Lastly, women who reported they interfered with their pregnancy had a greater than two-fold risk for severe complications compared to women who reported they did not interfere.[17]

### *Death Due to Unsafe Abortion*

The severe complications from unsafe abortion can often lead to the patient's death. An estimated 68,000 women die annually due to unsafe abortion, making it a leading cause of maternal mortality worldwide. In 2008, sub-Saharan Africa accounted for 62% of unsafe abortion-related deaths globally.[9] Sub-Saharan Africa has one of the highest maternal mortality ratios secondary to abortion in the world. Estimates suggest that the abortion-related mortality rate in sub-Saharan Africa is over 300 times higher than in the United States (185 vs. 0.6 maternal deaths per 100,000 abortions).[11]

A 2021 study in Uganda aimed to learn from past patients and prevent future deaths caused by complications from unsafe abortions. Abortion in Uganda is mostly illegal except when needed to save the mother's life or protect her physical and mental health. Despite being legal under certain circumstances, it is still largely unattainable for most women in the country.[18] The study examined the cases of 13 women who had died due to unsafe abortions at an

under-resourced medical center. Out of the 13 women who died due to unsafe abortions at the medical center in Uganda, 9 presented to the medical center with a delay, while 7 initially sought care at a different facility before being transferred to the study's medical center.[18]

On arrival at the medical center, 8 of 13 women were critically ill and near the point of death, while the rest were categorized as somewhat or significantly unstable.[18] Sepsis was identified as the most common primary diagnosis, with 9 of 13 women being diagnosed.[18] In addition, uterine perforation was diagnosed in 5 cases, and hemorrhage was the primary diagnosis in 4 cases. For treatment, 6 women were given intravenous antibiotics, 3 women received oxygen, 3 women were given blood transfusions, less than 3 women were given intravenous fluids, and less than 3 women were given misoprostol for retained products of conception.[18]

In order to learn from these 13 cases and improve future patient outcomes, review panels composed of at least one obstetrician and one experienced midwife were formed. The panels determined that 12 of 13 deaths may have been prevented with adequate post-abortion care.[18] It was also determined that if there was no delay in medical care and optimal treatments were used, 7 cases had a good chance of not ending in death.[18] Nine deaths were attributed to delays in presenting to the medical center, 6 deaths were attributed to a delay in receiving appropriate treatment, and 4 women died while waiting for an available ICU bed.[18]

One of the most common themes in the women who had died after an unsafe abortion was the delay in presenting for care. It is thought that this may be due, in part, to the fact that sepsis and uterine perforation develop slowly, and otherwise healthy young women can tolerate the symptoms until decompensating rapidly at the last moment.[18] Another common theme was the lack of adequate treatment, seen in the lack of resources for surgical care and blood

transfusions. Lastly, a lack of experienced provider review of each patient was determined to be a critical factor in contributing to death.[18]

Overall, the clinical implications of caring for patients presenting with complications following an unsafe abortion include understanding that these patients are more likely to have presentation delays and are likely sicker than they initially seem.[18] The review panels recommended early consideration of IV antibiotics be given due to the high incidence of sepsis and uterine perforation and that a knowledgeable clinician be consulted as soon as possible.[18]

The consequence of restrictive abortion laws and the high prevalence of unsafe abortion is a population of women compelled to endanger their physical well-being to terminate their pregnancy. The risks of unsafe abortion include hemorrhage, uterine perforation, sepsis, organ failure, and death. The women who make it out alive will likely have severe mental repercussions and trauma tied to their experience of obtaining an unsafe abortion. Medical and technological advancements have made safe abortion in developed countries approximately 14 times safer than childbirth, with a mortality rate of 0.6 per 100,000 abortions.[7] Even so, many regions worldwide, including sub-Saharan Africa, have maternal mortality rates of up to 185 deaths per 100,000 abortions.[11] Deaths related to unsafe abortions are often preventable and caused by various factors stemming from barriers to prompt and appropriate medical care, underscoring the urgent need for effective interventions to address the pressing public health issue of unsafe abortion.

**Abortion Policy Reform and Outcomes**

Abortion policy is crucial when assessing the barriers an individual must overcome to achieve a safe abortion procedure. Here, we will examine the countries of Ethiopia and South

Africa as case studies to see how reforms on restrictive laws impacted women's health of each country's population.

### *Ethiopia*

In 2005, Ethiopia expanded its abortion law to increase access to safe abortions. Before the policy change, abortion was allowed only to protect the woman from physical harm or to save her life.[19] Under this law, unsafe abortion was a leading cause of maternal mortality. In 1983, unsafe abortion was reported to have accounted for 54% of maternal mortality, and in 1992, it accounted for 41% of maternal deaths.[20] The large proportion of deaths due to abortion prompted the Ethiopian government to change its policies on the procedure.

The reformed law allowed women to legally obtain an abortion on grounds of rape, incest, or fetal impairment; if the woman's physical health is in danger; if the woman has physical or mental disabilities; or if the woman is unprepared for childbirth and child-rearing due to being a minor.[19] Since the law's introduction, the Ethiopian government has expanded access to abortion care through many avenues and aligned its guidelines with WHO recommendations.[19]

Implementing safe abortion access takes time, mainly when applied to an entire country. Several studies examined the progression and execution of this law, analyzing data from 2008 to 2014. Between these years, the proportion of legal induced abortions nearly doubled, from 27% to 53%, respectively.[21] The annual number of women seeking legal abortions increased by over 39%, from 158,000 in 2008 to 220,000 in 2014.[22] Several studies found that self-induced abortions in Ethiopia declined from 2008 to 2014. In 1991, 28% of women admitted to the hospital reported having induced an unsafe abortion themselves.[22] In 2014, this figure had fallen to 15%.[22]

Between 2008 and 2014, manual vacuum aspiration and dilation and curettage procedures decreased from 73% to 53% and 23% to 4%, respectively.[23] The introduction of medical abortions caused the proportion of abortions induced by misoprostol and mifepristone to increase from zero in 2008 to over one-third in 2014.[21] Both public hospitals and health centers had an increase in using the appropriate technology for uterine evacuation for second-semester abortions, increasing from 19% to 85% of procedures that followed WHO guidelines.[23] The gestational period in which the abortion was performed did not differ significantly. In 2008 and 2014, most women obtained their abortion within the first trimester (89% and 92%, respectively).[22]

The number of women seeking post-abortion care increased more than twofold between 2008 and 2014, from 58,000 to 125,000.[22] This is a notable success because when serious complications are treated appropriately and promptly, the likelihood of death is diminished substantially. The proportion of women seeking care for severe complications from abortion increased from 7% in 2008 to 11% in 2014.[22] The rise in this figure was likely due to the increased access to post-abortion care and the increased trust in abortion care resources. These factors lead to more women seeking the necessary care sooner, increasing the detection of complications from abortion. Post-abortion care (PAC) can also include contraceptives and counseling to prevent further unplanned pregnancies. The increased demand for abortion care shows the importance of working towards increasing contraceptive prevalence in Ethiopia. An estimated 25% of married women in Ethiopia have an unmet need for effective contraceptive methods, and as a result, 33% of pregnancies are unintended.[22] Efforts to increase access to contraceptive care resulted in 77% of women receiving PAC that included a modern contraceptive method in 2014.[22]

As the implementation of the newly revised abortion law continued, the Ethiopian government worked to increase access to the procedure. Between 2008 and 2014, the number of facilities that could provide abortion care more than quadrupled.[23] In 2014, two-thirds of public health centers, 80% of private and NGO centers, and 98% of public facilities could provide abortion care.[21] The quality of abortion care improved considerably over the years as well. Compared to 2008, facilities administered more antibiotics (from 61% to 82%), IV fluids (from 80% to 97%), and oxytocics, which had a 5-fold increase.[23] Facilities also reported an increase in the ability to perform blood transfusions (60% to 86%), as well as laparotomies (59% to 91%).[23] The number of facilities that provided post-abortion family planning services increased from 447 to nearly 2000 health centers.[23]

The type of provider also changed due to a vigorous strategy by the Ethiopian government to increase midlevel abortion providers. The proportion of care provided by physicians declined from 52% to 18% from 2008 to 2014, while the proportion of nurses, midwives, and surgical health officers increased from 48% to 83%.[22] This expansion of qualified providers contributed to the decentralization of abortion care and ultimately increased access to safe abortion for women.

Although the eradication of unsafe abortion has not been achieved in Ethiopia, studies report that in 2014 alone, an estimated 961 maternal deaths and 180,000 unsafe abortions were avoided due to abortion care and PAC.[22] Additionally, the proportion of unsafe abortions contributing to maternal mortality in Ethiopia has declined significantly. From 1980-1999, unsafe abortion accounted for 31% of maternal mortality.[20] During 2000-2012, 10% of maternal mortality in Ethiopia was due to unsafe abortion.[20] As a whole, Ethiopia's maternal mortality rate has decreased substantially, from 1,030 per 100,000 live births in 2000 to 401 per 100,000 live

births in 2017.[24] Overall, the changes in Ethiopia's abortion policy resulted in increased access to safe abortion, improvements in complication management, and the establishment of family planning services. These changes also coincided with a decline in the critical measure of maternal health, as the maternal mortality rate was reduced by over half of what it had been before the abortion policy reform.

*South Africa*

The abortion law in South Africa underwent several revisions, beginning with overturning the abortion ban in 1975.[25] Immediately after, strict limitations remained, hindering access to safe abortions for women in South Africa. The restrictions indicated that women were only allowed to have a legal abortion if she was at severe risk for mental or physical harm, the pregnancy was a product of rape or incest, and the procedure had to be signed off by 2 physicians.[25] Many women continued seeking unsafe methods of terminating their pregnancies, resulting in an estimated 120,000-250,000 unsafe abortions annually between 1975 and 1996.[25] Under this law, unsafe abortions had become an enduring and significant danger to women's health in South Africa.

In 1996, the Choice on Termination of Pregnancy Act (CTOP) was passed. This new policy granted women the right to have an abortion on request during the first 12 weeks of pregnancy, to safeguard the health and well-being of the mother or fetus, and in cases of rape/incest between 13-20 weeks (with the approval of one physician).[25] CTOP applied to all women and notably did not require parental consent for minors.[25] Although the expansion of safe abortion care was prioritized throughout South Africa, mainly by using inexpensive technology such as manual vacuum aspiration and misoprostol, less than one-third of designated health centers could provide abortion care by the end of the first year. This was primarily due to the

lack of providers that could provide abortions. In 2008, the South African government modified CTOP to decentralize care and include trained nurses as providers who can perform abortions.[25]

To target the shortage of providers, the South African government created the National Abortion Care Program (NACP) in 1998 to train providers and expand safe abortion care.[25] This organization worked to train providers on cost-efficient abortion techniques, how to manage incomplete abortion, and how to counsel patients effectively for post-abortion care.[25] On top of the logistical advancements, NACP facilitated discussions about views on abortion. Over 4000 nurses, midwives, and physicians were enrolled in these workshops, and it was reported to have shown positive changes and increased engagement in providing abortion services.[25] Through these initiatives, the percentage of designated facilities that provided abortion care rose from 32% in 2000 to 62% in 2003.[25] Improvements in other areas of reproductive health were observed as well. The contraceptive prevalence in the sexually-active population in South Africa increased from 61% to 65% from 1998 to 2003.[25] Interestingly, the differences in contraceptive usage between individuals living in rural and urban areas almost completely diminished from 1998 (67% urban, 54% rural) to 2003 (66% urban, 62% rural).[25]

In 1997, South Africa created the National Committee on Confidential Enquiries into Maternal Deaths (NCCEMD), which investigated maternal deaths in hospitals nationwide and suggested improvements to the Department of Health for better maternal care.[25] The decrease in abortion-related deaths after implementing the CTOP policy has been linked to the systemic changes in provisions of reproductive care and the work done by NCCEMD. In 1994, unsafe abortion complications caused 32.69 deaths per 1,000 abortions.[25] However, by 1998, only 0.80 deaths per 1,000 abortions were reported, and this number either remained stable or decreased in the following years.[25] Additionally, there was a 91% reduction in deaths associated with unsafe

abortion between 1998 and 2001 compared to the deaths recorded in 1994.[25] Between 2005 and 2007, abortion-related deaths constituted only 3.3% of all maternal deaths.[25]

In conclusion, the efforts to improve access to safe and legal abortion in Ethiopia and South Africa have yielded positive results for maternal health. The increased number of trained providers and the adoption of safe medical technology in health centers have enabled more women to access the care they need. The increased access also decreased reports of unsafe, self-induced abortions in Ethiopia. Additionally, the increase in the number of women who received post-abortion care has led to better management of abortion complications. These improvements have resulted in a decline in maternal mortality ratios in Ethiopia and a significant reduction in abortion-related deaths in South Africa. The analysis of the experiences of Ethiopia and South Africa illustrates that improving access to safe and legal abortion services is a critical measure in enhancing maternal health outcomes.

**Barriers to Abortion Access**

While restrictive policies are a significant barrier for women seeking a safe abortion, women face other challenges beyond prohibitive laws. Negative cultural attitudes towards abortion in sub-Saharan Africa often create barriers for women, which can be challenging and isolating to overcome. In sub-Saharan Africa, increasing the accessibility of abortion is not as straightforward as reforming abortion law. It must be approached through a multifaceted lens that considers the consequences in the woman’s community, negative attitudes from healthcare providers, and inaccurate perceptions about abortion, all of which ultimately stem from an underlying damaging stigma about abortion.

*Consequences in the Community*

An informal abortion done in a substandard environment by untrained individuals heightens the health risks of the procedure significantly. Despite this, some women in regions where safe abortion is legal still opt for this risky approach. To better understand this phenomenon, we must break down the motivations and reasoning behind the women's decisions to choose the unsafe method over the legal and safer alternative.

A study in Zambia found that 69% of women interviewed knew one or more women who had died after an unsafe abortion.[26] During this study, abortion in Zambia was relatively liberal, with a 28-week gestation limit and allowable reasons for abortion including the risk of physical or mental injury to the pregnant woman and any existing children.[26] However, the country still had a high mortality ratio of 120 abortion-related deaths per 100,000 live births, attributed to social and cultural factors and limited access to proper healthcare facilities.[26] Of the school-aged girls who died from unsafe abortions, over 80% had tried to perform the abortion themselves. The causes of death ranged from using antiparasitic drugs to ingesting traditional herbs.[26] The preference for self-induced abortions indicates that there may be social factors on top of pragmatic ones playing into the girls' decisions to have an unsafe abortion. Even in a country with relatively liberal laws, the concern of privacy and potential social blowbacks can lead to unsafe abortion practices, putting many school-aged girls at risk of death.

Many studies have cited privacy as a primary motivator for women to seek clandestine abortions over public sector procedures.[27] Women in Kenya and Zambia reported having opted for informal abortions due to fear of retaliation from their family and partners and being cut out from their community.[27] Kenyan women report to have been labeled as 'murderers' and ostracized from their community on account of having had an abortion and being a bad influence

on young women.[28] They are categorized as unfit for marriage, leading to social isolation and unfortunate future prospects.[28] Women have also cited fears of losing their income sources and support systems.[27] Communities also take advantage and use the fact that many complications arise from unsafe abortion as a reason for women not to proceed, instilling fear that abortion procedures result in infertility.[28] These justifications demonstrate that even in a setting with permissive abortion laws, women still opt for unsafe abortions to safeguard their reputation and social standing.

In the southeastern African country of Malawi, negative cultural beliefs about abortion were found to strongly influence women when seeking the procedure, particularly impacting younger women who face the brunt of the social consequences. The stigma of unplanned pregnancies outside of marriage can lead a woman into an early marriage to save the status of her family and herself.[29] Young women can also face expulsion from school, often never returning to complete their education.[29] In 2008, a primary school in Malawi reported 56 expulsions in one year due to the pregnancies of their students.[29] And if a student is found to have had an abortion, she is expelled from school as well.

Many cultural perceptions of abortion were recorded throughout the interviews with Malawian women. Long-held beliefs perpetuate the negative consequences associated with abortion, including the false notion that abortion can lead to infertility.[29] The Malawian community has labeled women who have had an abortion as sinners and evil.[29] Due to these barriers and potential social blowbacks, women in Malawi may feel compelled to seek unsafe and clandestine abortions to protect their status in their community. Although Malawi abortion law is heavily restricted and only allows a legal abortion if the woman’s health or life is at risk,

the cultural perceptions and stigma about abortion show a landscape that does not seem conducive to increasing safe abortion access.

*Negative Healthcare Provider Attitudes*

Negative treatment from healthcare workers has been reported to be a barrier to safe abortion access in sub-Saharan Africa.[27] Women learn of these negative attitudes by directly experiencing mistreatment from medical staff in the past or hearing about others' experiences.[27] It has been reported that in South Africa, some women seeking an abortion have been stigmatized and labeled as murderers by healthcare workers.[27] Attitudes from medical providers ranged from insulting or being hostile towards the patient, and failing to maintain confidentiality.[28] Lack of confidentiality could be especially damaging, leading to severe social consequences. The fears of mistreatment and social ex-communication weigh heavily on women seeking an abortion, causing them to often choose clandestine and unsafe options that maintain their privacy.

The negative abortion stigma by medical staff extended into their clinical care, with reports of clinicians refusing to provide an abortion or make a referral to an abortion clinic.[27] This and long wait times contributed to women turning to the informal sector to obtain an abortion.[27] The later a woman is into her pregnancy, the higher the risk of an abortion. Due to delays in receiving care, women were subjected to higher health risks due to their provider's beliefs. In some cases, a waiting list could potentially make the woman ineligible for an abortion, further contributing to the woman seeking an unsafe abortion outside of the formal sector.[27]

Providers' negative attitudes extended even further from delaying patient care. One doctor in South Africa admitted to keeping pain medication from their patients, stating that giving analgesics would make the procedure "too comfortable" and might bring repeat patients

back to the clinic.[30] A multi-country abortion survey that examined 11 countries in sub-Saharan Africa reported that 13% of women did not receive pain relief during their time at the health facilities.[15] According to the World Health Organization, pain relief from non-steroidal anti-inflammatory drugs (NSAIDs), antiemetics, and epidural anesthesia is the standard of care for abortion procedures, and it is recommended to be offered to the patients as needed.[31] Even with this globally established guideline, some healthcare providers' attitudes have influenced the care they provide women who are having an abortion, ultimately contributing to the fact that women choose to seek unsafe, self-medicated abortions instead of safe, formal sector procedures.

Since 1996, women in South Africa have had the legal right to an abortion on request up to 12 weeks gestation.[32] Even so, negative provider attitudes and hostile treatment of the patients continue to persist as barriers to safe abortion access. These attitudes are frequently based on religious or moral convictions and contribute to the negative stigma associated with abortion.[32] This can also exacerbate the shortage of providers for safe abortions, forcing women to endure long waiting lists, thus increasing their risks associated with the procedure, or turn to unsafe procedures in the informal sector.[32]

Providers who have moral and religious opposition to abortion have different ways of going about it in their jobs. Some removed themselves from performing abortions and provided just pre- and post-abortion care.[32] Others could reconcile their beliefs with their professional conduct and took it as part of their job.[32] According to reports, healthcare providers in South Africa showed more understanding and support towards patients seeking abortions for reasons they considered legitimate, such as fetal anomalies.[32] Additionally, most providers agreed that women seeking abortions due to rape or incest deserved more compassion.[32]

To increase the accessibility of safe abortions for patients, values clarification (VC) workshops have been implemented in abortion training for healthcare providers in South Africa.[32] These workshops focus on refocusing their attitudes toward abortion to support the woman being treated. They have been reported to be helpful in understanding barriers to safe abortions, eliminating misinformation, and addressing stigmatizing behaviors.[32] Although VC workshops have received positive feedback, they are not widely implemented, and thus the barriers that South African women face continue to persist.

*Inaccurate Perceptions of Abortion, Regulations, and Financial Challenges*

Although many women live in regions where abortion is permitted by law, the secrecy and stigma surrounding the procedure lead to incorrect perceptions that the procedure is illegal, contributing to the reasons that women choose unsafe abortion. The lack of knowledge in the general population about abortion was ubiquitous within several countries in sub-Saharan Africa.[27]

In Kenya, a series of focus groups done with male and female participants showed that they believed there was no safe way to have an abortion.[28] Another report found that misconceptions about the legality of abortion were widespread, even though all the regions examined had liberal laws on abortion.[27] Women reported being misled by healthcare workers and being given wrong information about their legal options.[27] Furthermore, the convoluted path of navigating abortion laws prevented patients from attempting to obtain the procedure legally altogether.

A woman's social network was an important factor that went into her decision to obtain an informal abortion.[27] These networks played a large role in relaying knowledge about informal abortion procedures and helping women to obtain one.[27] In Kenya, it was reported that 95% of

women discussed their plans for clandestine abortion with their social network before making the decision.[28] One study reported that a woman's social network had a greater bearing on her decisions if she was younger, possibly because they relied more heavily on their communities for support and guidance.[27] Additionally, if a woman knew someone involved in healthcare, she was more likely to have access to safe abortion in the formal sector.[27] The lack of clarity on abortion policies, coupled with a heavy reliance on social networks, suggests that women utilize their communities rather than official guidelines when making a decision about where to obtain an abortion.

Similar experiences are found in Zambia, where 70% of abortions are unsafe, even with relatively liberal laws.[33] In an analysis of a governmental hospital, it was found that 20% of the women seeking post-abortion care had initiated a non-clinical abortion prior.[33] Non-clinical abortions include insertion methods, herbal medicines, and all other abortifacient materials that do not include misoprostol and mifepristone or manual vacuum aspiration. Most patients interviewed stated they were unaware that abortion was legal and available in Zambia, and for the most part, they navigated their decision-making by confiding in their trusted social network.[33]

The women who chose an unsafe abortion revealed that they were led to do so by their close friends' and relatives' suggestions.[33] The women who went to the public sector for the procedure had the knowledge themselves or had social networks that knew of safe abortions and provided correct advice.[33] Many women and girls who seek unsafe abortions want to hide the procedure from their partners or parents, which can lead to a postponement of the necessary medical attention when they exhibit symptoms of complications but are hesitant to disclose their true medical history.[33] Patient interviews shed light on this type of situation, and in some cases,

women continued to deteriorate in health until they had no choice but to reveal their abortion and obtain proper medical care.[33]

Women have also cited regulations that are difficult to navigate as a barrier they must overcome to obtain a safe abortion in the formal sector. The requirement of parental consent is often cited as a difficult barrier to overcome, as women and girls who are seeking an abortion often prefer to keep it secret from their parents. In Zambia, the requirement of having 3 physicians sign off (one being a specialist) on a woman's abortion has been an issue due to the lack of doctors, particularly in rural areas.[27] Remarkably, this problem has been mentioned in two different papers with a 16-year gap, indicating that it has been a persistent issue for a long time.[27] In 2014, it was reported that Zambia had 1000 doctors serving a population of 15 million.[33] Less than 60 doctors were registered as obstetrician-gynecologists.[33] Zambia's abortion regulations, coupled with the lack of qualified physicians, create an environment where safe abortion is unattainable for many women.

Economic costs also contributed to barriers women had to overcome to obtain a safe abortion. Even though governmental care facility costs are intended to be reasonable, it has been reported that medical staff attempt to withhold care from women until they pay additional 'fees'.[33] Because of the widespread misunderstanding in some countries that abortion is illegal, women often felt they had no other choice but to pay the fee, with the fear of being reported to the police.[33] Low-income individuals are often the most affected by these additional expenses as they represent an overwhelming obstacle for them. The cost was also an issue for women who wanted to conceal their abortion from the people they were financially reliant on.[27] This is particularly applicable to dependents who may have wanted to keep their decision to have an abortion from their parents.[27]

Even in areas where safe abortions cost as much or even less than unsafe ones, false ideas about informal-sector abortions being cheaper persisted. In Ghana, abortion is permitted by law, yet many women end up having unsafe abortions due to the cost.[14] The women that are most impacted are young, unemployed women, many of them students, who report that the cost of the procedure in the public sector is too high for them to afford.[14] These women report that instead of seeking expensive care at public and private hospitals, they perform the abortion themselves through self-medication.[14] Although this may seem like a cheaper option initially, these unsafe abortion practices often result in these women being hospitalized for serious side effects from the abortifacient, which can end up costing much more than the safe procedure.[14]

The gestation of the pregnancy at termination also is strongly associated with the costs of the procedure. Many women face several barriers when seeking a safe abortion, and delays in care are an unfortunate reality. These delays can cause their pregnancy to be at a gestational age where cheaper, public-sector abortions are no longer available.[14] When women who already struggle with finances are forced to choose between private sector prices and purchasing an abortifacient themselves, they all too often choose the latter option. Even in countries where abortion is legal, for many women, the cost is often a deciding factor in whether or not they should risk their health with unsafe abortion.

The obstacles to accessing safe abortion go beyond policy and extend to the social, cultural, and economic factors that affect women seeking the procedure. Women must consider the potential ramifications within their community, including damage to their social status or even ostracization. Further, negative healthcare provider attitudes can result in poor treatment and delays in care, creating additional barriers. Compounding these challenges is the confusion around abortion legality and complicated regulations that hinder access to legal procedures.

Lastly, cost poses a significant barrier for many women, particularly those with lower socioeconomic status.

**Application to the United States**

*History of Abortion in the United States*

To understand the current status of abortion in the United States, it is crucial to examine the past, where the procedure was a commonly accepted aspect of reproductive care. During colonial times, the procedure was legal until "quickening" or the first fetal movement felt by the mother.[34] However, the attitude towards abortion changed in the mid-19th century when the American Medical Association (AMA) sought to regulate medicine and eliminate midwives and other practitioners who provided abortion services.[34] Before the intervention by the AMA, these providers relied on traditional methods such as herbal abortifacients, pessaries (a device similar to a tampon soaked in a solution), and surgical procedures like D&C.[34] The AMA, eager to establish itself as a gatekeeper of the medical profession, began its anti-abortion campaign in 1857. By 1880, at least 40 laws restricting abortion had been implemented across the US.[34]

Even though abortion was illegal in almost all states and territories during the late 19th and early 20th centuries, some doctors continued to perform them. Depending on the social atmosphere at the time, doctors would empathize with their patients' desires not to have children and perform abortions "off book".[34] In the 1920s and 1930s, many cities had doctors who specialized in abortions, and other doctors would refer patients to them. The Depression era saw an increase in doctors performing clandestine abortions, but after World War II, societal gender roles shifted, and women were expected to have children and stay at home. This led to doctors being prosecuted for performing abortions, forcing the practice underground and into the hands of less skilled individuals.[34] According to the Guttmacher Institute, up to 1.2 million illegal

abortions were performed annually in the 1950s and 1960s. In 1965, 17% of reported deaths related to pregnancy and childbirth were associated with illegal abortions.[1]

Disease outbreaks such as Rubella in the 1960s led to the endorsement of therapeutic abortions by medical authorities due to the risk of severe birth defects associated with infection.[34] However, access to safe abortions was limited and often only reserved for women of higher socioeconomic status.[34] Wealthier women began bringing their cases to fight for abortion to court, creating momentum to reform restrictive abortion laws. This paved the way for Roe v. Wade in 1973, effectively making abortion a constitutional right.[34]

Before Roe v. Wade, illegal abortion was highly prevalent and especially visible in the maternal death toll in the United States. In 1967, 829,000 abortions occurred in the US.[1] The death tolls from abortion declined from 2,700 women in 1930 to under 200 women in 1965.[1] This drastic reduction in deaths due to unsafe abortion was likely due to the introduction of antibiotics and the rise of medical technology to better manage post-abortion complications. However, the proportion of maternal deaths due to unsafe abortion (18% in 1930 and 17% in 1965) had nearly no change.[1]

Restrictive abortion laws were found to affect women in marginalized communities disproportionately. In the 1960s, 77% of low-income women who reported having an abortion had it self-induced, while only 2% had physician help.[1] Furthermore, a racial disparity was present in the abortion-related mortality of women living in New York during the 1960s. The study found that for white women, 1 in 4 deaths related to pregnancy or childbirth were due to unsafe abortion.[1] For nonwhite women, this figure was 1 in 2 deaths.[1] By the early 1970s, abortion was legal in some states, but women still had extremely limited access to the procedure. According to the Centers for Disease Control, approximately 130,000 women had an unsafe

abortion procedure in 1972.[1] In the following years, between 1972 and 1974, it was reported that nonwhite women had an estimated maternal mortality rate due to illegal abortion 12 times higher than white women.[1]

While abortion was largely illegal before the decision of Roe v. Wade in 1973, states did have certain conditions under which women could terminate their pregnancies. To obtain a legal abortion, women during this time had to have a certifiable risk to their mental or physical health if the pregnancy was carried to term. Oftentimes, this required women to have physicians and psychiatrists sign off on the reason for the procedure. Women who could navigate this system often had well-established relationships with their doctors. One New York study found that 88% of patients who had a therapeutic abortion between 1951 and 1962 were patients to private physicians and not hospital staff.[1]

In 1970, Alaska, Hawaii, New York, and Washington rescinded their anti-abortion legislation, allowing women who were residents in those states to obtain a legal abortion before fetal viability.[1] In New York, residency was not required; thus, traveling to New York to obtain a legal abortion became an attractive option for those who could afford it.[1] In 1972, 100,000 women traveled to New York for an abortion, some even traveling over 2000 miles from the Southwest.[1] A significant outcome of having to journey a long way to get an abortion was the subsequent postponement of the procedure, which could increase the likelihood of the woman experiencing complications. Less than 10% of New York residents had an abortion after 12 weeks gestation, while 23% of nonresidents had an abortion after the 12th week of pregnancy.[1] In addition, a woman who had to travel a considerable distance to get an abortion faced the challenges of traveling shortly after undergoing surgery and could not receive ongoing medical attention if follow-up services were needed. If a complication did occur, the woman might not

have access in her home state to medical providers who had adequate experience with post-abortion care. Although these hubs for abortion care in the United States were invaluable, they did not, in any way, tackle the more significant issue of unequal access to abortion.

Roe v. Wade was decided in 1973, protecting the liberty of a pregnant woman to have an abortion. Following this landmark case, abortion-related deaths declined dramatically, from 44 deaths in 1973 to 9 deaths just 7 years later, in 1981.[35] Most recent reports found 4 abortion-related deaths in 2019.[35] The risk of death due to legal abortion procedures decreased drastically from 3.3 deaths to 0.4 deaths per 100,000 abortions between 1973 and 1985.[36] This is attributed to increased physician knowledge, the progression of medical technology, and the rise of termination earlier in pregnancy.[36] The proportion of abortions obtained before 8 weeks gestation increased from 20% in 1970 to 56% in 1998.[1] By 2019, 79% of abortions were obtained before 9 weeks, and over 90% of abortions took place within the first trimester.[37]

*The Current State of Abortion in the United States*

In June of 2022, Roe v. Wade was overturned, ending the constitutional right to an abortion. Within 100 days after Roe was overturned, a minimum of 66 clinics across 15 states ceased offering abortion services, with some even shutting down completely.[1] Consequently, about 29% of women in the United States of reproductive age now reside in states where abortion access is either limited or nonexistent.[1] Following the overturn of Roe v. Wade, the ensuing months were fraught with confusion among healthcare workers. Vaguely worded abortion laws, combined with the fear of potential legal consequences and the possibility of physicians losing their medical licenses, created a heightened sense of uncertainty. Physicians in states with restrictive abortion bans often find themselves in a difficult position, torn between their obligation to provide necessary medical care and the legal constraints imposed upon them.

In some cases, they are left grappling with a troubling question: how sick and near death must a patient be before the provision of medical care is no longer considered criminal? These cases were reported to have occurred to patients in Ohio, Texas, and Wisconsin, all with restrictive abortion laws.[38,39]

Medication abortion in the United States comprised 53% of abortions performed in 2020.[40] This shows the widely gained acceptance of this method as a safe and effective option for patients and providers. Further, medication abortion is an option for patients who are in rural areas with limited access to healthcare providers. Since the June 2022 decision, increased barriers have limited patient access to medication abortion. In 15 states, restrictions have been imposed that require a physician to provide the medication, despite reports from the World Health Organization stating that advanced practice providers can safely administer this form of abortion care.[40] Additional barriers include mandating an in-person visit with a physician for the patient (in 6 states), requiring the first medication to be taken in the presence of a physician (in 1 state), and prohibiting the mailing of the prescription to the patient (in 1 state).[40] It is worth noting that these restrictions do not include the 12 states with near-total bans on abortion care, which have separate provisions that limit access to medication abortion and other forms of abortion care.[40]

As policies that restrict access to abortion care continue to be implemented, the impact on women's health cannot be ignored. A study conducted at the end of 2022 revealed that states with near-total bans or restrictions on abortion had significantly fewer maternal health services and worse health outcomes than states where abortion is accessible.[41] According to the study, states with restrictions on abortion had a 62% higher rate of maternal deaths than states without such restrictions.[41] Additionally, the ratio of obstetricians to births was 32% lower, and the ratio of

certified nurse midwives to births was 59% lower in those states compared to states without restrictions.[41] These ratios are also likely to worsen as more providers are driven out due to the inability to provide abortion care. Additionally, abortion-restricted states had greater limitations on Medicare coverage and affordable health insurance overall.[41] Continuing to criminalize abortion in these states poses a serious risk of exacerbating the existing disparities, particularly in states with limited Medicaid maternity coverage and inadequate maternity care resources, as healthcare providers become reluctant to practice in states that impose severe restrictions on their practice.[41] As a result, fractures in the maternal health system could deepen, and existing inequities based on race, ethnicity, and geography could be compounded.

### *Lessons to Bring from Sub-Saharan Africa to the United States*

Many countries in sub-Saharan Africa (SSA) have laws that limit access to abortion and the post-Roe United States mirrors them in many ways. Abortion is often only allowed in SSA when it's necessary to protect the mother's life or health. Nine out of ten (92%) women of reproductive age in SSA live in areas where access to abortion is highly or moderately restricted.[11] Similarly, 29% of women of reproductive age in the United States live in areas where abortion access is limited or unavailable.[38] As the US moves further into the post-Roe world, access to abortion may become increasingly limited as healthcare providers leave restrictive states. By examining what we know about abortion in SSA, we can better understand how to address public health concerns related to abortion and bring lessons to the post-Roe US.

Restrictive policies and barriers that cause delays in care can contribute to increased self-managed, unsafe abortions, which can result in severe complications such as inflammation, fever, organ failure, sepsis, and even death. Additionally, experiencing such a traumatic event may increase the risk of future mental health issues. To combat these significant public health

risks, Ethiopia and South Africa reformed their restrictive abortion laws and established social services. Ethiopia's maternal mortality rate was significantly reduced after legalizing abortion for more conditions, and the proportion of unsafe abortions decreased. Family planning initiatives were also created, with most women receiving post-abortion care also receiving a modern contraceptive method.[22] The Ethiopian government also addressed the shortage of abortion providers by implementing an extensive training program. These initiatives significantly increased the proportion of mid-level providers offering abortion services, rising from less than 50% to over 80%.[22] Similarly, South Africa experienced positive maternal health outcomes with a 91% decrease in deaths related to unsafe abortions, following the implementation of similar governmental initiatives.[25]

The clearest contribution to the improvement of abortion safety and maternal health in Ethiopia and South Africa was due to the reform of their restrictive abortion laws. We also understand that the lack of providers can significantly contribute to unsafe abortions. Policymakers in the United States should take note of this, as there are relatively few providers of abortions in the country, and existing clinics have and continue to close due to new policies. A lack of qualified abortion providers may lead women to lack understanding about the procedure, or worse, attempt the procedure themselves.

Social stigma was a significant obstacle to accessing safe abortion in many sub-Saharan African countries. Women were often excluded from their communities and viewed as unsuitable for marriage if they had an abortion.[28] While some stigma is associated with abortion in certain communities in the US, it is generally not as pervasive as in many SSA countries. In SSA, girls who had abortions could be expelled, which is unlikely to happen in the US. Women in the US who can obtain an abortion are less likely to face significant social consequences compared to

women in many SSA countries. While these damaging stigmas may not be as widespread in the US, it's crucial to acknowledge that these societal attitudes can still cause harmful consequences, such as driving women to choose clandestine abortion.

Healthcare providers in SSA with negative attitudes towards abortion affected women's access to safe abortion services. These providers often spoke poorly about women seeking an abortion, and some women were even denied pain medication during the procedure.[15] These negative attitudes mainly resulted in longer wait times and delays in care for women seeking abortion services.[27] In the US, the majority of physicians (78%) support abortion access.[42] Further, almost all obstetrician-gynecologists have come across patients seeking an abortion (97%), but only a small percentage (14%) offer abortion care.[43,44] Unlike in SSA, negative provider attitudes and their associated consequences are not significant in the US. Rather, the primary challenge in the US is the shortage of abortion providers, particularly as providers must decide whether to continue offering abortion services in states with strict abortion laws.

In SSA, misconceptions about abortion and its legality were widespread.[27] Similarly, in the US, misconceptions about the procedure have been used to promote legislation and provoke emotional responses. In the aftermath of the Roe v. Wade decision, there was a great deal of confusion among patients and healthcare providers about the legality of abortion. Even now, physicians are concerned that restrictive abortion laws limit their ability to make important medical decisions. In both SSA and the US, financial challenges also present a barrier to accessing safe abortion services. With many states in the US imposing strict limits on abortion, women often have to travel long distances to obtain a safe and legal abortion. On average, women living in states with restrictive abortion laws must travel 276 miles round trip, which can

be costly in terms of time off work, childcare, finding accommodations, transportation, and the actual cost of the procedure.[45]

By studying abortion in SSA, we can gain valuable insights into the effects of restrictive laws, the significance of their reform, negative stigma, misconceptions, and financial constraints associated with obtaining a legal abortion. The lessons that can be taken from SSA can be concentrated into three ideas. First, restrictive abortion policies can lead to dangerous abortion methods and delays in care, which can contribute to unsafe and clandestine abortion practices. Second, increased training of medical professionals and education of the public can promote increased access to and awareness of safe and legal abortion care. And last, financial and social constraints can be a large barrier for patients seeking an abortion leading to unsafe abortion.

There are many limitations to taking lessons from SSA and applying them to the US. One of the key factors is cultural differences, which significantly influence the community's attitudes toward issues like abortion and contraception. Additionally, gender roles differ across SSA and the US and among the different countries within SSA. Another critical aspect is the contrasting healthcare infrastructure between the countries of SSA and the US, which limits discussions on maternal mortality and the management of unsafe abortion.

Despite the constraints mentioned, it is crucial to note that global health data shows that countries with highly restrictive abortion laws have a significantly higher proportion of unsafe abortions than those with less restrictive laws.[3] This is further compounded by the fact that unsafe abortion has serious complications, which can quickly escalate into a public health crisis in countries with high rates of unsafe abortions.[3] As such, it is vital to emphasize the importance of challenging restrictive laws and promoting further research on the current state of abortion in the US post-Roe.

**Conclusion**

The prevalence of unsafe abortion worldwide underscores the critical need for safe and accessible abortion care. Sub-Saharan Africa has particularly high rates of unsafe abortion due to restrictive laws and social stigma, leading to significant maternal health risks. Policy reform in Ethiopia and South Africa revealed that increased access to legal abortion corresponded to a decline in abortion-related maternal deaths. However, social and economic barriers continue to prevent women from accessing safe abortion care. In the United States, the overturn of Roe v. Wade has led to restrictive laws and closures of abortion clinics, exacerbating existing disparities in maternal health outcomes.

Examining the situation in SSA has revealed that restrictive laws contribute to unsafe abortion and that increasing healthcare workers' training on abortion can promote access to safe procedures. Further, financial and social barriers can prevent patients from accessing a safe procedure. Despite the differences in healthcare infrastructure, culture, and gender roles between SSA and the US, the region still provides valuable insights due to its similar restrictive laws. The countries in SSA have dealt with these restrictions for a longer period, making them a helpful region to examine as the US moves into a new era. As complications from unsafe abortions can have severe consequences, addressing these barriers and promoting further research on abortion care in the United States post-Roe is crucial to preventing a potential maternal health crisis.

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