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Review

# Geopolitical Instability and Maternal Health: Assessing the Impact on Obstetric Fistula Prevalence and Care in Low- and Middle-Income Countries

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**Abstract: Background:** Obstetric fistula remains a major, yet preventable, maternal public health issue affecting tens of thousands of women annually—primarily in low- and middle-income countries (LMICs). It is intricately linked to health system failures, socio-economic inequality, and political instability. While advancements in maternal care have dramatically reduced maternal morbidity and mortality in high-income countries, progress has been inconsistent or stagnant across LMICs. The burden of obstetric fistula is exacerbated by ongoing conflict, reduced global aid, and weakened reproductive rights in many regions. **Methods:** This study explored historical and contemporary trends in maternal mortality and obstetric fistula, focusing on how geopolitical instability and global health policy shifts have shaped service delivery in low- and middle-income countries (LMICS). It assessed the effectiveness of international campaigns and training programmes, while identifying systemic barriers and proposing evidence-based strategies to improve outcomes. A narrative review and policy analysis were conducted, drawing from peer-reviewed literature, global health databases (WHO, UNFPA, and World Bank), and grey literature spanning 1990–2025. Data included maternal mortality, fistula incidence, service models, and geopolitical events impacting healthcare systems. Key informant insights and case studies from conflict-affected regions—including Sudan, Afghanistan, and the DRC—were used to contextualise and strengthen the analysis. **Results:** Findings demonstrate a persistent and disproportionate burden of maternal mortality and obstetric fistula in sub-Saharan Africa and South Asia. Despite global campaigns (e.g., the UNFPA Campaign to End Fistula), the prevalence of untreated fistula remains high. Geopolitical instability, such as civil conflicts and forced migration, has directly undermined maternal healthcare infrastructure. Furthermore, structural adjustment policies, funding shifts toward disease-specific programmes, and erosion of reproductive rights in several nations have hindered comprehensive maternal health provision. Capacity-building efforts, such as competency-based fistula surgery training endorsed by FIGO, have had localised success but are insufficiently scaled. **Conclusion:** Obstetric fistula is both a public health failure and a gender-based human rights issue, deeply rooted in structural inequities and geopolitical dynamics. Reductions in foreign aid, conflict-related health system collapse, and restrictive reproductive policies have collectively stalled progress. A multifaceted, rights-based approach—emphasising health system strengthening, midwifery-led care, patient empowerment, and geopolitical accountability—is urgently required. With coordinated investment and political will, the global community can reverse current trends and eliminate obstetric fistula as a public health problem

**Keywords:** obstetric fistula; maternal health services; low- and middle-income countries (LMICs); geopolitical conflict; reproductive health equity; health systems strengthening

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## Background

Maternal health remains a significant global challenge, with stark disparities between high-income and low- and middle-income countries (LMICs). In 2020, approximately 287,000 women died during and following pregnancy and childbirth, with nearly 95% of these deaths occurring in LMICs. Among the myriad complications contributing to maternal morbidity and mortality, obstetric fistula stands out as a particularly devastating condition [1].

Obstetric fistula is an abnormal opening between a woman's genital tract and her urinary tract or rectum, resulting from prolonged obstructed labour without timely medical intervention. This condition leads to continuous urinary or faecal incontinence, which often results in chronic medical issues, social isolation, and psychological trauma. Each year, between 50,000 to 100,000 women worldwide are affected by obstetric fistula, predominantly in sub-Saharan Africa and South Asia. The World Health Organization estimates that there are approximately 130,000 new cases of obstetric fistula annually, underscoring the persistent nature of this public health issue [1]. The development of obstetric fistula is linked to obstructed labour, which remains a significant cause of maternal deaths globally. Studies indicate that obstructed labour accounts for around 2% of maternal deaths, with regional variations. The consequences of obstructed labour are profound; for instance, women who develop obstetric fistula have a 99 times greater risk of experiencing stillbirth compared to those with normal deliveries. Furthermore, approximately 90% of pregnancies complicated by fistula result in stillbirth, exacerbating the emotional and physical toll on affected women [2].

The persistence of obstetric fistula reflects broader systemic failures in maternal healthcare delivery within LMICs. The lack of healthcare outcomes, medium to long-terms perplexes the issues around systemic failures. Factors such as inadequate access to skilled birth attendants, limited availability of emergency obstetric services, intra-operator variability and socio-economic barriers contribute to attribute to the high prevalence of this condition. The United Nations Population Fund (UNFPA) estimates that half a million women and girls in sub-Saharan Africa, Asia, the Arab States region, and Latin America and the Caribbean are living with fistula, with new cases developing each year [3].

Addressing obstetric fistula requires a comprehensive understanding of the interplay between geopolitical factors, historical contexts, and structural determinants that perpetuate maternal health inequities. This paper aims to explore these dimensions, examining the root causes of obstetric fistula, the impact of geopolitical influences on maternal health policies and practices, and potential strategies to uphold and restore women's rights to dignified, safe, and equitable maternal healthcare services.

## Historical Background: Maternal Mortality in Global Context

Maternal mortality has long been a critical indicator of health disparities worldwide, reflecting broader social, economic, and healthcare inequalities. Historically, childbirth posed significant risks universally; however, the 20th century marked a divergence between high-income countries (HICs) and low- and middle-income countries (LMICs). Advancements such as antisepsis, antibiotics, blood transfusions, and the proliferation of skilled obstetric care led to substantial reductions in maternal deaths in HICs. Conversely, many regions in Africa, Asia, and Latin America continued to experience high maternal mortality rates, underscoring persistent global health inequities.

*Sub-Saharan Africa*

Sub-Saharan Africa bears a disproportionate burden of maternal deaths. In 2020, the region accounted for approximately 70% of global maternal deaths, with a maternal mortality ratio (MMR) of 545 deaths per 100,000 live births. This stark contrast is evident when compared to the MMR of 3 per 100,000 live births in Australia and New Zealand during the same period. Factors contributing to this disparity include underfunded health systems, a shortage of skilled birth attendants, and inadequate transportation infrastructure, which collectively hinder access to timely and quality maternal healthcare. Additionally, socio-economic challenges and political instability exacerbate the situation, leading to limited healthcare access and poor maternal outcomes [4,5].

#### *Asia*

Southern Asia also faces significant maternal health challenges, accounting for around 16% of global maternal deaths in 2020. However, the region has made notable progress, achieving a 67% reduction in MMR from 408 per 100,000 live births in 2000 to 134 in 2020. Despite this improvement, the MMR remains high compared to HICs, indicating ongoing issues such as disparities in healthcare access, socio-economic inequalities, and cultural practices that may impede women's health-seeking behaviours. For instance, in certain areas, traditional practices and limited autonomy for women can delay or prevent access to necessary maternal healthcare services [1,2,6].

#### *Latin America and the Caribbean*

Latin America and the Caribbean have experienced mixed progress in maternal health. Between 1990 and 2013, the region saw an average 40% decline in maternal mortality. Notably, eleven countries achieved reductions of 40% or more during this period. Despite these advancements, the region's overall MMR of 85 deaths per 100,000 live births in 2013 was still considered high, and progress has been uneven. Political and economic instabilities, coupled with disparities in healthcare access, have hindered uniform improvements across countries. Additionally, restrictive reproductive health policies and limited access to contraception and safe abortion services have contributed to higher maternal mortality rates in certain areas [6].

#### *Global Disparities and Contributing Factors*

The global disparities in maternal mortality are influenced by a complex interplay of factors as described in Table 1 [7-9], including:

Key Feature	Description	Example
<b>Healthcare infrastructure</b>	Inadequate facilities, insufficient medical supplies, and a lack of trained healthcare professionals compromise the quality of maternal care in many LMICs	In South Sudan, many clinics lack electricity, clean water, and surgical capacity, leading to preventable maternal deaths.
<b>Socio-economic inequalities</b>	Poverty limits access to healthcare, nutritious food, and transportation, increasing maternal health risks	In rural Nigeria, women often delay seeking care due to inability to afford transport or clinic fees.
<b>Cultural practices</b>	Early marriages, preference for home births without skilled attendants, and reluctance to seek medical care due to cultural beliefs	In parts of Afghanistan, childbirth often occurs at home without skilled assistance due to gender norms and family pressure.

Key Feature	Description	Example
<b>Political instability/conflict</b>	Wars and civil unrest disrupt healthcare systems, displace populations, and create environments where maternal healthcare becomes inaccessible	In the DRC, ongoing conflict has destroyed maternity wards, forcing women to deliver in unsafe and unsanitary conditions.

Addressing these disparities requires a multifaceted approach that includes strengthening healthcare systems, promoting socio-economic development, ensuring political stability, and respecting cultural contexts while advocating for practices that enhance maternal health. Global initiatives, such as the Sustainable Development Goals, aim to reduce the global MMR to less than 70 per 100,000 live births by 2030, emphasizing the need for concerted efforts to improve maternal health outcomes worldwide.

## Background History of Obstetric Fistula

Obstetric fistula is a debilitating condition characterized by an abnormal connection between the birth canal and the bladder or rectum, leading to continuous leakage of urine or faeces. This condition predominantly affects impoverished, rural women who lack access to timely and adequate emergency obstetric care. The physical consequences are severe, often resulting in chronic medical issues, while the social ramifications include profound stigma, isolation, and economic hardship [7,10].

### *Historical Context and Global Initiatives*

Historically, obstetric fistula was prevalent worldwide, including in high-income countries, until advancements in obstetric care led to its near eradication in these regions. However, it remains a significant public health issue in many low- and middle-income countries (LMICs). In the 1990s and early 2000s, the condition garnered increased attention from the global health community. Pioneering institutions like the Addis Ababa Fistula Hospital in Ethiopia became centres of excellence for surgical repair and rehabilitation, offering hope to thousands of affected women. In 2003, the UNFPA launched the Campaign to End Fistula, aiming to eliminate the condition through prevention, treatment, and reintegration strategies. Despite these efforts, many women remain untreated, and fragile health systems in high-burden regions continue to pose significant challenges [3,11,12].

In a 2009 publication, "Obstetric fistula—a new way forward," Elneil and Browning, emphasized the need for innovative approaches to address the challenges and management of obstetric fistula, highlighting the importance of both prevention and treatment strategies. They underscored the necessity of integrating fistula management into broader maternal health programs to ensure sustainability and effectiveness [10]. This was a seminal moment in the addressing the issues of an age-old maternal health problem.

In a further article in 2015, "Global efforts for effective training in fistula surgery," the establishment of standardized, competency-based training programs for fistula surgeons [7] and its role in capacity building and the collaboration between the International Federation of Gynaecology and Obstetrics (FIGO) and global partners to develop unified training tools aimed at improving the quality and accessibility of fistula repair services was developed by the lead author of this article. Furthermore, it advocated for a modern approach to managing this devastating condition, aligning with the World Health Organization's objective of ensuring health security for women throughout their lifespan [7]. This approach was reinforced by a 2018 review synthesising clinician perspectives on obstetric fistula care, which identified integrated service delivery models as a critical strategy for sustaining and optimising the effectiveness of fistula treatment interventions [13].

## Methods

This study aimed to explore the systemic factors perpetuating maternal health inequities in low- and middle-income countries (LMICs), with a particular focus on the prevalence and impact of obstetric fistula. Specifically, it sought to (i) analyse trends in maternal mortality and obstetric fistula incidence over the past 35 years, (ii) evaluate the effectiveness of maternal health service delivery models, (iii) assess the influence of geopolitical instability—including conflict and policy changes—on healthcare access and outcomes, and (iv) provide evidence-based policy recommendations to reduce fistula incidence and improve maternal health equity.

To address these objectives, a narrative review and policy analysis were conducted. Peer-reviewed literature was identified through electronic databases including PubMed, Scopus, and Web of Science, using search terms related to “obstetric fistula,” “maternal health,” “conflict-affected settings,” and “health system reform.” The review included studies published between 1990 and 2025. Additionally, grey literature—such as UN agency reports, NGO briefs, and government policy documents—was used to complement academic findings and capture real-time developments.

Statistical data on maternal mortality and fistula incidence were triangulated using global health databases maintained by WHO, UNFPA, and the World Bank. To enhance contextual understanding, key informant interviews were conducted with twelve healthcare professionals, program implementers, and researchers from conflict-affected regions, including Sudan, Afghanistan, and the Democratic Republic of Congo (DRC). All interviews were conducted with informed consent and under the ethical oversight of a global health ethics review board.

Finally, case studies from selected conflict zones were used to illustrate the complex interplay between geopolitical events—such as war, forced migration, and foreign aid disruption—and maternal health outcomes. The GRADE framework was applied to appraise the quality of included evidence and ensure transparency in synthesizing findings and formulating recommendations.

## Results And Discussions

### A. Current Challenges in Obstetric Fistula Care

Despite global initiatives and contributions from global experts in obstetric fistula management, the issue remains pressing. The condition's persistence is indicative of broader systemic failures in maternal healthcare within LMICs. Addressing this challenge requires a multifaceted approach [7,8] that includes the following as outlined in Table 2 below:

Pillar	Focus Area	Key Requirements	Examples
<b>Prevention</b>	Enhancing access to quality maternal healthcare	<ul style="list-style-type: none"> <li>- Universal access to skilled birth attendants</li> <li>- Functional emergency obstetric care (EmOC)</li> <li>- Antenatal risk screening</li> <li>- Community education and transport planning</li> </ul>	<ul style="list-style-type: none"> <li>- Community midwives in rural Ethiopia</li> <li>- UNFPA Safe Motherhood upgrades in Uganda</li> <li>- Risk-based ANC triage in Bangladesh</li> <li>- Maternal waiting homes in Malawi</li> </ul>
<b>Treatment</b>	Expanding quality surgical repair services	<ul style="list-style-type: none"> <li>- Competency-based surgical training (e.g., FIGO/UNFPA modules)</li> <li>- National fistula centres with</li> </ul>	<ul style="list-style-type: none"> <li>- FIGO training centres in Tanzania and Nigeria</li> <li>- Hamlin Fistula Hospital, Ethiopia</li> </ul>

Pillar	Focus Area	Key Requirements	Examples
		adequate infrastructure - Integration into routine health systems - Post-operative follow-up protocols	- NHIF coverage for fistula surgery in Kenya - Outreach follow-up in Sierra Leone
<b>Reintegration</b>	Social and economic rehabilitation of affected women	- Trauma-informed psychosocial counselling - Vocational and economic empowerment programs - Literacy and legal education - Community reintegration and stigma reduction activities	- TERREWODE psychosocial programs in Uganda - Beyond Fistula's business kits in Kenya - Legal literacy in northern Nigeria - Reintegration ceremonies in Liberia

By adopting such an approach, the global health community can work towards the elimination of obstetric fistula and the restoration of dignity and health to countless women worldwide. However, despite all the global initiatives by multiple agencies, UNFPA, FIGO, Fistula Care, Fistula Care Plus and Engender Health, the dial has only moved slightly forward. There is a great deal to still be addressed, and to do so we need to understand what went wrong in the last three decades.

### **B. Obstetric Fistula and Maternal Health Services: A Thirty-Year Review of Delivery Challenges**

Despite heightened awareness and targeted interventions, global progress in maternal health has stagnated since the early 2010, which had its origins in the 1990's. Several factors contribute to this concerning trend:

- **Structural Adjustment Programs and Reduced Public Health Investment:** In the 1980s and 1990s, structural adjustment programs mandated by international financial institutions led to significant reductions in public health spending in LMICs [14–16]. This underfunding weakened health systems, limiting access to quality maternal care .
- **Shift Toward Vertical, Disease-Specific Funding:** Global health financing has increasingly favoured disease-specific programs targeting conditions like HIV, tuberculosis, and malaria. While these initiatives have achieved notable successes, they often divert resources from comprehensive maternal health services, leading to fragmented care and neglected maternal health infrastructure [16].
- **Erosion of Reproductive Rights Due to Rising Conservatism and Anti-Choice Politics:** A global surge in conservative ideologies has resulted in restrictive reproductive health policies, impeding women's access to essential services. For instance, in January 2025, U.S. President Donald Trump signed Executive Order 14182, enforcing the Hyde Amendment and revoking prior orders that expanded reproductive healthcare access. This action

curtailed federal funding for abortion-related services, significantly affecting reproductive rights [17,18].

- **Impact of the COVID-19 Pandemic:** The COVID-19 pandemic severely disrupted maternal health services worldwide, reversing years of progress. Lockdowns, resource reallocations, and overwhelmed health systems limited access to prenatal and postnatal care, leading to increased maternal complications and deaths.
- **Recent Funding Cuts and Policy Changes (2024–2025):**
  - *Freezing of Title X Funds:* In April 2025, the Trump administration froze Title X funding for 16 organizations, including nine Planned Parenthood affiliates, citing potential violations of grant terms and federal laws [19]. Title X has historically provided vital health services such as birth control, cancer screenings, and STI testing to low-income individuals. The funding freeze jeopardizes access to these essential services for marginalized communities.
  - *Supreme Court Deliberations on Medicaid Funding:* As of April 2025, the U.S. Supreme Court is evaluating whether states can block Medicaid funding to Planned Parenthood [17]. This case could have profound implications for low-income patients' access to healthcare services, including contraception and cancer screenings.
  - *Foreign Aid Sanctions and Health Service Disruptions:* In January 2025, the U.S. administration froze over \$40 billion in foreign aid, leading to the closure of more than 200 health facilities in Afghanistan. This action left approximately 1.84 million people without access to essential healthcare services amid rising cases of measles, malaria, and polio [18].
- **Restrictive Policies and Their Consequences:**
  - *Taliban's Male Escort Rules:* In Afghanistan, the Taliban's mandate requiring women to be accompanied by a male escort (mahram) when seeking medical care has resulted in tragic outcomes. Delays caused by this policy have led to preventable maternal and infant deaths, exemplifying how restrictive social policies can directly harm maternal health [18].

These factors collectively underscore the multifaceted challenges impeding progress in maternal health. Addressing these issues necessitates comprehensive policy reforms, sustained investment in maternal healthcare infrastructure, and unwavering commitment to upholding women's reproductive rights globally. There is no doubt that geopolitical influences have had a detrimental effects on achieving parity in maternal health.

### C. Geopolitical Influences in Conflict Zones

Conflict, migration, and political instability profoundly impact women's access to maternal healthcare. From 2022 through 2025, various geopolitical events have exacerbated these challenges, leading to devastating consequences for maternal health services globally [2].

#### *Sudan*

The civil conflict that erupted in Sudan in April 2023 has led to one of the world's most severe humanitarian crises. Over 8 million people have been displaced, and access to healthcare has been severely disrupted. In South Darfur, for instance, the escalation of conflict has resulted in alarming rates of maternal and neonatal mortality, with 46 maternal deaths and 48 neonatal deaths from sepsis reported in just the first half of 2024 [20]. Health facilities have been destroyed or rendered inaccessible, leaving thousands of pregnant women without essential maternal health services. The collapse of maternal services has resulted in increased maternal and infant mortality rates [2,20].

#### *Afghanistan*

In January 2025, the U.S. administration froze over \$40 billion in foreign aid, leading to the closure of more than 200 health facilities in Afghanistan [18,19]. This action left approximately 1.84 million people without access to essential healthcare services amid rising cases of measles, malaria, and polio. Additionally, the Taliban's mandate requiring women to be accompanied by a male escort (mahram) when seeking medical care has led to preventable maternal and infant deaths. Delays caused by this policy have resulted in tragic outcomes, such as the death of a pregnant woman and her baby due to complications and delayed care [4,16,21–23].

#### *Democratic Republic of Congo (DRC)*

In April 2025, Congolese civilians returning home after the M23 rebel group's takeover of Goma found their communities devastated. More than 100,000 people left displacement camps only to discover destroyed homes and non-existent basic services, including healthcare [9,24,25]. The lack of medical facilities has forced many women to give birth in unsanitary and unsafe conditions, exacerbating maternal and infant mortality rates .

#### *Gaza Strip*

The ongoing conflict in the Gaza Strip has led to severe destruction of healthcare infrastructure. Israeli airstrikes have targeted hospitals and clinics, resulting in a lack of medical supplies and services. In one instance, a mother underwent a caesarean section without anaesthesia due to depleted medical resources. The destruction of reproductive healthcare facilities has led to a rise in preterm births and increased maternal and infant mortality [2,26].

#### *Haiti and the Dominican Republic*

Escalating violence and the collapse of healthcare infrastructure in Haiti have forced many Haitian mothers to seek medical care in the neighbouring Dominican Republic. Despite stringent deportation policies and longstanding tensions, Dominican hospitals have seen an influx of Haitian women giving birth. The Dominican government's plans to deport up to 10,000 Haitians weekly further complicate access to maternal healthcare for these women [2].

#### *United States*

In April 2025, the U.S. administration initiated significant layoffs and restructuring within the Department of Health and Human Services (HHS), targeting maternal and child health programs. The elimination of up to 20,000 positions has led to the dismantling or significant scaling back of vital programs supporting maternal, child, mental health, and reproductive services. Health experts have expressed deep concern about the detrimental impact on vulnerable communities amid already high maternal mortality rates [19].

These geopolitical events underscore the profound impact of political instability and conflict on women's access to maternal healthcare. The destruction of healthcare infrastructure, restrictive policies, and funding cuts have collectively exacerbated maternal health crises in affected regions [14,25,27,28].

#### **D. Women's Right to Reproductive Healthcare**

Access to reproductive healthcare is a fundamental human right, enshrined in international frameworks such as the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) and the Sustainable Development Goals (SDGs). CEDAW explicitly affirms women's rights to reproductive choice, emphasizing that states should ensure women's access to healthcare services, including those related to family planning. Similarly, SDG Target 3.7 aims to ensure universal access to sexual and reproductive health services by 2030, integrating reproductive health into national strategies and programs [1,29].

Despite these commitments, significant disparities persist globally, particularly affecting marginalized communities. Indigenous women, for instance, often face systemic barriers to reproductive healthcare, including underfunded services and logistical challenges such as distant facilities and lack of transportation. Community-led initiatives have emerged to address these gaps, but comprehensive government support remains crucial [14,30,31].

The concept of reproductive justice, developed by women of colour in the United States in 1994, provides a comprehensive framework that extends beyond the pro-choice narrative. It encompasses the right to have children, not have children, and to parent in safe and sustainable communities [15]. This framework is particularly pertinent when examining systemic neglect and violations in reproductive healthcare, such as obstetric violence. Obstetric violence refers to the mistreatment and abuse that women may experience during childbirth and other reproductive health services, recognized as a serious human rights violation and a form of gender-based violence [23,29,32].

Denying women access to skilled care during childbirth not only infringes upon their bodily autonomy and dignity but also has profound health implications. For example, restrictive abortion laws have been shown to cause extensive harm and violate human rights, as evidenced by international critiques of such policies. Furthermore, the criminalization of reproductive choices disproportionately affects marginalized groups, perpetuating structural inequalities and systemic racism [21,29].

To achieve substantive equality and uphold women's reproductive rights, it is imperative to address these systemic issues through policy reforms, adequate funding of healthcare services, and the dismantling of discriminatory practices. Empowering women to make informed decisions about their reproductive health is essential for the realization of their human rights and overall well-being [29].

#### **E. Empowering Women in Accessing Obstetric Fistula Care**

Empowering women affected by obstetric fistula involves a multifaceted approach that encompasses education, economic independence, psychosocial support, legal empowerment, and active participation in healthcare decision-making. The World Health Organization (WHO) emphasizes the importance of patient inclusion in decision-making processes, recognizing that such involvement leads to more effective and personalized healthcare outcomes [1,8].

##### *Education and Awareness*

Comprehensive education about obstetric fistula, its causes, prevention, and treatment is fundamental. Informing women about their reproductive health enables them to make informed decisions and seek timely medical care. Community-based awareness programs can dispel myths and reduce stigma associated with the condition. For instance, the WHO advocates for culturally appropriate counselling to enhance patients' understanding and engagement in their healthcare journey [8].

##### *Economic Independence*

Economic empowerment is crucial for the reintegration of fistula survivors into society. Vocational training and microfinance initiatives can provide women with skills and resources to generate income, fostering self-reliance and reducing economic vulnerability. Programs like Beyond Fistula have demonstrated significant improvements in participants' economic status, including increased employment rates and income levels [2,7,28,33,34].

#### *Psychosocial Support*

Addressing the psychological and social challenges faced by fistula survivors is essential. Counselling services, peer support groups, and community education can help rebuild self-esteem and facilitate social reintegration. Studies have shown that structured counselling programs significantly enhance knowledge about fistula and improve self-esteem among affected women [1,3,7,10,11,30].

#### *Legal Empowerment and Human Rights Literacy*

Educating women about their legal rights and advocating for policies that protect these rights are vital. Understanding legal entitlements enables women to demand quality healthcare and challenge discriminatory practices. Organizations like the UNFPA emphasize the need for legal and social changes to improve women's status and access to education and healthcare [3,35].

#### *Patient Inclusion in Healthcare Decision-Making*

The WHO underscores the importance of involving patients in healthcare decisions to ensure that services are patient-centered and responsive to individual needs. In the context of obstetric fistula, this means engaging women in discussions about their treatment options, post-operative care, and reintegration plans. Such inclusion fosters a sense of agency and ensures that healthcare services align with patients' preferences and cultural contexts [3,16].

#### *Community Engagement and Advocacy*

Empowering women also involves transforming societal attitudes and norms. Community engagement initiatives that involve men, local leaders, and policymakers can promote gender equality and support for women's health rights. Organizations like TERREWODE in Uganda have successfully implemented community-based programs that advocate for women's reproductive rights and provide support for fistula survivors [1,3,4,31].

By integrating these strategies, we can create an environment where women affected by obstetric fistula are empowered to make informed decisions, achieve economic independence, and actively participate in their communities, ultimately leading to improved health outcomes and quality of life.

### **The Way Forward Revisited in 2025**

Addressing the global maternal health crisis, which in turn will help eradicate obstetric fistula, necessitates a comprehensive, multi-pronged strategy that encompasses systemic investments, policy reforms, and community engagement. The following detailed approaches are essential:

#### **1. Invest in Primary Healthcare and Midwifery-Led Models**

- **Enhance Midwifery Education and Integration:** Midwife-led care has been shown to significantly improve maternal and neonatal outcomes, including reductions in preterm births and low birthweight infants. Investing in midwifery education and integrating midwives into healthcare systems can address provider shortages and promote equitable care [22,27,30].

- **Establish Midwife-Led Units (MLUs):** Implementing MLUs within existing health systems offers a cost-effective approach to maternity care, providing women-centered services that have been associated with improved maternal satisfaction and outcomes [22,30].

## 2. Scale Up Fistula Repair Training and Surgical Systems

- **Expand Training Programs for Fistula Surgeons:** Addressing the backlog of untreated obstetric fistula cases requires comprehensive training initiatives for surgeons and multidisciplinary teams. Organizations like FIGO have developed training manuals to standardize and disseminate best practices in fistula repair [1,3,7,11], but over the last five years the training programmes has stalled. It is critical that previously established training programmes are embedded into academic institutions to ensure their sustainability.
- **Strengthen Surgical Infrastructure:** Investing in equipped surgical facilities and ensuring the availability of necessary medical supplies are critical to support fistula repair services. Collaborative efforts between governments and NGOs can facilitate these improvements [11].

## 3. Integrate Maternal Health into Universal Health Coverage (UHC) Plans

- **Prioritize Maternal Health Services in UHC Schemes:** Ensuring that maternal health services, including prenatal and postnatal care, are core components of UHC can provide equitable access to care for all women. This integration is vital for achieving Sustainable Development Goal targets related to maternal health [28].
- **Standardize Care Across Public and Private Sectors:** Expanding access to quality healthcare and attaining UHC requires standardizing care across both sectors, integrating services, and setting policies that enable consistent, high-quality maternal health care [36].

## 4. Ensure Domestic and International Policies Protect Reproductive Rights

- **Advocate for Legal Protections of Reproductive Health:** Supporting legislation that safeguards access to comprehensive reproductive health services, including abortion care, is essential. The Women's Health Protection Act (WHPA) exemplifies federal efforts to establish such protections [9,21,28,35].
- **Address Disparities in Reproductive Health Policies:** Recognizing and rectifying how reproductive rights policies may differentially impact women of colour and immigrants is crucial for equitable healthcare access [15].

## 5. Develop Community-Based Referral Systems for Obstetric Emergencies

- **Implement Effective Referral and Transport Systems:** Establishing community-based transportation and referral networks can ensure timely access to emergency obstetric care. Studies have shown that such systems are critical in reducing maternal mortality in low-resource settings [9,14].

- **Utilize eHealth Tools for Communication:** Leveraging technology to improve communication between community health workers and healthcare facilities can enhance the efficiency of emergency referrals. For example, eHealth tools have been implemented to streamline referral processes in certain regions [14].

Implementing these strategies requires coordinated efforts among governments, international organizations, healthcare providers, and local communities. By focusing on systemic improvements and policy reforms, we can create resilient healthcare systems that prioritize and uphold women's health and rights globally.

## Conclusions

The persistent prevalence of obstetric fistula in low- and middle-income countries (LMICs) is a stark indicator of enduring systemic failures within maternal healthcare frameworks. Over the past three decades, numerous initiatives have been launched to address this debilitating condition; however, their effectiveness has been consistently undermined by a confluence of factors. Notably, geopolitical instability, exemplified by conflicts in regions such as Sudan and the Democratic Republic of Congo, has led to the destruction of healthcare infrastructure and the displacement of populations, severely restricting access to essential maternal health services.

Compounding these challenges are economic constraints, including reductions in international aid, which have further debilitated healthcare systems. The World Health Organization has warned that such aid cuts could have "pandemic-like effects" on maternal mortality rates, particularly in conflict-affected areas where the risk is already significantly elevated. Additionally, socio-cultural factors, such as poverty and limited education, continue to impede women's access to timely and adequate obstetric care, thereby increasing the incidence of obstetric fistula. We have been here before.

Addressing the multifaceted challenges associated with obstetric fistula necessitates a comprehensive and collaborative approach. This includes strengthening healthcare infrastructure, ensuring political stability, increasing financial investments in maternal health, and implementing culturally sensitive educational programs to raise awareness about reproductive health. By adopting such an integrated strategy, the global health community can once again make significant strides toward eradicating obstetric fistula and advancing equitable maternal health outcomes worldwide.

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