Narrative Review Article

Barriers to Reproductive Health Access for Women in Northern Syria During the Civil War: A Multi-Dimensional Analysis

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ABSTRACT

Women in Northern Syria face persistent barriers to reproductive health access amid the ongoing conflict. This paper employs a qualitative synthesis of peer-reviewed studies, NGO assessments, and humanitarian data to examine the multidimensional constraints shaping women's reproductive health outcomes. Findings reveal seven intersecting barriers: attacks on health infrastructure and personnel, displacement, economic hardship, limited donor funding, restrictive gender norms, lack of awareness, and weak institutional coordination. The deliberate targeting of hospitals has disrupted service delivery, while inflation and poverty have rendered care unaffordable. Social restrictions and misinformation further restrict women's autonomy and access to accurate reproductive information. Together, these barriers compound vulnerability and perpetuate cycles of inequity. The study concludes that reproductive health access must be prioritized within post-conflict recovery agendas, emphasizing the necessity of sustained international aid, gender-responsive policy reform, and long-term investment in healthcare infrastructure, as prerequisites for rebuilding stable and equitable Syrian communities.

Keywords: Reproductive health; Syria; conflict; women's health; humanitarian crisis; gender inequality; maternal care; access to healthcare

INTRODUCTION

The Syrian Civil War started in 2011 when Bashar al-Assad's regime faced a challenge to its authority when pro-democracy protests erupted throughout the country (1). This protracted war has resulted in hundreds of thousands of deaths and has created the largest modern day refugee crisis (1). It has left nearly 14 million Syrians displaced, with around half being internally displaced persons (IDPs) (2, 3). This prolonged conflict has exacerbated poverty, hunger, mental health, health, and education crises in Syria. Families face immense hardships, struggling to meet their basic needs, with 13.4 million people requiring humanitarian aid, including 7 million who are internally displaced (2, 3). Civilians are the most affected group from this war, with women and girls being disproportionately and severely impacted (4). Women have had to endure severe hardship as a result of this war, and one of the most prominent issues they face is a lack of access to reproductive health services (RHS). Lack of access has heightened birth complications, maternal mortality, and long-lasting physical implications.

Syria is divided into 14 administrative governorates and three de facto zones of control. Those zones are the Syrian government-controlled zone, the Syrian democratic forces (SDF) controlled zone, and the Turkish-backed rebel zone. For this paper, the focus will be on the Turkish-backed rebel zone which encompasses

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northern and northwestern Syria. The Turkish-backed rebel zone remains highly conflict-affected, making it the primary region where extensive reports document the severe reproductive health crisis faced by women (5-7). Comparatively, the Syrian government-controlled and SDF-controlled zones are comparatively more stable. Women make up roughly 39-46% of all IDPs in this region (around 2 million). Some major cities that will be focused on include Aleppo, Idlib, and Hama. While many studies offer an extensive report on how the Syrian Civil War has created and exacerbated the barriers Syrian women face, impacting accessibility of the RHS and how they impact maternal health, the existing literature is fragmented, often focusing on isolated factors (financial, economic, cultural, and infrastructure). This paper argues that the barriers to women's reproductive health in Northern Syria–including attacks on infrastructure, economic hardship, and sociocultural stigma–are not only isolated but deeply interconnected, creating a compounded crisis that requires an integrated examination. A significant gap exists in the development of an integrated conceptual understanding that captures the interplay between these multifaceted barriers to women's access to reproductive health services, so the article's main goal is to address this gap by proposing a comprehensive understanding of how these structural, economic, and sociocultural barriers interact. This paper synthesizes qualitative and quantitative findings from peer-reviewed studies, NGO reports, and humanitarian assessments published between 2011 and 2024. Sources were identified using Google Scholar and other major humanitarian databases. This literature review examines 7 access barriers placed into different categories to reproductive-health services for women in Northern Syria and discuss their impacts on maternal health.

STRUCTURAL AND PHYSICAL BARRIERS TO REPRODUCTIVE HEALTH ACCESS

Attacks on Health Infrastructure and Healthcare Workers

Across all studies, attacks on health infrastructure function as the foundational barrier shaping nearly every aspect of reproductive healthcare access in northern Syria. These assaults do not merely reduce the number of functioning facilities, they also reshape women's medical decision-making, pushing them toward emergency-oriented strategies that minimize time spent in dangerous spaces. Physicians for Human Rights and the Syrian American Medical Society consistently document widespread destruction of hospitals, but Ekzayez et al. (2021) introduce a crucial behavioral dimension: as violence intensifies, women increasingly avoid routine care and opt for C-sections to reduce their exposure to conflict (8). The WHO ideal C-section rate is 15 percent, yet rates in some areas have reached 64%. Each one-unit increase in explosions in a given month is associated with a 20% rise in deliveries and C-sections (8), a shift with long-term physical and psychological consequences (5).

Across sources, a clear pattern emerges: conflict simultaneously disrupts the supply of services (through destroyed facilities, reduced staff, and shortages of equipment) and the demand for services (as women avoid vaginal deliveries and delay antenatal care out of fear). Even when facilities remain operational, many women abandon essential prenatal care due to potential risk, a pattern associated with higher maternal mortality (9). The relocation of specialized staff away from front-line areas further weakens service availability. Although 40 percent of the population in northwestern Syria lives in camps, only 18 percent of facilities are located in these settings (5), compounding access challenges.

Overall, the evidence demonstrates that targeted attacks on healthcare do more than create difficult conditions, they fundamentally restructure how the reproductive health system functions. By destabilizing both service availability and women's medical choices, protracted conflict pushes women into risk-reduction strategies that carry significant and lasting health consequences.

Underfunding of Health Facilities

Widespread underfunding is a major driver of barriers to women's reproductive health in northern Syria. Underfunded health systems are often unable to meet population needs, with shortages in staff, medicine, and critical services.

More than one in three health facilities in Syria cannot operate at full capacity, while the rest are undersupplied, overwhelmed, and unable to consistently treat patients with urgent health needs (10). In northwest Syria, pregnant women facing obstetric emergencies have died during transfers between hospitals due to the absence of essential supplies such as blood and medications.

As of September 2023, half of maternity hospitals in northwest Syria had suspended operations, affecting approximately 1.3 million women of reproductive age (11). Of the 63 emergency obstetric and newborn care facilities in the region, 30 were already at risk of closing

due to lack of funds (5). Funding gaps have also forced major maternity hospitals to shut down in 2024, leaving over 100,000 displaced people without care (6).

The withdrawal of international donor funding has further intensified these barriers. In recent months alone, 77 health facilities—including 17 hospitals, nine of which served women and children—were forced to suspend activities due to underfunding (12). Nearly one-third of all health facilities in Idlib and northern Aleppo have already closed or partially suspended operations, affecting over 1.5 million people. Without funding boosts, an additional 112 health facilities are projected to shut down, compromising access to maternal care (12).

SOCIOECONOMIC AND LOGISTICAL BARRIERS

Studies show that the Syrian Civil War has impacted women's ability to afford reproductive health services as well as access them. While inflation, displacement, and unemployment undermine household finances, multiple studies reveal that economic strain also determines whether women can even afford the means to be offered care. For example, a study led by Okba Doghim shows women with higher family monthly incomes had higher family planning usage rates (13), but humanitarian reports emphasize that even when women want reproductive services, transportation costs alone often exceed their financial ability. The cost of transportation to a health facility is out of many people's budget (14). In Idlib, the cost to rent a car is approximately 15,000 Syrian Pounds (29$). For most families with a lower monthly income, this is unaffordable (14). A healthcare provider in urban Idlib reported that if their patient wants to go to the nearest hospital, it will cost them 50 Turkish lira ($2.65) for rides in a car and approximately 200 Turkish lira ($10.60) in a private vehicle (5).

Economic instability is associated with reduced mobility, geographic access, and women's autonomy. Rising transportation fees make distant hospitals effectively useless, particularly for displaced populations who are already overrepresented in camps lacking proper medical care. This aligns with studies conveying that women in refugee camps are significantly less likely to receive recommended ANC (15) and access to post-abortion care (9).

Importantly, economic hardship also interacts with social factors. Families coping with financial instability may pull girls from school or marry them early, reinforcing misinformation and reducing reproductive decision-making power. Overall, economic hardship functions both as an independent barrier to RHS access and as an amplifier of other obstacles

EDUCATIONAL AND INFORMATIONAL BARRIERS

Lack of Awareness Surrounding Reproductive Health

Syria's Civil War has created a significant knowledge gap in women's reproductive health which stems from disrupted schooling, structural instability, and child marriages due to financial instability within the family, leading to a decline in women's school attendance. According to the UN, it is estimated that 1,054 schools have been damaged since the conflict broke out. This has pushed a plethora of schools out of service, making it hard for girls to attend school and receive proper education. Medical sources add that disruptions in clinical training have forced underqualified staff into specialized roles, reducing the quality of information and care women receive (13). This collapse of formal and healthcare-based education is associated with an environment in which misconceptions tend to emerge.

Adolescents, displaced women, and those with lower education experience the largest knowledge gaps, particularly regarding contraceptive safety and prenatal care schedules. In a report led by Okba Doghim, when asked about specific family planning methods, 41% of female respondents believe that contraceptive injections cause infertility, while a similar percentage believe that the insertion of an intrauterine device (IUD) leads to infections (13). In a report led by Abdullah Sulieman Terkaw regarding prenatal care visits, over half of female respondents were not aware of the recommended frequency of visits as well as the recommended schedule of visits (15). Physicians report cases of women unaware of fetal death or STI risks (8), demonstrating that misinformation extends into clinical encounters.

Overall, awareness barriers simultaneously reduce women's ability to make informed choices and undermine the health system's ability to deliver safe care. This demonstrates that reproductive misinformation is as much a structural outcome of war as destroyed hospitals.

SOCIAL AND CULTURAL BARRIERS

Stigma Around Women's Reproductive Care

The Syrian Civil War has exacerbated the impact of stigma surrounding reproductive health, leading to a lack of education on obstetric health, a lack of certain

services, and a lack of reports on sexual violence, leading to a decrease in the receipt of care. Studies consistently show that cultural norms surrounding sexual health, particularly STIs and rape, discourage women from pursuing essential reproductive services. Both patients and healthcare workers have reported deep stigma based on social and cultural norms around accessing health care for STIs and HIV/AIDS, which can directly lead to pregnancy complications if gone untreated (5). Yet studies also reveal that while some women avoid clinics in fear of humiliation, others are denied care when medical personnel intentionally leave out evidence of sexual violence to avoid retaliation (16).

Studies show that stigma interacts heavily with legal and cultural structures. Adultery laws criminalization of sexual activity outside marriage leaves rape survivors face legal risk in addition to social backlash. This may help explain the underreporting of sexual violence and the high rates of untreated STIs documented by humanitarian groups. Stigma therefore functions as a bridge between gender norms, GBV, and healthcare avoidance.

Gender-Based Violence (GBV)

The Syrian Civil War has exacerbated the impact of gender-based violence (GBV), which has become a major barrier to women's reproductive health, limiting women's mobility, autonomy, and health-seeking behavior. Studies consistently show that conflict conditions have normalized violence against women and girls, particularly in displaced communities where overcrowding and insufficient security heighten exposure to abuse. In camps such as Al-Hol, where women and children make up the vast majority, GBV risk is elevated while reproductive health services remain scarce (16, 17). Even in urban areas, fear of harassment or exploitation during travel often deters women from visiting clinics, limiting their ability to reach maternal or emergency services (5).

GBV not only increases physical and sexual violence but also creates psychological and logistical barriers that discourage women from seeking care. Early marriages further reduce women's reproductive autonomy and raises risks of complications from early pregnancies (14). Survivors decline medical examinations and avoid reporting abuse due to stigma, retaliation, or the threat of criminalization under adultery laws (16). This underreporting results in untreated trauma, STIs, and pregnancy-related complications.

GBV is both a cause and amplifier of reproductive health inaccessibility. It shapes where women can safely go, whether they can seek treatment, and how health providers respond, making GBV one of the most structurally embedded barriers influencing reproductive outcomes in northern Syria.

Social Gender Norms

Social and gender norms in Syria have created lasting barriers to women's reproductive health, particularly during conflict. Deeply rooted patriarchal expectations limit women's autonomy, influence household decision-making, and determine whether care is socially permissible. Even before the conflict, women were underrepresented in medical professions; war conditions intensified this shortage as many female providers fled, were killed, or faced social constraints that prevented them from working. Because many families prohibit male doctors from treating women, the scarcity of female health workers directly reduces access to essential reproductive services (15).

Studies show that gender norms reinforce restrictive attitudes toward reproductive decision-making. Cultural attitudes shown to strongly oppose contraceptive use among adolescents reflect broader expectations that prioritize fertility and marital norms over women's autonomy (13). Mobility restrictions further access: women often cannot travel unaccompanied, encounter harassment at checkpoints, or are denied passage without a male escort. These restrictions disproportionately impact women in areas where facilities are far from front lines.

Gender norms also interplay with economic hardship and displacement. In financially distressed households, early marriage is used to gain financial protection, yet it exposes girls to intimate partner violence, early pregnancies, and reduced education (16, 17). These gender norms are linked to material barriers that limit health-seeking behavior and the availability of appropriate care.

Overall, the evidence shows that social gender norms operate as the framework that shapes how all other barriers are experienced by women. These norms influence who is allowed to seek care, the conditions under which they can access services, and how much control they have over their own health decisions.

SUMMARY OF SEVEN ACCESS BARRIERS

In northern Syria, access to women's reproductive health services is hindered by 7 access barriers: attacks on health infrastructure, lack of awareness, economic

hardship, social stigma, gender-based violence, gender norms, and underfunding of health facilities. Attacks on health infrastructure have destroyed hospitals and reduced the number of staff, making it extremely difficult for women to access health centers. Lack of awareness caused by disrupted education or lack of formal medical training has left many women misinformed about contraception, prenatal care, and reproductive health, and has also undermined the quality of care, as untrained and undereducated staff are forced to take on specialized medical roles. Economic hardship prevents women from affording certain medications or treatments and prevents them from accessing transportation services. Social stigma surrounding reproductive and sexual health discourages women from seeking care, reporting sexual violence, and impacts the treatment of STD, which can lead to a multitude of pregnancy complications. Gender-based violence has increased during the conflict, leaving many women vulnerable to sexual violence, which can lead to numerous reproductive complications if gone untreated. Underfunding of health facilities has forced many hospitals to close or reduce services, leaving millions of women without maternal or emergency care. These seven barriers have consistently limited access to reproductive health services. However, there is little understanding of how they are connected. The following sections will explore how these barriers interact and why recognizing their interconnections is essential.

THE INTERPLAY OF BARRIERS

This review uses a cascading, multi-layered conceptual framework to explain how structural, economic, informational, and sociocultural barriers interact to shape women's access to reproductive healthcare in northern Syria. At the foundational level are structural barriers, including attacks on facilities, chronic underfunding, and shortages of trained personnel. These disruptions reduce service availability, increase travel distance, and weaken health system capacity. These conditions are associated with the emergence of the second layer of barriers, which encompasses economic constraints such as transportation costs, displacement-related financial strain, and reduced household income. These economic limitations make even operational facilities functionally inaccessible for many women.

Economic pressures are linked to disruptions in education, including reduced school attendance among girls and limited opportunities for reproductive health learning. Economic strain is associated with the persistence of misinformation, as families facing financial hardship have fewer avenues to obtain accurate and reliable health information. This weakened informational environment is linked to the intensification of sociocultural barriers, including restrictive gender norms, stigma surrounding STIs and contraception, and silence around sexual violence. As misinformation circulates within communities, these beliefs are associated with reduced care-seeking, especially for sensitive services such as STI treatment, family planning, or post-rape care.

At the top layer of the framework, sociocultural barriers become self-reinforcing. Stigma is associated with lower reporting rates and reduced service utilization, which limits the visibility of reproductive health needs to humanitarian actors and health authorities. As a result, reproductive health gaps may remain unaddressed.

Together, these patterns demonstrate that the barriers to reproductive healthcare do not function independently but operate as an interconnected system in which each layer reinforces the next. This layered model highlights how conflict-driven structural disruptions shape social and economic challenges, ultimately producing a cycle of restricted access that disproportionately affects women in northern Syria. Below is a diagram that captures the interplay of these 7 barriers (Figure 1).

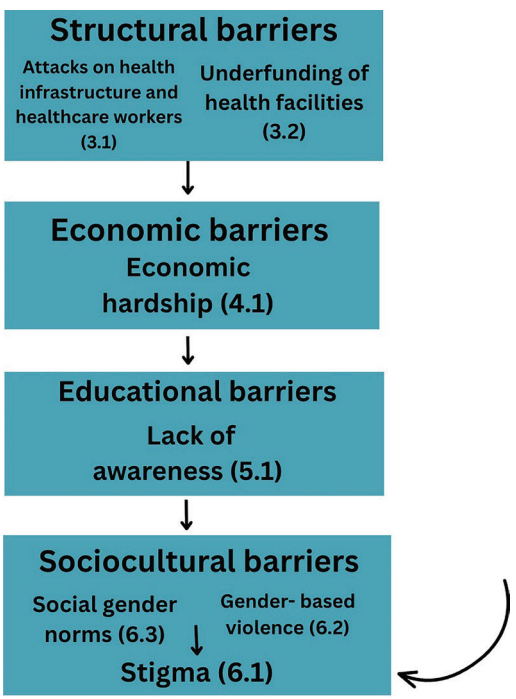

Figure 1. Interplay of 7 Barriers.

POLICY IMPLICATIONS AND NEXT STEPS TO ADDRESS THE ISSUE OF INACCESSIBILITY TO RHS

Understanding how these barriers are interconnected can help NGOs and policymakers design responses that match women's actual needs on the ground. Since structural, economic, informational, and sociocultural barriers overlap, solutions should address several barriers at once rather than treating each one separately.

First, NGOs and humanitarian actors can expand mobile health units and community-based reproductive health services. Reports from northwest Syria show that women in camps and remote areas face the greatest difficulties reaching facilities because of distance, insecurity, and high transport costs, and are less likely to receive recommended maternal and emergency care (2, 5, 9). Mobile clinics, outreach midwives, and home-based visits can reduce these access gaps by bringing services directly to women who cannot safely or affordably travel to hospitals.

Second, improving the stability of reproductive health services requires stronger and more predictable support for facilities already operating in Turkish-controlled areas. Evidence shows that underfunding, short-term projects, and fragmented governance repeatedly disrupt emergency obstetric and newborn care, especially in northwest Syria (2, 5, 9, 18, 19). While direct intervention by the Syrian Ministry of Health in these zones is politically very limited, practical steps can still be taken. Multi-year funding for essential reproductive services, coordination between local health directorates, Turkish-supported hospitals, WHO mechanisms, and international NGOs, and technical collaboration on clinical protocols or supply chains are more feasible ways to strengthen care.

Finally, policy responses need to recognize that fear, stigma, and safety concerns strongly shape whether women seek reproductive health services. Studies link gender-based violence, early marriage, and social stigma to reduced use of contraception, STI treatment, and post-rape care (14, 16, 20, 21, 22, 23). Integrating private GBV services, psychological support, and targeted reproductive health education into existing maternal and primary care can help women access care in settings that feel safer and more respectful.

Together, these approaches align with the evidence and acknowledge the complex environment in which Syrian women are making health decisions.

CONCLUSION

This review synthesizes evidence from humanitarian reports, peer-reviewed studies, and clinical observations to demonstrate how structural, economic, informational, and sociocultural barriers restrict women's reproductive healthcare access in northern Syria. Using a cascading, multi-layered framework, the analysis shows that these barriers do not function independently but interact in ways that reinforce one another, producing a self-perpetuating cycle of limited access and delayed care. This integrated model highlights the need for holistic approaches that address multiple barriers simultaneously rather than in isolation.

This paper utilizes the most updated and highly informative reports in order to construct an in-depth analysis of reproductive health barriers and how they interconnect. Despite the extensive range of academic and humanitarian literature reviewed, several limitations were encountered. Data collection in northern Syria remains fragmented, leading to inconsistencies and incomplete findings across sources. Sampling limitations also persist, as most studies focus primarily on urban centers or displacement camps, resulting in an underrepresentation of women living in more rural areas. Furthermore, there is a notable shortage of quantitative data on socially sensitive barriers—such as gender-based violence, early marriage, and cultural stigma—which are often underreported due to fear, legal constraints, and social taboos. Future research should address these challenges by developing data collection methods and services that ensure greater privacy and personalization for women affected by GBV and other social barriers.

Future work should expand the evidence base on women's lived experiences, explore how community-led interventions may mitigate sociocultural constraints, and evaluate which health-system strategies remain feasible in settings of protracted conflict. Strengthening data systems, coordinating humanitarian actors, and investing in gender-sensitive programming remain essential steps for improving reproductive health outcomes in displaced and conflict-affected populations.

CONFLICT OF INTEREST

The author declares that there are no conflicts of interest related to this work.

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