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Review Article

Intermediary Determinants of Health and Access to Reproductive Health Services among Afghan Migrant Women: A Scoping Review

Zahra Bayat Jozani [1], ***Zohreh Mahmoodi*** [2], ***Amirhossein Takian*** [3,4,5], ****Seyedeh Tahereh Mirmolaei*** [1]

1. *Department of Midwifery and Reproductive Health, School of Nursing and Midwifery, Tehran University of Medical Sciences, Tehran, Iran*
2. *Social Determinants of Health Research Center, Alborz University of Medical Sciences, Karaj, Iran*
3. *Department of Global Health, Center of Excellence for Global Health (CEGH), School of Public Health, Tehran University of Medical Sciences, Tehran, Iran*
4. *Department Health Management, Policy & Economics, School of Public Health, Tehran University of Medical Sciences, Tehran, Iran*
5. *Health Equity Research Center, Tehran University of Medical Sciences, Tehran, Iran*

***Corresponding Author:** Email: mirmolaei1@gmail.com

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Abstract

Background: This scoping review aimed to identify intermediary Social Determinants of Health (SDH) affecting access to reproductive health services among Afghan migrant women, emphasizing the challenges in achieving equitable health service access for this vulnerable population.

Methods: To ensure methodological rigor, the PRISMA checklist was followed. The inclusion criteria comprised quantitative studies addressing access to reproductive health services among Afghan migrants. Articles were retrieved from SCOPUS, Web of Science, and PubMed databases, as well as through manual reference checks, covering the period from Jan 2000 to Mar 2025. Data extraction was guided by the World Health Organization's SDH framework, with a specific focus on intermediary determinants such as healthcare quality, behavioral and psychosocial factors, and social networks.

Results: From an initial pool of 628 articles, 18 met the eligibility criteria. The most frequently reported intermediary SDH was the quality and condition of healthcare services. Other common factors included behavioral aspects, social capital and cohesion, and psychological well-being. These determinants were consistently linked to disparities in access to reproductive health services.

Conclusion: Effective access to reproductive health services among Afghan migrant women hinges on addressing both structural and intermediary SDH. The influence of these factors is context-specific, and tailored interventions are needed. Notably, the supportive role of non-governmental organizations and community-based social support systems should be prioritized to enhance reproductive health outcomes in migrant population.

Keywords: Social determinants; Health services; Afghan; Scoping review

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Introduction

Sexual and Reproductive Health and Rights (SRHR) encompass sexual health, sexual rights, reproductive health, and reproductive rights, which are vital for social progress and sustainable development (1,2). Ensuring equitable access to reproductive health services is a global priority, as it directly influences maternal and child health, economic growth, and social stability (3,4). Recognizing the multifaceted barriers to access, the WHO introduced the Social Determinants of Health (SDH) framework into health policy in 2010, emphasizing the need to address both structural factors (income, education, and legal status) and intermediary factors (healthcare system quality, living conditions, and psychosocial context) to achieve health equity (5,6). Intermediary determinants, in particular, have a direct and immediate effect on health outcomes and access to services.

Despite international commitments, migrants remain among the most vulnerable populations facing persistent inequities in reproductive healthcare access. By 2023, the global refugee population reached 36.4 million, with over 281 million international migrants, including 6.1 million Afghans—the second-largest refugee group globally, many residing in Iran (6-8). Systemic inequalities—such as poverty, restrictive immigration policies, racial and gender discrimination—continue to marginalize migrant populations and obstruct access to essential services (9-11) Moreover, the American College of Obstetricians and Gynecologists (2022) emphasizes that addressing social determinants such as income, education, and discrimination is critical to reducing disparities in reproductive health outcomes, particularly for marginalized populations like migrants (12).

Studies conducted among Afghan women in Iran and Germany have documented barriers such as low health literacy, cultural stigma, legal insecurity, and inadequate healthcare quality (13-15). These findings underscore the urgent need for targeted interventions grounded in the SDH framework to improve reproductive health outcomes for migrant women.

While Iran has implemented initiatives to improve healthcare for migrants, illegal migrants still face access barriers. This study aims to examine the impact of intermediary social determinants of health – which are often overlooked in analyses – on Afghan migrant women's access to reproductive health services. This contrasts with the prevailing focus on structural factors as the primary influences on reproductive health outcomes. As such, this work serves as a precursor to and contributes to evidence-based policymaking and the development of targeted intervention strategies.

Methods

The scoping review method was chosen for this study because the research topic is broad and multidimensional, requiring the identification and mapping of key concepts and existing gaps in the field of Afghan migrant women's access to reproductive health services.

To enhance the quality and standards of the study, the PRISMA checklist was utilized, which helped to enhance the reliability and transparency of the review's findings and conclusions (16).

Study Design and Research Question

Using the PECO framework, the study focused on: Population (P): Afghan migrant women aged 15-49, Exposure (E): Intermediary social determinants of health, Comparison (C): Absence of effective intermediary social determinants, Outcome (O): Access to reproductive health services. The research explored how intermediary social determinants affect Afghan migrant women's access to reproductive healthcare.

Inclusion Criteria

The review included original observational (cross-sectional, case-control, cohort) and interventional studies examining intermediary social determinants influencing reproductive healthcare access.

Data Collection and Search Strategy

Data was systematically gathered from databases like PubMed, Scopus, ISI Web of Science, and Google Scholar, using MESH and EMTREE-derived keywords such as "Social determinants," "Intermediary social determinants of health," "Access to reproductive health services," and "Afghan migrants." Two researchers conducted the search independently over six months (Oct 2023–Mar 2025).

This strategy was according to the WHO's social determinants of health frame work, emphasizing material conditions (e.g., lifestyle, work, food access), behavioral and biological factors, psychosocial influences, health system access, social capital, and cohesion. Definitions of reproductive health, migration, and healthcare access were also integrated.

Search terms targeted intermediary determinants (e.g., "working condition," "mental health," "food insecurity," "social capital"), access to reproductive health (e.g., "access to care," "contraceptive availability"), and migrant populations (e.g., "immigrants," "Afghan people"). Boolean operators "AND" and "OR" were used to combine these keywords across databases for the period Jan 2000 to Mar 2025. Fig. 1 illustrates the article selection process.

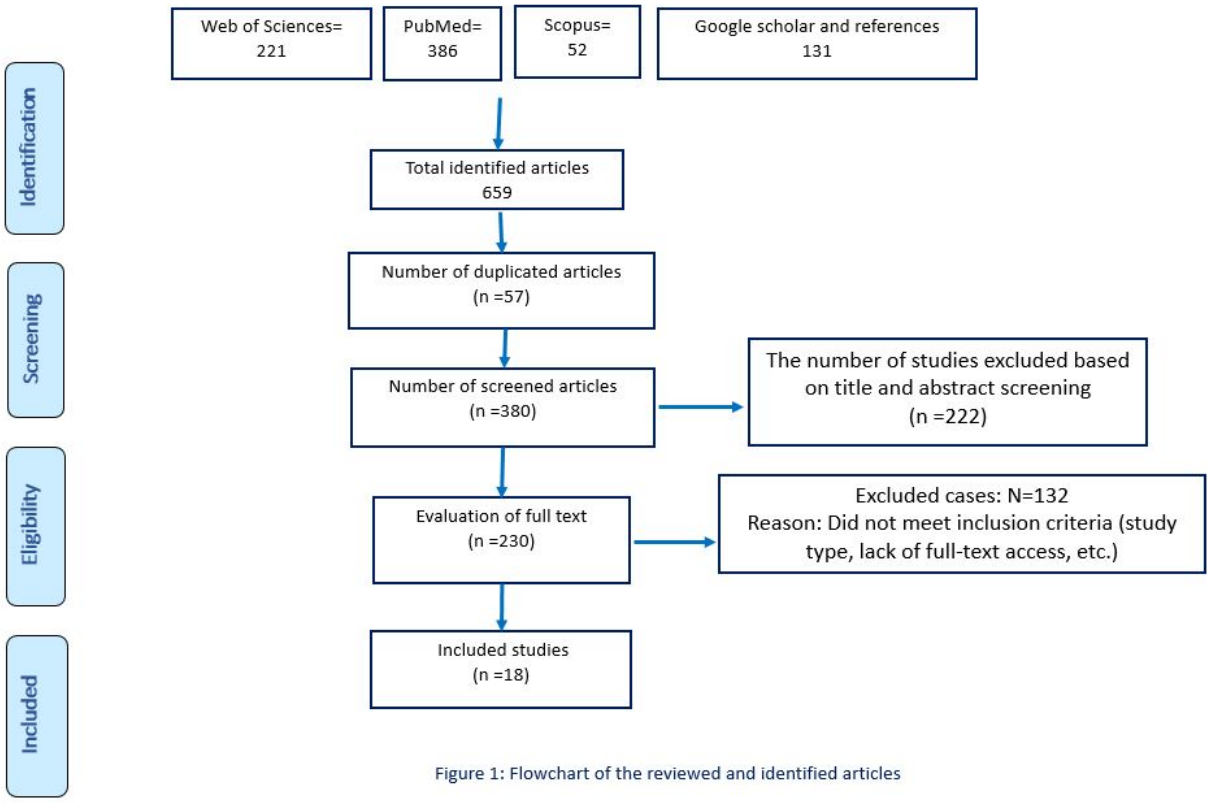

Fig. 1: Flowchart of the reviewed and identified articles

For synthesis of results, we charted, organized and summarized data in Table 1, and identifying research gaps during results.

Results

An initial search yielded 659 articles (52 from Scopus, 190 from Web of Science, 386 from

PubMed). Additional sources included Google Scholar and reference lists. After screening for relevance, duplicates, and accessibility, 18 articles were selected for final review—comprising two cohort studies, one mixed-methods study, and the rest cross-sectional. The article information is presented in Table 1.

Table 1: Demographic characters of included articles

Author /year	Study population	Main result	SDH	SRH
1- Badshah 2023 (17)	1039 mothers' record collected prospectively from the four public-hospitals 12 % Afghan and 88% Pakistani	Afghan refugee mothers were more influenced by residence, maternal age, and pregnancy registration, whereas hypertension and short stature were uniquely linked to Pakistani mothers.	Live in Tribal areas - non-fresh water - old age mothers in pregnancy– Spousal agreement for using health services -Social support	Spontaneous abortion - premature birth - low birth weight - neonatal mortality
2-Shafiei 2012(18)	14 Afghan migrant women	Factor related with satisfaction with 'interactions with caregivers', 'the organization of care and the hospital environment' and 'reflections on care at home in Afghanistan'.	Attitude and behavior of service providers – hospital environment and organization of visits and long waiting times – short visiting hours and food quality – social support -	Maternal mortality Quality of prenatal care Quality of intrapartum care. Quality of maternity care Quality of care during childbirth. Postnatal care. Postpartum care
3-Akerman 2019 (19)	288 immigrants speaking Arabic, Dari, Somali or English	Immigrant women often lack knowledge about contraceptive counseling, HIV testing, and health examinations, often due to emotional and social support issues, lack of children, and cultural barriers.	Experiencing lack of emotional social support and Interaction with service providers, social support .	to limited access, or suboptimal use of healthcare services. Lack of knowledge of where to turn for contraceptive counselling and HIV testing Unplanned pregnancy, inadequate use of preventive methods, risk of sexually transmitted diseases, negative psychological consequences .
4-Raheel 2012 (20)	A randomly selected group of 650 married Afghan women	Refugee women who had had access to subsidized healthcare were significantly more likely to use the contraceptive methods	Support of NGO-Social validation	Using contraceptive – Number of pregnancies and children – Future planning in family planning
5-Cohen 2012 (21)	71504 women Iraq and Afghanistan veterans	Trend of increasing prevalence of disease outcomes in women with PTSD, depression, and comorbid PTSD and depression (p for trend <.0001 for all outcomes).	Mental health problem . stress , PTSD	Categories included sexually transmitted infections, other infections (e.g., urinary tract infections), pain-related conditions (e.g., dysmenorrhea and dyspareunia), and other conditions (e.g., polycystic ovarian syndrome, infertility, sexual dysfunction). Increase in fertility problems. Infections of the reproductive and urinary tracts. Negative consequences of pregnancy (miscarriage, premature birth). Insufficient use of preventive services.
6-Dadras 2021 (22)	424 Afghan women aged 18-44	Poor antenatal care, intimate partner violence, and poor mental health can negatively impact pregnancy outcomes, according to a study.	IPV Intimated partner violence Food insecurity psychological problems	Preterm labor- Abortion Stillbirth Eclampsia preeclampsia Early rupture of Membrane Gestational Hypertension

Table 1: Continued…

				Gestational Diabetes Intrapartum hemorrhage infections
7-Purdin 2008 (23)	Afghan refugee women	from 291 per 100000 live births in 2000 to 102 per 100000 live births in 2004. births attended by skilled staff increased from 5% in 1996 to 67% in 2007. Complete prenatal care coverage from 49% in 2000 to 90% in 2006, and postnatal coverage from 27% in 2000 to 85% in 2006.	community health worker, community involvement and education, good coordination, and effective systems Availability of services 24 hours, peers' educators , Interaction with service providers. -Socia l support.	Maternal death - coverage of pregnancy and postpartum care - cesarean section Maternal mortality. Childbirth without medical care. Complications of pregnancy. Failure to use preventive services. Infant mortality and low birth weight .
8- Sharifi 2020 (24)	280 pregnant Afghan women	Healthcare providers, family, friends, internet, and media sources significantly influence decision-making in healthcare services, with education level, number of children, residence, place of birth, and insurance status influencing factors.	Social support (family and social networks) and interpersonal communication .	Access to prenatal care, previous delivery location, and reproductive health information sources influence pregnant women's awareness and decision-making, while lack of accurate information increases stress and worry among immigrant women.
9-Khan 2020 (25)	500 women 15-49 yr	Health and Family Planning: 61% did not use contraceptives, 41% had health issues, and 55% had a one-year gap between pregnancies. 60% had never experienced abortion. Knowledge and Use of Contraceptives: 52% used contraceptives to avoid unwanted pregnancies, while 44% were unaware of family planning methods.	Support by NGO- support for food employee housing -wear clouts as their culture dissatisfaction with the public health facilities	Abortion – pregnancy gap- Family planning Knowledge- Early marriage Early pregnancy pain and heavy bleeding due to menstrual problems - High fertility rates. - Problems in maternal health. - Limited access to contraception. - Vulnerability to sexually transmitted diseases. - Inadequate maternal care.
10-Roe JV 2024 (26)	57 Afghan women in camp	involved 46 women interested in reproductive care, with 43.9%) visiting a clinic. Seventeen visited for a pregnancy test, eight prescribed oral contraceptives, and eight received folic acid.	Knowledge - NGO support	- Decreased access to prenatal care services. - Increased risks of pregnancy and childbirth in Afghan migrant women.
11- Inci, 2020 (27)	307 Women afghan and Syria- mean age was 33 yr (range: 18–63).	The study involved 307 participants, primarily from Syria and Afghanistan, with a mean age of 33 yr. The majority were "requiring contraception," with 47% having unmet needs. Traditional methods were used by 53% of women, with 30% using intrauterine contraceptive devices. The study found that many women used insufficient birth control methods.	Legal access Language barriers Cast Lack of health education Lack of information Service quality Depression Truma and depression	Family planning services Abortion services Integration reproductive services - High birth rate (average of 2.5 children) High birth rate (average 2.5 children). Unmet family planning needs. - Unmet needs in the field of family planning
12-Dehghan 2021 (28)	146 Iranian pregnant women and 142 Afghan pregnant women	The study found that mental health issues (MFA) and violence (DV) were significantly correlated in both Indigenous and Asian women (IPW) and APW, with verbal violence in	Husband's addiction, in IPW. history of physical illness, housing status, fetal gender, and number of children in APW.	Maternal–fetal attachment (MFA) and domestic violence (DV) unplanned pregnancy

Table 1: Continued…

		IPW and sexual violence in APW having a more significant correlation with MFA.		
13-Delkhosh 2018 (29)	a settlement in the city of Semnan, Iran, from 2016 to 2017. Afghan refugee women (n ¼ 188) with ages between 15 and 49 yr	Modern contraceptive use was found to be more exposed to IPV (52.3%) among women, with partners refusing contraception being more likely to abuse them.	-Polygamy, violence from a sexual partner, - Man decision making about using Family planing	Lack of use of contraceptive methods and unwanted pregnancies – childbirth under 18 yr – early marriage – home childbirth – spontaneous abortion – use of traditional contraceptive methods – lack of use of any contraceptive method – Pregnancy complications (premature birth, low birth weight, infections) Reduced access to prenatal care
14-Changizi 2023 (30)	number of deliveries across 3 years (2017– 2019) was 168488 Afghan mothers	The average maternal mortality rate among Afghan mothers is 43 per 100,000 live births, with non-pregnancy-related reasons, bleeding, and blood pressure disorders being the main causes. Severe obstetric complications are twice as high as Iranian mothers. Pregnancy risks include diabetes and hypertension.	Living in rural or marginal areas, reliance on untrained healthcare providers, and limited use of modern prenatal services contribute to disparities in maternity care quality and access between Afghan and Iranian women.	Afghan mothers face higher maternal mortality, increased pregnancy complications, and postpartum risks compared to the Iranian population, along with negative newborn outcomes and reduced quality of life due to limited healthcare access.
15-kizilkaya 2022(31)	316 Afghan refugee women	The level of awareness among this group of women about the early signs of breast cancer, self-examination methods, and the need for screening was very low. - Barriers such as language, culture, and lack of access to sufficient information are considered the main factors of ignorance.	Limited access to healthcare services in the host country (Turkey). - Lack of trust or awareness regarding healthcare systems. -The social and familial roles that diminish the priority of health.	Low level of awareness among women and lack of access to services
16- Balsara 2010(32)	512 Afghan refugee women visiting these clinics .	High rates of genital infections among Afghan women are worsened by low awareness and limited healthcare access, with cultural, linguistic, and economic barriers being key obstacles to improving their reproductive health.	Living conditions in the camps - Limited access to healthcare services - Stress and mental health issues	High prevalence of genital tract infections -Pelvic pain and menstrual disorders -Increased risk of infertility -Maternal mortality -Poor mental health -Low quality of care services
17- Korkut2022(33)	264 Afghan refugee women	Refugee women's contraceptive use rates are lower than global averages, with cultural, economic, and linguistic barriers hindering access to family planning-related healthcare.	Limited access to health services and family planning counseling Insufficient counseling on the use of contraceptive services	Afghan women show high use of permanent contraceptive methods, low use of modern options like IUDs, and face notable rates of abortion and unwanted births due to limited access to family planning services.
18- Dadras 2020(34)	725 Afghan women	Low education, health insurance, economic status, and cultural differences hinder access to prenatal care, while social support and awareness increase women's utilization of services.	Family income - education - legal status Fear of discrimination or mistreatment, religious and cultural concerns	Pregnancy visits and prenatal care

The intermediary social determinants of health affecting access to reproductive health services among Afghan migrants are classified into three categories in frame work:

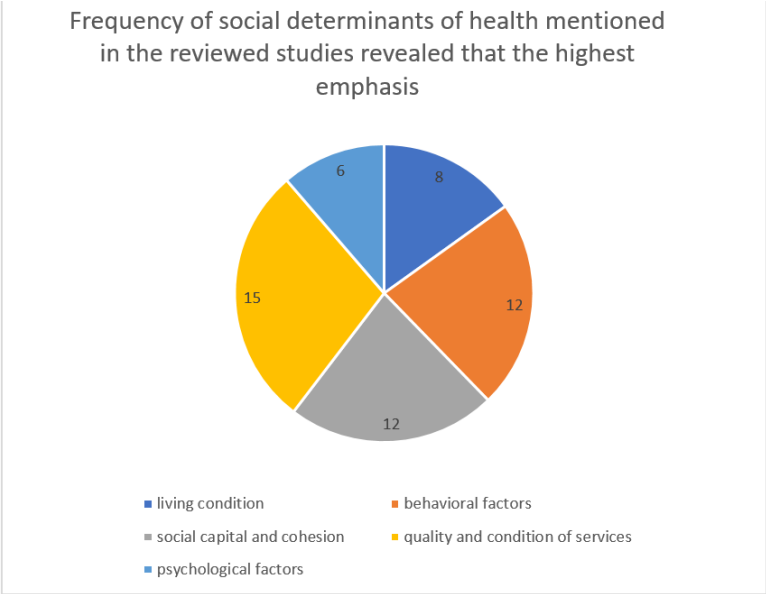

Fig. 2: Frequency of social determinants of health mentioned in the reviewed studies revealed that the highest emphasis

An analysis of the frequency of social determinants of health mentioned in the reviewed studies revealed that the highest emphasis was placed on the "quality and condition of health services," which was reported in 15 studies. Additionally, both "behavioral factors" and "social capital and cohesion" were mentioned 12 times each, indicating the importance of beliefs, attitudes, and social support in accessing health services. In contrast, "psychological factors" had the lowest frequency, being reported in only 6 studies, although some studies addressed them in greater depth (Fig. 2).

Health Outcomes Categorization

In analyzing the impact of intermediary social determinants on reproductive health, the reviewed articles grouped outcomes into key categories include Pregnancy and childbirth complications, Infant health, Family planning and Reproductive system health.

Discussion

Among intermediary social determinants of health, health service quality and conditions were the most frequently cited. These highlights the importance of infrastructure, care standards, service coordination, and patient-provider relationships. Behavioral factors and social capital/cohesion each appeared in 12 subcategories, reflecting the influence of individual attitudes and social support. In contrast, psychological factors—such as PTSD, stress, and intimate partner violence—were the least addressed, noted in only six subcategories.

We categorized our findings based on the WHO's Social Determinants of Health framework, specifically under the subcategories of intermediary determinants:

Quality and condition of health services

The most frequently reported intermediary determinant across the reviewed studies was the quality and condition of healthcare service delivery. Shafiei et al. and Purdin et al. highlight poor service organization, long waiting times, and under-resourced healthcare systems, which correlate with inadequate maternal care, higher maternal and infant mortality, and increased complications during pregnancy and childbirth (18,23). Khan emphasizes dissatisfaction with public health facilities, linked to unmet contraception needs and unsafe pregnancy conditions (25). Mahmoudi et al., highlighted that improved access to health services

during the COVID-19 pandemic was associated with a better quality of life among Afghan migrants. These findings collectively emphasize that the service quality and healthcare system environment are central to shaping Afghan migrant women's access to and satisfaction with reproductive health services (35). Addressing these systemic gaps—through culturally sensitive care, appropriate provider training, and infrastructure improvements—is critical to improving reproductive health outcomes in this population (36).

Biological and behavioral factors

Among the intermediary determinants identified across our reviewed articles, several factors were categorized under behavioral and biological determinants. several studies note the influence of partner control, traditional gender norms (e.g., men deciding on care), substance abuse by partners, and cultural practices (e.g., home birth, use of traditional midwives), which often result in avoidable complications or failure to access modern contraceptive or prenatal services (17-19). Our findings were consistent with the studies that stated cultural beliefs and attitudes played an essential role in Afghan refugee women's access to gynecological cancer-related preventive healthcare services. Addressing cultural and behavioral barriers at the community level is crucial for improving the overall well-being and reproductive autonomy of Afghan migrant women (37,38).

Living condition

Living conditions emerged as a critical factor, appearing in 8 subcategories in studies, including life in refugee camps, residence in urban slums or marginalized settlements, lack of access to clean water, and food insecurity. Another study also aligns with our findings, with researchers identifying these conditions as key factors for health and well-being (39). These conditions negatively impact the reproductive health of Afghan migrant women by increasing vulnerability to infections, limiting access to healthcare services, and exacerbating mental stress. Such precarious environments not only affect physical health but also intensify feelings of social exclusion and instability. This underscores the necessity of integrating housing, water, and food security considerations into reproductive health strategies targeting displaced populations.

Psychological factors

Although psychological factors were the least frequently mentioned intermediary determinants in the reviewed studies, this does not imply they are of lesser importance.

The migration and displacement experiences of Afghan women are closely linked to mental health issues such as PTSD, depression, and anxiety, which negatively impact their reproductive and physical health. These issues increase the likelihood of adverse pregnancy outcomes, including sexually transmitted infections, sexual pain, polycystic ovary syndrome, and infertility (21,30). Over half of Afghan women were experienced complications like preterm birth, gestational diabetes, or infection, with education, legal immigration status, and health insurance reducing these risks. Strengthening psychosocial support and integrating psychological counseling into prenatal care were highlighted as essential measures (22). Similarly, research on resettled Afghan refugees in Australia reported that 44% met criteria for clinically significant PTSD symptoms, and 14.7% exhibited symptoms suggestive of clinically significant depression. These psychological challenges are compounded by post-migration stressors such as social isolation, discrimination, and limited access to healthcare, further exacerbating their overall well-being (40,41).

Social capital and social cohesion:

Lack of emotional and social support—as well as limitations in healthcare services and mistrust of health systems—has been shown to directly affect Afghan migrant women's access to reproductive health services (17-19) These factors negatively influence health-seeking behavior and decision-making capacity, leading to unplanned pregnancies, limited use of preventive services, and poor sexual and reproductive health (SRH) outcomes. Our study found that financial and informational support from NGOs improved contraceptive use and reproductive health outcomes (20,26). Our

findings align with previous research, such as Egli-Gany et al., which stressed that migrant populations often face not only structural barriers like legal status and income, but also significant intermediary challenges including emotional distress and poor service environments (11). Similarly, studies conducted among Afghan women in Iran and Germany identified social discrimination, low social support, and inadequate healthcare quality as major barriers (14).

Limitation

This scoping review did not include a formal critical appraisal of the quality of the included studies, as the primary aim was to explore the breadth and scope of the existing evidence rather than to assess methodological rigor. Additionally, the review was limited to English-language publications, which may have excluded relevant studies published in other languages and could affect the comprehensiveness of the findings.

Conclusion

The WHO's Social Determinants of Health framework highlights intermediary factors, such as health service quality and conditions, as critical barriers to reproductive health access for Afghan migrant women, emphasizing the need for improved healthcare infrastructure, service delivery, and patient-provider relationships. Behavioral factors, social capital, and psychological issues (e.g., PTSD, stress) also significantly influence health-seeking behavior, reflecting the complex barriers faced. Improving outcomes requires a multifaceted approach, including enhanced healthcare access, mental health support, community-based interventions, and culturally competent care. Policy reforms should address both structural and psychosocial factors to ensure equitable healthcare, with future research focusing on evaluating targeted interventions for migrant health.

Journalism Ethics considerations

Ethical issues (Including plagiarism, informed consent, misconduct, data fabrication and/or falsification, double publication and/or submission, redundancy, etc.) have been completely observed by the authors.

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Conflict of interest

The authors declare that there is no conflict of interests.

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