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Literature Review

Strengthening Jordan's Family Planning System: Evidence-Based Insights and Adapted Global Best Practices to Improve Modern Contraceptive Uptake

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Abstract

Background: Jordan's fertility decline has stalled after decades of progress, and contraceptive use has only very recently recovered from a drop in the 2010s. Between 1990 and 2010, the contraceptive prevalence rate (CPR) rose significantly, contributing to a decline in fertility from 7.1 to 3.3 children per woman. However, from 2012 to 2018, the CPR fell from 61% to 52% and has only recently rebounded to 60%. During this period, many couples turned to less effective methods, such as withdrawal, and the use of modern techniques, including IUDs, pills, injectables, and implants, declined. Reported reasons for non-use include fear of side effects, husband opposition, and lack of awareness.

Methods: This narrative review synthesizes existing literature on family planning (FP) in Jordan and identifies global best practices with potential for adaptation in the Jordanian context. It applies a gender-sensitive, evidence-based framework.

Results: The review finds that discontinuation of modern methods is high, unmet need rose during the COVID-19 pandemic, and provider attitudes and insufficient male involvement constrain voluntary, rights-based FP. It also highlights the need for improved sexual and reproductive health and rights (SRHR) education, both in schools and through community engagement, to strengthen contraceptive literacy and decision-making. Recommendations span four thematic areas: provider behavior change, male engagement, comprehensive SRHR education, and service delivery.

Conclusion: These interventions, grounded in global evidence and contextualized for Jordan, offer implementers actionable guidance. The paper also identifies critical research gaps in contraceptive use, access, and quality of care.

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Introduction

Ongoing political instability and economic challenges across the Middle East have contributed to rapid population growth in Jordan through successive waves of refugees from countries such as Palestine, Iraq, Syria, Libya, and Yemen [1]. As of 2025, Jordan's population is estimated at approximately 11.5 million people, with around one-third (roughly 30% - 35%) consisting of non-Jordanian residents, including refugees, migrants, and expatriates [2]. Jordan hosts one of the largest refugee populations per capita globally, with hundreds of thousands of registered refugees, the majority of whom are Syrian, alongside smaller numbers from Iraq, Yemen, and other countries. This large non-citizen population places considerable pressure on public services, particularly the healthcare system. Women, girls, and children constitute a substantial share of those affected and face heightened health vulnerabilities, especially related to sexual and reproductive health, due to precarious and unstable living conditions [1].

Contraceptive use in Jordan increased greatly between 1990 and 2010 [3], contributing to declining fertility rates, from 7.1 children per woman in the 1970s to just 3.3 children in 2012 [4]. Between the 2012 and 2023 Jordan Population and Family Health Surveys (JPFHS), the total fertility rate (TFR) dropped from 3.5 to 2.6 children per woman, a significant change considering that fertility levels had remained relatively steady, fluctuating only slightly between 3.5 and 3.8, from 2002 to 2012 [5]. At the same time, Jordan's contraceptive prevalence rate (CPR) had declined from 61% to 52%, coinciding with a shift towards less effective methods such as withdrawal [6]. The use of modern contraceptives has followed a similar trend, with a marked decline in the use of male condoms (from 8% to 5%). The most recent JPFHS, however, shows an uptick in the CPR to about 60%, largely due to an increase in the use of traditional methods [5]. Modern methods of contraception include sterilization, oral contraceptive pills, intrauterine devices (IUDs), condoms, injectables, hormonal implants, vaginal barrier methods, and emergency contraception.[1]

The biggest reasons Jordanian women cite for not using contraception are fear of side effects, husband's refusal, and lack of awareness about methods. Discontinuation of modern contraceptives, especially hormonal methods, is also common, often due to dissatisfaction with the method [7]. Unmet need reportedly increased up to 20% during the COVID-19 pandemic [8]. A scoping review of family planning (FP) interventions in Jordan between 2010 and 2022, including communication campaigns, counseling programs, educational initiatives, and community-based efforts, found that many lacked robust methodological frameworks and strong evidence of effectiveness. The study pointed out the limited implementation of High Impact Practices in Family Planning (HIPs) in Jordan, calling for more rigorous, evidence-based programs to create a supportive environment for FP access and use [9].

Our narrative review synthesizes a wide range of literature on family planning in Jordan alongside global best practices for improving modern contraceptive use. We identify areas of unmet need and propose interventions particularly relevant in the Jordanian context, drawing on prior research and, where possible, examples from comparable settings. Our evidence-based approach emphasizes the gendered dimensions of family planning and aims to offer actionable insights for policymakers and program designers.

Methodology

This article draws on a structured, narrative literature review conducted as part of the USAID Health Services Quality Accelerator Activity in Jordan. The goal was to identify key trends in sexual and reproductive health (SRH), assess alignment with global best practices, and highlight relevant approaches from countries with similar sociocultural characteristics. The process followed a rigorous, multi-stage approach based on conceptual relevance to ensure broad coverage of both peer-reviewed and grey literature, synthesizing findings thematically to highlight patterns and inconsistencies.

Search strategy and sources

Peer-reviewed articles and book chapters were identified using Web of Science, Scopus, Google Scholar, ScienceDirect, ProQuest, and PubMed. Search terms included combinations of "Jordan," "family planning," "contracept*," and "reproductive health," using Boolean operators (AND, OR) to capture the key concepts and intricacies of the research question. In addition to the initial database searches, backward and forward citation tracking was included to identify additional relevant literature. This process involved reviewing the reference lists of included articles (backward citation tracking) to locate earlier foundational studies. Also, it enables the identification of newer studies that have cited the included articles (forward citation tracking) using tools like PubMed. Grey literature, including evaluations, technical briefs, and country reports, was found through targeted searches of institutional websites such as UNFPA, WHO, UNICEF, FP2030, and DHS.

The team applied consistent search terms and inclusion criteria. Only English-language publications available online were considered. Both academic and practitioner-oriented sources were included to ensure relevance for programmatic and policy use.

Three-stage review process

The review was conducted in three stages:

1. Landscape assessment: We first mapped Jordan's FP landscape using data from the 2017–18 and 2023 Jordan Population and Family Health Surveys (JPFHS), supplemented by literature on contraceptive trends, demographics, and service delivery in both public and private sectors.

[1]Although the mCPR metric is no longer used by some global health stakeholders because it does not have a standard definition, it is still reported by many data collection agencies active in Jordan, including the country's Department of Statistic's in its "Jordan population and family and health survey," and will therefore be referenced in this article.

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2. Comparison with global best practices: Global evidence-based practices were reviewed using the High Impact Practices in Family Planning (HIP) resources and the Comprehensive Human Rights-based Voluntary Family Planning Program Framework [10]. These represent expert consensus from organizations including USAID, WHO, UNFPA, and FP2030. We then compared global guidance to Jordan's current practices to identify gaps.

3. Contextual case studies: Finally, we reviewed FP interventions in socio-culturally comparable countries, with a focus on the Arab world. Searches included "family planning" combined with terms like "Arab world," "Middle East," and "Eastern Mediterranean." Case studies from Egypt, Lebanon, and Morocco most often illustrated how HIPs were adapted in local contexts. These examples aim to show possibilities for contextual tailoring, not to prescribe one-size-fits-all solutions.

This structured approach enabled the synthesis of diverse evidence to inform rights-based, practical recommendations for improving FP service delivery in Jordan.

Ethical approval

Ethical approval was not required for this type of study by our institutions, as this research is a literature review based on publicly available data and does not involve human or animal subjects.

Reflexivity statement

This manuscript was developed by a multidisciplinary team with diverse geographic, institutional, and professional backgrounds. Sawsan Majali and Raja Khater, Jordanian nationals based in Jordan, were part of the URC team implementing the USAID Health Services Quality Accelerator Activity. Their direct engagement with the local health system provided essential contextual insight. Myriam Vuckovic and Peyton Luiz, based at Georgetown University in Washington, DC, contributed academic, methodological, and global health expertise. The author group includes individuals of varying seniority, from junior researchers to experienced public health professionals, supporting a collaborative, reflexive approach to analyzing sensitive FP and SRH topics in Jordan.

Conceptual framework

The World Health Organization (WHO) Regional Office for Africa defines a best practice as "a technique or method that, through experience and research, has proven reliably to lead to the desired result." In the case of FP, the desired result is having children if, when, and how an individual so chooses. Best practices are generally evaluated based on efficacy (performance under ideal circumstances), effectiveness (performance under real-world conditions), and acceptability among stakeholders (e.g., users, providers, authorities) [11].

A related concept in the FP space is High Impact Practices (HIPs): evidence-based practices vetted by experts based on a "demonstrated magnitude of impact on contraceptive use and potential application in a wide range of settings." Relevant outcome measures include unintended pregnancy, fertility, and proximate determinants of fertility (delay of marriage, birth spacing, or breastfeeding). Evidence of replicability, scalability, sustainability, and cost-effectiveness is also weighed. The Bill and Melinda Gates Foundation, Family Planning 2030 (FP2030), the UN Population Fund (UNFPA), WHO, and, until recently, USAID co-sponsor the HIP Partnership, in which more than 60 organizations collect and share evidence on FP HIPs. Practices are sorted into three categories: enabling environment, service delivery, and social and behavior change [12].

Our review employs a conceptual framework called the *Comprehensive Human Rights-based, Voluntary Family Planning Program Framework* [10], which is in line with the voluntary, rights-based family planning (VRBFP) approaches endorsed by the London Summit on Family Planning in 2012. VRBFP programs are those designed "to fulfil the rights of individuals and couples to determine the number and timing of their children freely, with access to quality information and services, free from discrimination, coercion or violence" [13]. The *Comprehensive Framework* is structured around ten rights-related principles, including: Accessibility, Quality, Equality, Informed Decision-Making, Participation, and Empowerment. Like the HIPs, the *Comprehensive Framework* views FP through a socioecological lens. A diagram of the VRBFP framework from FP2030 can be found in Figure 1 below [10].

Results

Jordan's reproductive health context

Access to reproductive healthcare for women varies significantly by region, educational attainment, socioeconomic status, and nationality. Many married women encounter substantial barriers to care, including physical constraints, long distances to health facilities, lack of information about where to seek services, the need to obtain permission to attend medical appointments, and concerns about being attended by male providers; overall, 42% of women report experiencing at least one such challenge. Women with disabilities face additional obstacles in accessing sexual and reproductive health services, particularly due to inadequate physical accessibility of facilities, the absence of reasonable accommodations, and a shortage of health personnel trained to communicate effectively with individuals with diverse disabilities [1].

Sexual and reproductive health services for Syrian refugees in Jordan remain constrained by persistent financial, social, cultural, and informational barriers, despite policies that allow refugees to access Ministry of Health facilities at the non-insured Jordanian rate rather than the higher foreigner rate. As a result, more than 90% of Syrian refugees rely on public healthcare services rather than private providers, reporting fewer access barriers in public facilities. Access to primary and secondary healthcare for Syrian refugees living in camps and host communities is further facilitated through referral mechanisms and the availability of clinic-based services within camps; however, gaps in service availability, continuity

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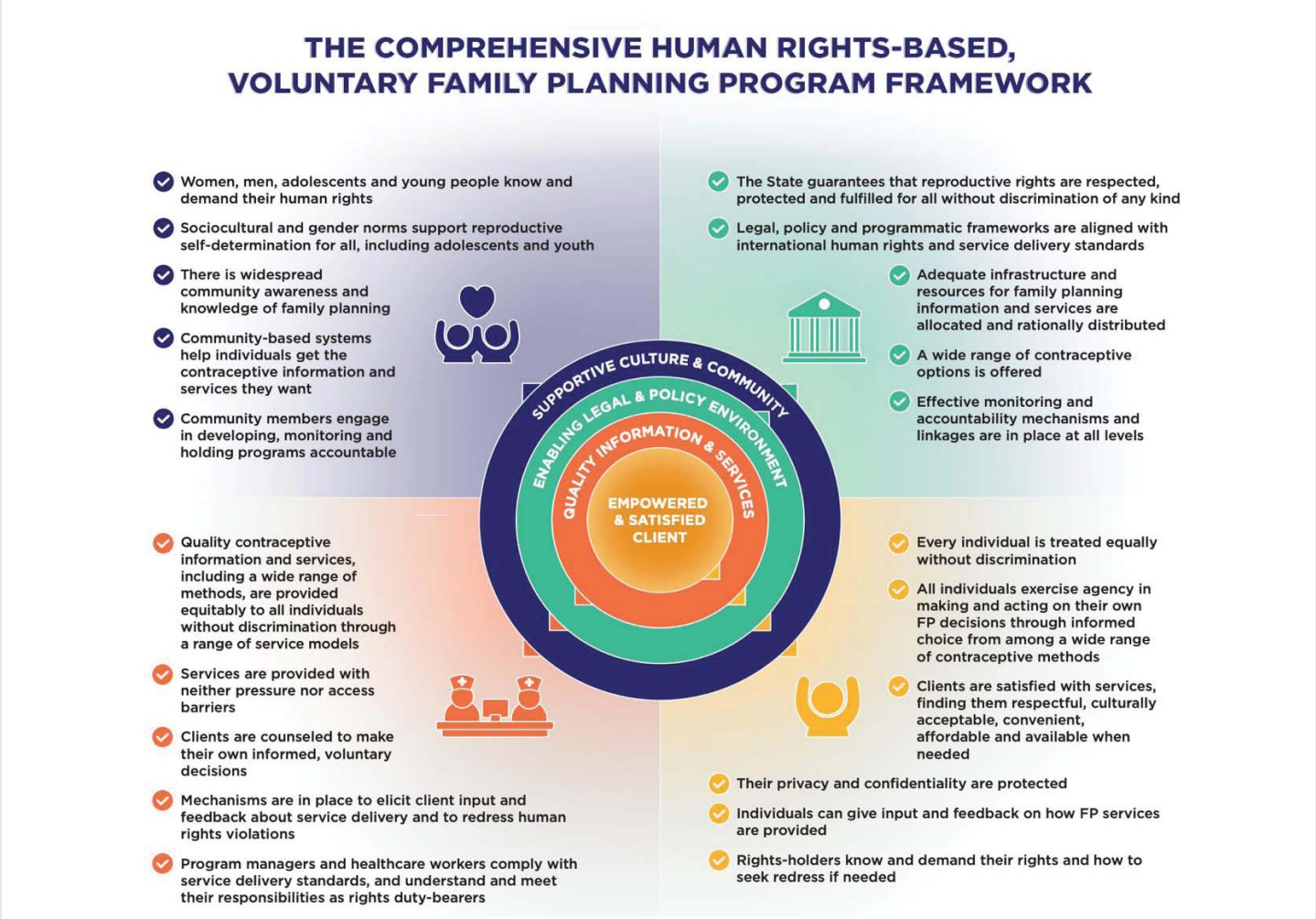

Figure 1: The Comprehensive Human Rights-based, Voluntary Family Planning Program Framework [10].

of care, and affordability continue to limit equitable access to comprehensive sexual and reproductive health services [1,14].

Fertility, family size, and marriage

Between 2011 and 2021, Jordan saw a 24.3% decline in fertility, the Arab world's largest drop during that period. The Jordan Population and Family Health Surveys (JPFHS) report a modest decline in total fertility rate (TFR) from 2.7 children per woman in 2017/18 to 2.6 in 2023. In contrast, Syrian women in Jordan maintain a much higher TFR of 4.7 [5,15]. Fertility also varies by health insurance status. Insured women (58% of those aged 15–49) have a slightly higher TFR than uninsured women (2.9 *vs.* 2.5), with marked variation by insurance type: women covered by the Ministry of Health had the lowest TFR (2.1), while those with UNHCR coverage had the highest (6.4) [16].

Culture and religion influence family size. Some Muslims value large families, and Jordanian society often favors sons [4]. Most births (86%) are wanted at conception; 8% are mistimed, and 6% unwanted. Among married women aged 15-49, 17% want another child soon, 18% want to delay, and 49% want no more or are sterilized. Men are less likely than women to want to limit childbearing [17].

Early marriage remains common among women in Jordan. Approximately 15% of women aged 20–49 were married before the age of 18, while early marriage among men is rare, with only 1% marrying before their 18th birthday. Marriage before age 15 is very uncommon, affecting just 2% of women and no men in this age group. At the governorate level, the prevalence of early marriage ranges from about 3% to 6%. By nationality, the median age at first marriage is higher among Jordanian women aged 25–49 (22.7 years) than among Syrian women and women of other nationalities, whose median age at marriage is 21.6 years [5].

Overall, the median age at first marriage is 22.5 years, and the proportion of women aged 20–49 married by age 18 (15%) is lower than in many Eastern Mediterranean countries [4,5]. Fertility peaks between ages 25–29, reflecting prevailing norms of early childbearing. Early marriage has historically existed across Syrian, Jordanian, and Bedouin communities and should therefore be understood as a regional public health and human rights issue rather than a cultural anomaly linked solely to displacement. The proportion of women aged 15–49 who have ever been married declined slightly from 56% in 1990 to 54% in 2002, before rising to 60% in 2017–18, followed by a 2% decrease to 58% in 2023. Despite this recent decline, child marriage rates increased from 13.7% to 15%

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[5], with particularly sharp rises among Bedouin and Syrian refugee populations. Among these groups, marriage among girls aged 15–17 has tripled since the onset of the Syrian civil war, limiting educational opportunities and placing additional strain on health services. In 2023, 1% of women aged 20-24 married before age 15, and 10% before the age of 18. [5,18,19].

The percentage of women aged 25–49 who were married before age 18 declined steadily between 1990 and 2009 and has since stabilized at approximately 15% - 16%. Notable differences persist by nationality: the median age at first marriage is 19.3 years among Syrian women living in camps, compared with 22.7 years among Jordanian women and 22.4 years among women of other nationalities [5].

Child marriage substantially increases girls' vulnerability to intimate partner violence (IPV), with consequences that extend well into their reproductive lives. Marriages involving minors are more likely to be characterized by pronounced power imbalances, limited autonomy, and reduced capacity to negotiate sexual activity or contraceptive use. Many early marriages are also consanguineous, which can further compound health risks [19]. National data underscore these patterns: the 2023 Jordan Population and Health Survey reports that women aged 15–19 are more likely to have ever experienced spousal sexual violence (5%) compared to women in older age groups (3%) [5]. Evidence suggests that early marriage and IPV interact to exacerbate reproductive vulnerability. A 2020 review found that girls married before age 18 who experienced IPV were four times more likely to have unmet family planning (FP) needs than women who married later, even when both groups were exposed to violence [18]. This shows how early marriage intensifies dependence on male partners and limits access to sexual and reproductive health services, reinforcing a cycle of violence, unintended pregnancy, and unmet FP needs.

The persistence of child marriage in Jordan is shaped by an intersection of cultural beliefs, displacement, and economic insecurity. However, framing child marriage as a marker of refugee identity not only reinforces harmful stereotypes but also detracts from the shared social, economic, and legal conditions that sustain the practice across populations. Early marriage is often perceived as a strategy to preserve family honor, particularly in contexts where sexual violence is feared, such as refugee camps [20,21]. Honor is closely tied to female purity, with strong emphasis placed on virginity before marriage, making marriage appear to families as a form of protection against stigma and social exclusion. In addition, child marriage may be viewed as a pathway to Jordanian citizenship or as a means of easing financial strain, especially in households facing poverty and instability. Structural gender inequality further limits women's access to education and employment, reinforcing the perception of daughters as economic burdens and making early marriage a coping mechanism for families across ethnic and national lines [20].

Sexual education

Basic fertility knowledge is far from universal, and awareness of family planning (FP) remains low across age groups. Only 59% of women can correctly identify the midpoint of the menstrual cycle as the most likely time to conceive [22], and many are unaware of the high risk of postpartum conception [22]. In a 2022 survey, 15% of non-users reported not using contraceptives because they "didn't know about them" [7]. Over 75% of Jordanians are unfamiliar with emergency contraception. A 2022 cross-sectional study found that only 26.2% of unmarried female university students had adequate sexual and reproductive health (SRH) knowledge, with major gaps in contraception, menstruation, and sexually transmitted diseases (STDs). SRH knowledge varied significantly by residence, education, religion, and field of study, indicating a need for targeted education and curriculum integration [23]. In Irbid, a study of married women found those who believed in the effectiveness of modern methods were nearly nine times more likely to use them, underscoring the link between education and FP adoption [22].

Contraceptive use

Contraceptive use in the Middle East rose by 13.4% between 1990 and 2010; in Jordan, the increase was 18.2% [3]. This contributed to a sharp fertility decline, from 7.1 children per woman in the 1970s to 3.3 in 2012 [4]. In 2014, Jordan scored 60/100 on the Family Planning Effort Index, up from 51/100 in 2009, reflecting service improvements [3].

More recent fertility stagnation has been linked to both a decline in FP use and a shift toward less effective methods, especially withdrawal [6]. The contraceptive prevalence rate (CPR) fell from 61% in 2012 to 52% in 2017-18, mainly due to reduced condom and rhythm method use. The latest JPFHS shows a rebound to 60%, driven by increased reliance on traditional methods, especially withdrawal, which rose from 13% in 2017-18 to 20% in 2023. Pill, rhythm, and sterilization rates remained stable [5], suggesting barriers to, or mistrust of, more effective methods.

Currently, 69% of women have ever used contraception. Ever-use is highest in Irbid, Ajloun, and Jerash (75%) and lowest in Ma'an (57%), and correlates with age and education [16]. Jordan's modern contraceptive prevalence rate (mCPR) fell from 40% in 2012 to 37% in 2018, ranging from 25% in Ma'an to 43% in Jerash. Among currently married women, 38% report using a modern contraceptive method, while 22% rely on traditional methods. Withdrawal and IUDs are the most frequently used methods, each reported by about 20% of married women, followed by the pill (8%) and male condoms (6%). Permanent methods remain rare, with only 2% of women reporting sterilization and fewer than 1% using injectables or implants [5]. Overall, modern methods satisfy just over half (57%) of the total demand for family planning [7].

Modern contraceptive use is lower among Syrian and other non-Jordanian women (32%) compared with Jordanian women (38%). Syrian and other non-Jordanian women are also less likely to use any modern method (33% and 35%, respectively) than Jordanian women (39%), with Syrian women residing in refugee camps reporting lower family planning use than those living outside camps (41% vs 51%) [5]. Slightly more than half

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(52%) of modern method users obtained their contraception from the public sector, while 48% accessed services through the private sector.

Barriers to demand and use

Total demand for family planning among currently married women aged 15-49 remained relatively stable between 2002 and 2012 (71% - 73%), declined to 66% in 2017-18, and rose again to 71% in 2023. Met need for family planning (including modern and traditional methods) followed a similar trend, dropping from 61% in 2012 to 52% in 2017-18, then rising to 60% in 2023. Unmet need increased from 12% in 2012 to 14% in 2017-18, then declined to 11% in 2023 [5]. Around 14% of married Jordanian women and 19% of Syrian and other non-Jordanian women have unmet FP needs [17]. The unmet need for modern contraception is estimated at 29% overall, 17% for limiting births, and 12% for spacing [16]. Regional differences are stark: in Irbid, unmet need for modern methods nears 46%, with 27% using traditional methods and 19% using none [22].

The main reasons women gave for not using contraception were fear of complications, husband's refusal, and lack of awareness. Religious and social pressure were less commonly cited (7% and 2%, respectively) [7]. However, Syrian women reported much higher opposition to the use of modern methods (14.1% overall, 13.3% in urban areas, and 23.4% in refugee camps) than Jordanian women (8%) [5]. According to SDG indicator 5.6.1, 58% of women aged 15-49 make their own informed decisions about sexual relations, contraceptive use, and reproductive healthcare. Most female FP users (85%) say decisions were made jointly with their husbands. Decision-making power varies by region and education, with non-users in Ma'an, Aqaba, and those with no formal schooling most likely to report that their husband made the decision not to use FP [17].

Discontinuation of modern contraceptives is common, often due to dissatisfaction. The 2017-18 JPFHS defines modern methods as including sterilization, injectables, IUDs, pills, implants, condoms, LAM, and emergency contraception. It found that 30% of users discontinued a method within a year, and about 20% of current traditional method users had previously stopped using a modern method [16]. Women wishing to delay childbirth often avoid all methods due to fears about long-term fertility effects [3]. Typically, modern methods are only adopted once women reach their desired number of children.

Adolescent and youth sexual and reproductive health

Strong cultural and religious taboos against sex outside marriage, especially premarital sex, discourage open discussion of sexual and reproductive health and rights (SRHR) with adolescents, who are viewed as not needing such information [24]. Family planning (FP) is typically introduced only after a woman marries and has her first child [18]. Jordan lacks a universally implemented, standardized SRH curriculum, and many teachers feel unprepared or uncomfortable addressing the topic [25]. Parents also wish to discuss SRH, but often lack the tools. Among youth aged 10 - 24, 81% expressed a strong need for SRH education, 72% wanted to participate in programs, and 43% struggled to access accurate information [26]. In communities with early marriage, FP remains relevant even for teens [25].

Unmarried individuals, especially youth and divorcees, face significant barriers to SRH services, and Syrian youth often experience discrimination in care settings. A study of urban Syrian refugees aged 12-24 found poor treatment by healthcare providers to be a major barrier. Youth-friendly attitudes were more common in Amman, with physicians generally less conservative than nurses and midwives [26]. Cultural taboos also limit data collection on SRHR needs. One study found 7% of university students had engaged in premarital sex [24], while another reported over 60% of practitioners had treated at least one unmarried adolescent for SRH issues [25]. These findings challenge the belief that SRH services are unnecessary before marriage.

SRH among refugees

The rise in early marriage and the high TFR observed in the Syrian refugee population are frequently cited as SRHR issues in Jordan [24]. However, the Institute for Reproductive Health at Georgetown University found that "the stagnation of TFR and mCPR predates the influx of Syrian refugees" [6]. Recent research suggests that Syrians and ethnic Jordanians generally have similar fertility preferences. This contradicts the stereotype that Syrian people are uneducated and want large families. It is true, though, that Syrian girls are more likely than their Jordanian peers to be concerned about early marriage and issues related to reproductive health and gender-based violence (GBV) [26].

SRH during the COVID-19 pandemic

The COVID-19 crisis negatively impacted SRHR care provision and outcomes globally. As seen in other crisis settings [27], the pandemic influenced fertility preferences. Many women in the Middle East wanted to delay or reduce childbearing due to pandemic-related stress and uncertainty [28]. In Lebanon, for instance, most Syrian refugees expressed a desire to limit family size and delay future pregnancies, citing financial strain and heightened stress [29].

Despite increased demand for family planning (FP), fertility rates often rise during pandemics. Health systems become overstretched, particularly affecting low-income groups. Disruptions to maternal and child health (MCH) services and fear of infection deter care-seeking [8]. Lockdowns, clinic closures, stockouts, and financial hardship raised the risk of unintended pregnancy [28]. A 10% global drop in modern contraceptive use caused an estimated 1.4 million unintended pregnancies in LMICs by March 2021 [30]. In Jordan, maternal mortality rose from 32.4 to 38.5 per 100,000 live births from 2019 to 2020, with COVID-19 as the leading cause [31]. MCH centers closed for 70 days, disrupting FP access. Although women typically receive a three-month supply, many delayed returning due to infection fears.

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Crises can also shift social norms, affecting sexual behavior and gender-based violence (GBV). In Jordan, COVID-related stress altered sexual patterns, increasing intercourse frequency but reducing satisfaction among women [32]. Youth face an increased risk of early sexual activity as education and job prospects vanish. Women, with fewer income options, may face early marriage or exploitation to ease household financial burdens [8]. Pandemic stressors such as job loss or illness often triggered aggression, and some men, feeling emasculated by unemployment, resorted to violence [33]. All forms of domestic abuse undermine reproductive autonomy. These patterns emerged clearly in Jordan. Adolescents and adults, refugee and non-refugee alike, found SRH and GBV services harder to access. While pharmacies remained stocked, 10% - 20% more women and girls reported FP obstacles [8]. In Azraq and Zaatari camps, FP use dropped by 47% among 117,000 Syrian residents [34]. Nationally, contraceptive use among married Jordanian women declined from 65.5% pre-pandemic to 59.9% during the spring 2020 curfew, rising slightly to 61.5% post-lockdown [33]. Among 519 women surveyed in late 2020, 38% changed methods due to access issues, and about one-third became pregnant during lockdown, most unintentionally [35].

Adaptation of global best practices in the Jordanian context

Based on the findings presented in our narrative review, the following section identifies global best practices (GBP), which could help to improve utilization of modern family planning methods in Jordan. These recommended best practices are grouped under the four thematic areas delineated in the Comprehensive Human Rights-based Voluntary Family Planning Program Framework: (1) supportive culture and community; (2) enabling legal and policy environment; (3) quality information and services; and (4) empowered and satisfied client [10]. Each recommendation is followed by a brief discussion, additional evidence, and insights specific to Jordan. Where relevant, we also present recommended best practices for FP in emergency contexts. Supplemental Table 1 features additional selected HIP case studies from other countries in the region, illustrating interventions that could be scaled up or replicated in Jordan, along with a range of resources for program design.

1. Supportive culture and community

Promote family planning (FP) as a tool for empowerment [12]: Educational campaigns on birth spacing offer a culturally acceptable way to introduce youth to SRHR [24]. WHO recommends spacing births by 3–5 years, but in Jordan, 29% of births occur within 24 months and 16% within 18 months of the previous birth [17]. Most Jordanians recognize the health benefits of spacing [36], making it a useful entry point for introducing broader VRBFP concepts like agency and empowerment [10].

Involve men in FP counseling [12]: Qualitative research on male resistance is needed [12]. Many Jordanian men see SRH as relevant only during pregnancy. Barriers include stigma, limited awareness, and clinic hours conflicting with work [26]. One indication of the insufficient male contribution to FP in Jordan is the underutilization of male condoms. Estimated rates of usage within married couples range from 7% to 14% [16]. The percentage of women who report they can ask their husband to use a condom increases as wealth does, from 62% among those in the lowest wealth quintile to 76% among those in the highest quintile [17]. Women whose husbands used condoms reported a higher quality of life compared to those whose husbands did not [37]. The evidence is clear that male involvement is a crucial component in increasing the demand for FP. A recent study analyzing DHS data from Jordan found that women who make FP decisions by themselves or jointly with their husbands are 1.5 times as likely to use modern methods as those for whom FP decisions are made solely by the husband or someone else [3]. Examining modern method usage in Irbid, Komasawa, et al. showed that spousal agreement on FP and knowledge of modern contraceptive methods were the factors most strongly correlated with use [22]. The HIP Partnership's strategic guide, *Engaging Men and Boys in Family Planning: A Strategic Planning Guide*, provides detailed, step-by-step advice for program implementation. It is designed to help program managers and decision-makers identify effective strategies to engage men and boys in family planning programs, including promoting gender equality and positive gender norms across all life stages [12].

Engage youth in community programs that challenge traditional views [12]: Early, premarital interventions support joint SRH decision-making and reduce stigma around men's involvement [24,38]. A recent study by El-Dirani, et al. [39] evaluated *Mish 'Ayb* ("Not a Shame"), a community-based interactive play that fostered public dialogue, built trust, and highlighted deeply embedded cultural norms that restrict SRHR access, especially for young, unmarried individuals.

Collaborate with religious leaders to design culturally relevant SRHR curricula [14]: Most Jordanians are open to SRH discussions when framed in religious values [26]. Religious leaders should help design culturally relevant SRHR materials through partnerships between the Ministry of Health and the Ministry of Awqaf and Islamic Affairs. While Jordan accesses international curricula, adapting them for local contexts remains a challenge [38]. Culturally grounded programs are essential for wide acceptance.

Involve parents and in-laws in outreach [12]: Parents are key gatekeepers to youth SRHR information [6]. In-laws, especially mothers-in-law, influence reproductive decisions and may pressure early childbearing [37,40]. Because they are major SRH information sources, they should be targeted in social behavior change programs [3]. Multigenerational outreach strengthens community support and political will [10].

Develop national behavior change programs that promote gender equity and discourage early marriage [12,41]: Sexual and reproductive health (SRH) programs can serve as entry points for broader social change by creating safe, trusted spaces where women and girls can discuss early marriage, gender norms, power within marriage, and acceptable sexual

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behavior [20]. However, health-sector interventions alone are insufficient. Fry, et al. [19] emphasize the need for multisectoral approaches involving child protection, health, education, social development, and justice sectors, particularly during the transition from primary to secondary school—a period when dropout risk increases sharply. Addressing attitudinal barriers among adolescents and caregivers at this stage, and prioritizing girls' education more broadly, is one of the most effective strategies for reducing child marriage.

Complementary community-based interventions are also critical. For out-of-school girls aged 15–17, UNICEF recommends literacy classes, life skills programming, and sports as mechanisms to build agency and social support [20]. At the same time, engaging parents and community members can help challenge restrictive perceptions of girls' roles and mobilize collective action to prevent gender-based violence (GBV) and harassment. In Jordan, one promising and potentially scalable initiative involved trained female preachers conducting home visits to discuss the harms of early marriage, an approach identified by government stakeholders as effective during UNICEF's regional review [20].

Develop FP programs with sustainability and local ownership [12]: The *Comprehensive Human Rights-Based Voluntary Family Planning Program Framework* emphasizes equitable participation. Sustainable scale-up is a pillar of The Challenge Initiative, an adolescent and youth SRH project funded by the Bill and Melinda Gates Foundation, which empowers local governments to implement evidence-based RH interventions [42]. Local ownership ensures continued impact beyond individual projects or political cycles.

2. Enabling legal and policy environment

Adopt a total market approach (TMA) [12,43]: TMA coordinates public, private, and NGO resources to efficiently meet FP demand. Public health authorities assess needs and allocate resources, e.g., focusing on low-income groups while middle- and upper-income users rely on private services. NGOs contribute technical support. A balanced public-private mix expands access and method choice [43] and leads to better investment and per capita FP spending [44].

Strengthen contraceptive supply chains [12]: Access issues and supply chain failures are the principal reasons women in low- and middle-income countries do not use or continue using contraception [45]. Active supply chain management requires a strong infrastructure to track inventory and financing, run system diagnostics, and optimize storage and distribution solutions. Mobile technology is a powerful tool to conduct real-time reporting and tracking of inventory across different levels of the supply chain [46].

Jordan's contraceptive supply is largely led by the Ministry of Health, covering most public and NGO providers. Public-sector contraceptive distribution is tracked, but private-sector monitoring is limited, and the private sector remains less regulated. Gaps that emerged during the COVID-19 pandemic highlight the importance of government-led coordination, strengthened information systems, and cost-effective, integrated public–private approaches to ensure long-term contraceptive security.

The HIP Partnership offers a comprehensive guide on supply chain management, highlighting evidence that robust supply chains enhance family planning programs and providing practical guidance to strengthen them [12].

Redistribute healthcare resources for underserved populations [12,43]: Access barriers persist for Bedouin communities in the northeast and south, where services are limited and mainly public [6]. Private and NGO providers are largely absent in these regions, access to advanced care is limited, and local clinics often lack updated national guidelines [22]. High provider turnover and the scarcity of female physicians further restrict care, since cultural norms discourage cross-gender care [6,47].

Reintroduce targeted FP voucher programs [12,43]: Vouchers subsidize care for low-income or high-need groups and encourage service quality through provider participation [48]. As of 2019, Jordan lacked a dedicated FP program for poor and disadvantaged groups, and a 2023 review found no evidence of active voucher schemes [9]. More recent information from stakeholders indicates that some donor-supported projects, such as those funded by Italian Aid and UNFPA, are currently providing FP vouchers on a limited basis. These initiatives, however, are not integrated into national systems and remain unsustainable without external funding.

Frame SRHR education as a core life skill within educational policy [10,41]: In Jordan, sexual and reproductive health concepts are present in school curricula but remain fragmented, largely information-based, and weakly integrated across grades, limiting their effectiveness in building skills and informed decision-making [49]. Comprehensive, developmentally appropriate SRH education should begin early in primary school and deepen through adolescence [10]. Secondary schools and universities are particularly critical, as many young people approach their sexual debut during these years [38]. In 2020, UNFPA put out a report called Between 3eib and Marriage: Navigating Comprehensive Sexuality Education in the Arab Region, which explores the landscape of comprehensive sexuality education in the Arab region. The report identifies promising initiatives and many potential best practices for replication or scaling, providing practitioners with examples from across the region to catalyze the efforts that have been made so far [49].

Recently, the Royal Health Awareness Society (RHAS), in collaboration with the Ministry of Education, has introduced reproductive health (RH) concepts into extracurricular activities for grades 5 to 10 through school counselors in approximately 300 public schools in Jordan, reaching around 28,000 students, with expansion and an impact evaluation planned for 2026 to inform potential integration into the national curriculum. This aligns well with the priorities of Jordan's National Sexual and Reproductive Health Strategy (2020–2030), which calls for systematic, age-appropriate integration of SRHR

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education within formal education frameworks, supported by trained educators and coordinated national oversight [1]. A useful regional case study for authorities in Jordan could be Tunisia, which in 2019 became the first Arab nation to provide sex education for all elementary and middle school students. The curriculum involves young people "learning about their bodies in a biological and religious-based way in hopes of protecting them from sexual harassment, catcalling, rape, and molestation." [50].

Establish youth engagement forums [14]: Although providing youth-friendly SRH services has been identified as a national policy priority, little is known about the habits and needs of young people – an area in need of further research [25]. A 2020 proposal called for a secure Arabic-language platform to gather youth input on SRH [26]. In 2024, the Higher Population Council (HPC) and ShareNet launched *Darby* (drhpy.org.jo), a youth-centered RH knowledge hub where users can also ask questions.

Standardize follow-up and removal services for FP [14]: Inconsistent follow-up contributes to contraceptive discontinuation due to unmanaged side effects [10]. Regular check-ins allow clients to ask questions and change methods as needed. Scheduled LARC removals reduce health risks, including infections and miscarriage from retained IUDs during pregnancy [51].

Use legal mechanisms to counter child marriage [41]: As discussed in the background section, early marriage remains a concern in Jordan. Although 18 is the legal minimum, Sharia courts can authorize marriage for girls as young as 15 [52]. Displaced and undocumented populations face weak enforcement [20]. Citizenship laws that deny women the right to pass nationality to children incentivize early marriage in refugee settings.

Liberalize FP provision [10,43]: FP services should be available with minimal restrictions on who can access them, and when, where, or by whom they are provided [10]. Health insurance should universally cover SRH services regardless of age, marital status, or citizenship [43].

Improve post-assault care and EC access [53]: Emergency contraception (EC) must be available for sexual assault victims, in line with WHO guidance [53]. The recently approved Navela is sold in the private sector but should be pharmacy-accessible without requiring clinical visits. A 2024 study found that pharmacists' decisions are influenced by stigma, ambiguity, and misinformation, highlighting the need for training and stigma-free environments [54]. Mandatory police reporting by healthcare providers deters care-seeking and should be reconsidered to protect victims' confidentiality and dignity [26].

In emergency contexts:

Classify SRH and GBV services as essential and ensure their continuity during emergencies [28]: The WHO recommended that family planning, as a fundamental SRH service, be continued during pandemics [33], prioritizing the prevention of STIs and unintended pregnancies [55]. National policy should eliminate barriers to contraception access during crises. Measures may include ensuring prompt customs clearances, extending prescription periods, permitting virtual counseling (e.g., for OCPs), allowing self-administration (e.g., of injections), and expanding task-sharing [10].

Formalize systems to grant Syrians access to healthcare and clearly communicate changes in refugee healthcare policy to patients and providers [10]: Syrian refugees in Jordan face persistent inequities in FP access. Two-thirds report financial barriers to healthcare, and many are denied services at Ministry of Health (MoH) facilities due to a lack of proper identification [26]. Shifting policies on refugee out-of-pocket healthcare spending have caused confusion and reduced service use. In 2018, the government restricted subsidized healthcare to Syrians in official camps. While uninsured Jordanians receive FP services free of charge, this policy is inconsistently applied to Syrians [26].

Ensure government-led management of FP supply chains and develop adaptable crisis response mechanisms [34]: FP stakeholders may find alternative suppliers, fulfill orders with partial shipments, and transfer products between areas to ensure consistent, equitable access to contraception. Such interventions are particularly critical during periods of crisis, including pandemics [28].

3. Quality information and services

Expand the range of FP methods available [12,14]: Contraceptives such as OCPs, implants, injections, condoms, and IUDs are theoretically free at MoH primary centers, with some offering female sterilization [37]. However, implants and injections remain inconsistently available [6]. Ensuring broad method choice, a HIP promoted by E2A, involves marketing to improve access and appeal across sectors [12]. A diverse, affordable method mix reduces both direct and indirect costs for users [56,57].

Strengthen provider capacity with culturally responsive, client-centered counseling [10,43]: Client-centered counseling, emphasizing interpersonal relationships and cultural context, is the gold standard in FP care [10,43,58]. The "Speak Up" question-card pilot, piloted in 20 health centers under the USAID-HSQA Activity, showed promise but ended prematurely without evaluation. FP training is lacking in Jordan's pre- and in-service curricula [59]. Training providers on compassionate, evidence-based SRH care would reduce discontinuation and improve quality.

Revise FP counseling guidelines to ensure accuracy and respect [10,43]: Many providers, especially midwives and MCH staff, offer inadequate or inaccurate counseling, violating the principle of informed choice [10,7]. Counseling that sets realistic expectations about side effects improves user satisfaction and reduces discontinuation without switching [17]. Decision aids and AI-supported digital tools can enhance unbiased, client-centered counseling [60].

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Implement a learning framework to address provider biases [43]: Cultural beliefs often hinder providers from delivering comprehensive counseling on modern FP methods [26]. Personal views favoring large families—especially with sons—and religious beliefs shape the information doctors and midwives share. Many offer only short-term methods to married women with low parity, limiting options due to concerns about future fertility [7]. Personal values must not override patients' rights; objecting providers should refer clients and provide emergency care when needed [41]. Training, standards, and accountability mechanisms are essential for a rights-based, non-discriminatory health system [26].

Train providers on adolescent and youth SRHR rights and services [12,61]: Many providers hesitate to serve youth, mistakenly believing parental consent is required for unmarried adolescents [26,62]. A supportive policy environment and provider training are needed to reduce barriers [12,25]. The Higher Population Council, UNFPA, and RHAS developed national youth-friendly service standards piloted in several IFH centers (Sweileh, Zarqa, Karak, Ajloun), and IFH staff have been trained in applying them. Further efforts are required to scale up the implementation of these standards and to expand capacity-building initiatives for healthcare providers to ensure consistent, high-quality youth-friendly services at the national level [63].

Offer diverse SRHR service delivery models [12]: Mobile outreach and integration into primary care improve access for marginalized groups and reduce stigma, especially for unmarried individuals [12,14]. The MoH mandates FP counseling during third-trimester ANC, postnatal, and premarital care, a recognized HIP [14,28]. Pairing SRH with mental health services can better support youth and refugees facing harassment, GBV, or family pressure [26]. Youth-only clinics and special service hours should be evaluated, and education campaigns are needed to address psychosocial barriers [64].

SRH access for refugees remains concentrated in camps, where only 21% of Syrians reside. Urban refugees still face challenges accessing SRH care. Civil society organizations (CSOs) can play a key role in "last-mile" FP delivery through mobile outreach, community distribution, and facility-based care, which has been linked to increased mCPR, client satisfaction, and method diversity, especially LARCs [18,65,66].

Use fractional social franchising to scale up FP services [12]: Social franchising trains private providers to offer branded, high-quality FP services, using existing infrastructure to rapidly expand reach [42,67]. To reach vulnerable groups like Syrian refugees, MoH could recruit community spokespeople, subsidize services, and boost demand via social marketing [43].

Explore remote delivery of SRH and GBV services [28]: Currently, virtual services mainly serve adolescents, the most eHealth literate demographic, who appreciate telehealth's privacy [26]. However, midwives, Syrian refugees, and host communities see digital tech as a feasible, cost-effective way to boost SRHR awareness, though concerns about digital literacy and the warmth of virtual care remain [8]. Pilots show promise for digital SRHR services, AI, and personalized FP guidance [68,60]. Traditional media remains trusted, but recent trials reveal that text reminders and mobile apps can increase modern contraceptive use and improve FP decision-making [3,69].

In emergency contexts:

Offer alternatives to facility-based delivery of FP [28]: Providers should continue developing telehealth for both emergency and routine SRH care [28]. Oral contraceptives can be safely prescribed via phone or video, and interest in self-administered injectables is growing [55]. Many young Jordanians access SRH info through the Noor Al Hussein hotline, internet, WhatsApp, and the National Women's Health Care Center's RMNCH hotline [8].

Pharmacies, open at convenient hours and less stigmatized than clinics, should be evaluated for SRH task-sharing, as pharmacists are trusted community professionals and ideal for delivering self-care FP interventions [28,70]. Currently, 10-13% of married Jordanian women receive medical care through pharmacies [33]. A Jordanian study showed pharmacist-led education significantly improved knowledge and attitudes about oral contraceptives [71]. In some countries, pharmacists prescribe OCPs, sell condoms, and administer injectables - vital during emergencies when facilities are overwhelmed [28]. During COVID-19, Jordanian pharmacies remained open under special permits, with the Jordan Pharmacists Association launching the "Hello Pharmacist" hotline and coordinating medication delivery [70].

Mobile outreach is another successful strategy for offering mobile and community-based FP services when health facilities are inaccessible or pose a risk to patients [28]. Community health workers (CHWs) may also serve as task-sharing partners in emergencies and in places that lack the infrastructure for telehealth services [28]. Integrated care, which offers multiple services during one visit, reduces opportunity costs for the patient as well as delivery costs for the provider, while reducing the risk of transmission [28, 64].

4. Empowered and satisfied client

Use civil society organizations (CSOs) with strong community ties to implement educational and social and behavior change (SBC) interventions [12]: CSOs, due to their close ties with communities, are well-positioned to lead SBC efforts. Their initiatives often include forming local monitoring committees, self-help groups, and engaging community gatekeepers [66]. CSO-led education and SBC efforts have effectively improved knowledge and attitudes on birth spacing and FP, increased modern contraceptive use, and strengthened providers' capacity to support community communication [66]. Despite success in the region, community education remains underused in Jordan. Examples from Egypt, Iraq, and Tunisia provide culturally relevant models [59]. Programs targeting men have strong potential, yet Jordan lacks a male-focused FP component - this gap should be prioritized, as male involvement barriers limit FP uptake [59,66].

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Launch educational campaigns that dispel specific myths about hormonal contraception [12, 43]: Many Jordanian women distrust hormonal methods due to beliefs that they are "unnatural" or harmful, including fears about cancer risk and fertility impact [31]. These attitudes have some religious roots but are also found globally [72]. Men's limited participation in FP counseling contributes to their preference for non-hormonal methods, indicating a significant lack of male knowledge about modern contraception [6].

Provide women and girls with income-generation opportunities to reduce financial dependence and abuse [28]: Economic empowerment promotes female autonomy. Financial dependence restricts women's ability to access FP services and contraceptive products and increases vulnerability to abuse and early marriage [8,19]. Evidence from sub-Saharan Africa shows women's empowerment positively impacts maternal and child healthcare utilization [73].

In emergency contexts:

Create an MoH-run counseling hotline and website providing reliable SRHR information [38]: During COVID-19 lockdowns, women and girls had limited access to SRH service information, relying mainly on the Noor Al Hussein hotline, internet, and WhatsApp [8]. The Higher Population Council, with RHAS and UNFPA, developed Darbi, a youth-focused SRHR website (see Section 2). A dedicated, easily accessible SRHR information platform run by the MoH would improve knowledge, especially among vulnerable groups in crisis and non-crisis settings. Youth, unmarried individuals, and those facing abuse may find phone or online access less stigmatizing and more feasible than clinic visits [38].

Discussion

The key themes of this analysis, emerging from a comparison between Jordan's context and global best practices, are provider behavior change (PBC), male participation in FP, and comprehensive SRHR education. PBC is critical to ensuring quality, rights-based care. In Jordan, some individuals are denied services based on age or marital status, while others receive substandard care due to racial, ethnic, or class discrimination. Cultural beliefs often drive Jordanian providers to give incomplete or inaccurate counseling on modern FP methods [26]. Medical decisions are frequently based on personal ideology rather than evidence. Shifting social norms and standardizing provider training could help reduce bias, but no unified SRH/GBV service package or training manuals currently exist. This highlights the need for consistent training and accountability mechanisms [1].

Male involvement in SRH remains limited. This remains an underutilized yet critical pathway to improving FP outcomes. Many men view FP as solely a woman's responsibility, and practical barriers like clinic hours may further reduce access [26]. Research consistently shows that shared decision-making improves outcomes, yet little is known about why many men refuse contraceptive use. This is an area that deserves further research. Family planning demand and utilization in Jordan are much higher among couples who make joint decisions about contraception, birth spacing, and family size. Encouraging male participation in FP counseling is a promising approach to challenge gender norms and promote joint decision-making [3].

SRHR literacy is also lacking. Misconceptions, social taboos, and limited community engagement hinder progress, compounded by the absence of national sexual education programs [1]. VRBFP programming relies on public awareness of rights. SRHR education must therefore be a core component of Jordan's FP strategy to dispel myths, reduce stigma, and strengthen voluntary, rights-based family planning, and more research on youth behaviors and needs is essential [38]. Education efforts should be implemented in schools, homes, and community settings. In the Middle East, parents and in-laws often act as key gatekeepers [6,24]. Outreach activities should target these and other local influencers, such as religious leaders, in support of behavior change.

Study limitations

This review was narrative rather than systematic and therefore does not provide exhaustive coverage of all relevant literature. Although consistent search terms and inclusion criteria were applied across multiple databases and sources, some relevant studies may have been missed. The review was limited to English-language publications available online, which may have excluded relevant evidence published in Arabic or contained in non-digitized local reports or program documentation. In addition, the inclusion of grey literature and expert consensus resources, while valuable for policy and programmatic relevance, may reflect variability in methodological rigor. Comparisons with global best practices and case studies from socio-culturally comparable countries were intended to illustrate adaptable approaches rather than establish causal effects or direct applicability to Jordan, given differences in health systems and contexts [74].

Conclusion

Sexual and Reproductive Health (SRH), including access to modern family planning in Jordan, continues to face considerable challenges. Despite the presence of multiple national strategies, many interventions remain unimplemented and uncoordinated. Conflict, disasters, and epidemics further disrupt access to SRH and GBV services, particularly for women, youth, refugees, and persons with disabilities. Service provision remains uneven across regions, hindered by weak health information systems, a lack of standardized indicators, poor intersectoral integration, and gaps in human resources. Research and documentation, especially for young people, men, older adults, and persons with disabilities, are limited, and coordination remains fragmented. The National Strategy for Reproductive and Sexual Health 2020-2030 recognizes these shortcomings and sets out key priorities to improve SRH and GBV services in the years ahead. The document also introduces a stronger rights-based framework than prior strategies, seeking to ensure access to services and information for vulnerable groups, especially in times of crisis and emergency

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[1]. Strengthening Jordan's FP governance, reinforcing the Ministry of Health's role across all sectors, and establishing a unified national FP data system should be priorities in the years to come. This should be supported by sustainable domestic financing to ensure continuity despite shifting donor priorities.

SRH funding in Jordan remains heavily donor-dependent, with limited sustainable budgeting or institutionalized programs [1]. As a 2016 report from Georgetown University's Institute for Reproductive Health observed, "without USAID funds and other donors, there is no family planning." At that time, USAID was estimated to support approximately 70% of family planning initiatives [6]. In 2025, however, U.S. funding for reproductive health and family planning programs was halted by the Trump administration, creating a significant gap in both funding and service delivery. Whether the Jordanian government, in collaboration with other partners such as the European Union, will step in to sustain these critical initiatives remains uncertain. This underscores the need for strengthened national ownership and sustainable domestic financing to ensure continuity of FP and SRHR services.

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Author contributions

Myriam Vuckovic: Conception, methodology, and writing - original draft, review, and editing.

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Raja Khater: Conception and writing – original draft, review, and editing.

Peyton Luiz: Methodology, data extraction, data analysis, and writing of the original draft.

(Supplement-Resource-Table)

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