

MAPPING NATIONAL AND PROVINCIAL DISASTER MANAGEMENT PLANS FOR REPRODUCTIVE HEALTH IN THE I.R. OF IRAN

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Executive Summary:

Major disasters and emergencies significantly impact public health, health infrastructure, and health care delivery to affected populations. In all communities, including those facing disasters and emergencies, Sexual and Reproductive Health (SRH) is a crucial public health need. Additionally, women and girls are at increased risk of unintended pregnancies, maternal deaths and disabilities, sexual and gender-based violence (GBV), unsafe abortions, sexually transmitted infections (STIs), including HIV, and psychosocial issues. Therefore, National Disaster Plans and programs, as well as emergency operation plans of health stakeholders, should address SRH to ensure that women's and girls' essential needs are appropriately and effectively covered in disasters. This study reviews, analyzes, and maps available national, provincial, and main health authorities' disaster plans in Iran to assess their inclusion of SRH services.

The results revealed that Iran's Disaster Management Law does not directly address SRH. This document outlines the roles of various governmental and public organizations responsible for providing health care services, such as the MOH, IRCS, and Iran's Welfare Organization. Additionally, the National Disaster Management Strategic Plan emphasizes prioritizing and responding to the needs of vulnerable groups and ensuring healthcare delivery during disasters.

One of the major challenges in developing and implementing the National Disaster Risk Reduction Program and the National Preparedness and Response Program is the lack of consideration for SRH. It is recommended that a proactive approach be adopted to include SRH services in future national and provincial preparedness and response programs.

This study indicates that the National Reconstruction and Rehabilitation program, as part of the National Disaster Management Strategic Plan, comprehensively addresses the needs of women and girls in disasters. Concerning SRH services, critical services like STIs, family planning, GBV, maternal, and psychosocial services have been considered in this program.

The National Disaster Management Strategic Plan identifies the Ministry of Health as the primary organization responsible for providing necessary healthcare services in many activities during disasters and emergencies. The Welfare Organization and the Red Crescent Society are

recognized as collaborating organizations. Thus, these organizations must develop their own Emergency Operation Plans (EOP) for each healthcare service segment in disasters and emergencies. The Ministry of Health and the Red Crescent Society have individually developed EOPs for according to their organizational responsibilities. However, an approved EOP for the Welfare Organization was not found.

In the Ministry of Health's approved EOP, a primary function in the response phase is dedicated to the family and population health sector, detailing activities to provide healthcare to pregnant women, maternal and child care, essential medications and equipment, safe deliveries, family planning services, and prevention of violence against women and girls, all within the framework of the Minimum Initial Service Package (MISP) for disasters and emergencies. Similarly, the Iranian Red Crescent Society's EOP emphasizes developing reproductive health instructions and providing reproductive health services within the MISP framework in affected regions.

No approved EOP at the provincial level was found in Iran. Considering Iran's vast size and diversity in hazards, vulnerabilities, capacities, disaster risks, ethnicities, cultures, customs, and traditions across different provinces, localizing EOPs to align with each region's culture and traditions, along with available resources and capacities at the provincial level, could increase acceptance and effectiveness among target groups. Additionally, this approach would make EOP implementation in affected regions more community-based, enhancing the effectiveness and success of response activities.

Chapter One

Introduction

Introduction

Large-scale natural and man-made disasters, including earthquakes, floods, wildfires, and conflicts, significantly affect public health, health infrastructure, and health care delivery to affected individuals. Additionally, research has shown that disasters and emergencies disproportionately impact the poorest and most vulnerable, especially women and children. Sexual and Reproductive Health (SRH) is an essential public health need in all communities, even more so in those facing disasters and emergencies. Women and girls are particularly at risk of unintended pregnancies, maternal death and disability, sexual and gender-based violence (GBV), unsafe abortions, sexually transmitted infections (STIs), including HIV, and psychosocial challenges (1).

Universal access to SRH services, encompassing family planning and sexual health, is crucial and should be incorporated into national strategies and programs. During disasters, access to SRH services often becomes limited. These services must be reinforced in preparation for future incidents to reduce SRH-related morbidity and mortality during disasters and emergencies. A multi-sectoral and multidisciplinary approach to health emergency and disaster risk management is vital. It safeguards public health and minimizes morbidity, mortality, and disability associated with disasters through effective prevention, preparedness, response, and recovery efforts (2).

Necessity of developing and implementing National Disaster Plans

The development and implementation of a National Disaster Plan is crucial for ensuring a country's preparedness and effective response to disasters. Such a plan is vital for saving lives, minimizing damage, and facilitating a timely and effective recovery. There are several reasons why every country should develop and implement a National Disaster Plan:

1. **Preparedness**: A National Disaster Plan prepares a country for disasters. It details the necessary actions before, during, and after a disaster to reduce the loss of life and property.

- Coordination: The plan ensures coordinated efforts among all relevant agencies and organizations during a disaster. This coordination is key to preventing duplicated efforts, confusion, and delays in response.
- Resource Allocation: It identifies the resources needed in a disaster, such as personnel, equipment, and supplies. This foresight enables efficient resource allocation and ensures their availability when needed.
- 4. **Risk Reduction**: The plan plays a crucial role in disaster risk reduction by identifying potential hazards and devising strategies to mitigate them. Strategies may include implementing building codes, zoning regulations, and public education campaigns.
- 5. **Recovery**: It includes strategies for post-disaster recovery and reconstruction, aiding communities in quick recovery and minimizing the long-term impacts of disasters (3).

Types of National Disaster Plans

National Disaster Plans vary in perspective and objectives and can be classified into four main categories:

- Strategic National Disaster Plan: This type of plan is a comprehensive approach to disaster management, aiming to strike the right balance between prevention, preparedness, mitigation, response, and recovery interventions.
- National Disaster Risk Reduction Plan: This plan focuses on strategies to reduce and mitigate disaster risks. It outlines key actions that should be undertaken to minimize the impact of disasters.
- 3. **National Preparedness Plan**: The primary goal of this plan is to enhance the preparedness and readiness of communities for disasters. It identifies actions that can increase a community's ability to respond effectively to disaster situations.
- 4. **National Response and Recovery Plan**: This plan centers on the actions stakeholders should take when a disaster occurs. It clarifies the rationale (Why), specific actions (What),

timing (When), locations (Where), and methods (How) for responding to disasters. Additionally, it outlines how actions should be controlled, evaluated, and reported.

Importance of Sexual and Reproductive Health (SRH) in Disaster Plans

The inclusion of Sexual and Reproductive Health (SRH) in disaster plans is crucial for public health, especially in communities facing disasters and emergencies (2). The COVID-19 pandemic significantly impacted access to SRH services, leading to disruptions in family planning, antenatal care, gender-based violence response services, and postnatal care for women and newborns (4). Therefore, disaster plans must address the SRH needs of affected populations through a coordinated and integrated approach. Key considerations include:

- Family Planning Services: These are vital in situations where war or natural disasters have devastated existing health services. Disasters can disrupt the availability and accessibility of contraceptive services, leading to a host of serious consequences such as unwanted pregnancies, unsafe abortions, closely spaced pregnancies, and high-risk pregnancies. Providing free condoms from the early stages of relief operations is often the first step in restoring family planning services (5). National disaster plans should ensure a variety of family planning methods, including emergency contraception, to prevent unintended pregnancies and related issues (6).
- 2. Maternal and Newborn Health: This aspect includes expanding access to skilled birth attendants, basic and comprehensive emergency obstetric and newborn care, and strengthening community-based service platforms before, during, and after pregnancy (7). The risk of fatalities and complications during labor increases when healthcare services are limited, as often happens during disasters. National disaster plans must ensure the availability and accessibility of maternal and newborn health services, and that health professionals are trained to provide emergency obstetric care (6).
- 3. **Prevention and Management of Sexual and Gender-Based Violence (SGBV):** SGBV, particularly among adolescents, has significant health and social consequences. Disasters can escalate the risk of SGBV, including sexual violence, with women, adolescent girls, and boys often being the victims. SGBV can manifest in various forms during or after

disasters and emergencies, such as rape, sex in exchange for food, shelter, or protection, as well as other abuses like sexual threats, exploitation, humiliation, molestation, incest, torture, and domestic violence. Intimate partner violence can also increase the risk of unintended pregnancies and induced abortions among girls abortions (7). National disaster plans should incorporate strategies for preventing and responding to SGBV, including providing medical and psychosocial support to survivors (8).

- 4. Access to Human Immunodeficiency Virus (HIV) and Sexually Transmitted Infections (STIs) Prevention and Treatment: STIs are a significant public health concern globally, particularly among adolescents. Data on STIs among adolescents in low- and middle-income countries are often limited. Healthcare disruptions can exacerbate the situation, limiting access to prevention, treatment, and care for STIs and HIV. The emergence of HIV has heightened the focus on STI control, given the strong correlation between STIs and HIV transmission. The presence of STIs, including herpes and ulcerative (syphilis) and inflammatory (chlamydia, gonorrhea, trichomoniasis) conditions, can increase the risk of HIV transmission by two to three times (7). Effective and prompt management of STIs, encompassing prevention, early detection, and treatment, is crucial. It not only prevents complications for individuals but also reduces the spread of STIs in communities and provides an opportunity for targeted STI prevention education (9). National disaster plans should ensure that affected populations have access to HIV and STI prevention and treatment services, including the availability of condoms and antiretroviral therapy (6).
- 5. **Psychosocial Support**: Disasters can profoundly impact mental health, including sexual and reproductive health aspects. Survivors of Sexual and Gender-Based Violence (SGBV) often endure long-lasting psychological and social effects. The psychological aftermath of SGBV can hinder survivors' personal functioning and well-being, impacting their relationships with family and the broader community. Serious psychological consequences include social stigma, isolation, and rejection by intimate partners, spouses, and families. Moreover, societal tendencies to blame victims of sexual violence can lead to social isolation, hindering or delaying recovery. With social and emotional support, many survivors learn to cope, and their distress diminishes over time. Professional psychosocial and mental health care is crucial for survivors. If possible, all survivors should be referred

to trained counselors for professional psychological evaluation and care (10). National disaster plans should ensure the availability of psychosocial support services, including counseling services and support groups, to those in need (11).

By integrating these considerations, national disaster plans can address the Sexual and Reproductive Health (SRH) needs of affected populations effectively, providing necessary care and support during and after disasters.

Chapter Two

Study Objectives and Methods

Study Objectives:

This study aimed to achieve the following objectives:

- 1. To review and analyze how national disaster plans in various countries have integrated Sexual and Reproductive Health (SRH) services into their plans and programs.
- 2. To review, analyze, and map the existing national disaster plans in Iran, assessing how they address SRH services.

Methods of Narrative Review

This study employs a comparative content review and analysis of legislation and policy documents from various countries, including Iran, focusing on any aspect of Sexual and Reproductive Health (SRH) in disasters at the national level.

Data Collection

In August 2023, an online search was conducted to identify relevant national disaster plans, reports, guidelines, and articles detailing the integration of SRH services into national disaster plans. The search encompassed websites of national governments and non-governmental organizations (NGOs), international reports, scientific databases, and other available resources. The search strategy employed was as follows: ((adolescent OR sexual OR "Reproductive health") AND (Plan OR framework OR law OR policy*) AND (emergency* OR disaster*)). Documents were selected through a three-stage process. Firstly, legal, strategic, policy documents, and scientific articles related to adolescent SRH in disasters were gathered for further screening. Secondly, titles, abstracts, and executive summaries of documents published between 2000 and 2023 were reviewed to ascertain explicit mention of SRH. Documents not meeting the inclusion criteria or lacking full text were excluded. Lastly, the full texts of the documents were examined to identify explicit content regarding SRH services in disaster contexts.

Data Analysis

Two researchers undertook the coding of documents and data extraction. They used a predefined coding strategy and data extraction sheet, pre-tested on various legal and policy documents from different countries. During the analysis phase, all included documents were screened for content related to Sexual and Reproductive Health (SRH) in disasters. The researchers categorized the information based on individual references to SRH services in disaster contexts using the extracted codes. Any discrepancies were discussed until a consensus was reached.

Methods of Mapping Iran's National Disaster Management Plans

Following the enactment of "Iran's Disaster Management Law" in 2019 by the Islamic Parliament of Iran, the National Disaster Management Organization (NDMO), under the Ministry of Interior, became responsible for enacting documents, executive regulations, and guidelines for this law. Subsequent actions included:

- Formation of the secretariat for the enactment of plans, regulations, and executive enactments of the disaster management law.
- Preparation of a databank of high-level documents and related documents on the subject of the law.
- Compilation of a list of experts for proposed members of the leadership council, compilation committee, and enactment committees.
- Conducting focused group sessions to gather insights from experts and representatives.
- Developing national disaster plans through expert committees.
- Examination, approval, and communication of the plans by the Government of the Islamic Republic of Iran.

This study aimed to review, evaluate, and map Iran's National Disaster Plans as approved by the Government of the Islamic Republic of Iran, focusing on various aspects of sexual and reproductive health services. The National Disaster Management Strategic Plan, National Disaster Risk Reduction Plan, National Preparedness and Response Plan, and National Recovery Plan were reviewed and mapped in terms of SRH. Additionally, due to thematic relevance, the Emergency Operation Plan of the Ministry of Health, Emergency Operation Plan of the Iranian Red Crescent Society, and available documents of Iran's Welfare Organization were examined.

All mentioned documents were thoroughly analyzed, with SRH-related issues noted in a table to identify which aspects of SRH were mentioned in each document. The study focused on relevant Persian words in these documents, such as sexual, reproductive, maternal, neonatal, family, child, children, girl, boy, man, woman, women, men, violence, social, psychological disease, and virus.

Chapter Three

Findings from the Literature Review

Experiences of Countries Integrating SRH into Disaster Plans

Several countries have effectively integrated Sexual and Reproductive Health (SRH) into their disaster plans. These nations have shown that integrating SRH into disaster plans and providing essential services to affected populations during and after disasters is feasible. Consequently, they have managed to mitigate the adverse impacts of disasters on SRH and enhance the health and well-being of the affected populations. Here are some examples:

The Philippines:

Since 2010, the Philippines has incorporated SRH into its disaster risk reduction and management plan. This plan includes measures to ensure access to maternal and newborn health services, family planning, and HIV prevention and treatment during disasters. The country also formed a rapid assessment team to identify and address the SRH needs of affected populations (12). Additionally, to prevent high levels of maternal and newborn mortality and morbidity, a 24-hour emergency referral system was established as a crucial consideration during the 2013 typhoon in the Philippines (13).

Nepal:

Before the 2015 earthquake, Nepal had progressed in providing reproductive health care services to its largely rural population, which comprises about 81% of the total population (14). Several initiatives, such as the National Reproductive Health Strategy, the National Reproductive Health Commodity Security Strategy (2007–2011), the Nepal Family Health Program, the National Female Community Health Volunteer Program, the National Safe Motherhood Plan (2002–2017), the National Policy for Skilled Birth Attendants (SBA), and the Safe Delivery Incentive Program, were implemented. Disaster preparedness and response activities prior to the earthquake included establishing protocols, incorporating MISP components into disaster preparedness and

response plans, pre-positioning RH kits, engaging health facilities, and conducting training of trainers (15).

After the 2015 earthquake, Nepal developed a comprehensive SRH response plan that included training health workers in emergency obstetric and newborn care, ensuring access to family planning services, reducing HIV transmission, and providing psychosocial support to survivors of gender-based violence (16). Other related RH measures to reduce the earthquake's negative impact on the affected girls and women included distributing dignity kits, setting up adolescent-friendly service corners in outreach RH camps, developing a menstrual health and hygiene management program, and establishing linkages between adolescent-friendly information corners in schools and service centers in health facilities population (17). The Central Department of Population Studies reported that a majority of respondents were satisfied with health services, with 80% reporting access to RH and women's health information (18). However, factors such as inadequate human resources, poor communication between national and sub-national level stakeholders, and under-resourced facilities impacted the provision of SRH services during the Gorkha earthquakes in Nepal, 2015 (15).

Haiti:

Following the 2010 earthquake, Haiti implemented an SRH response plan, which encompassed emergency obstetric care, family planning services, and psychosocial support for survivors of gender-based violence. Additionally, the country set up mobile clinics to deliver SRH services to those affected by the disaster (19).

Research findings revealed that the 2010 earthquake in Haiti significantly disrupted family planning services. The intensity of the earthquake led to a decrease in the use of injectables, which were the most commonly used modern contraceptive method in Haiti, and resulted in an increase in current pregnancies and unwanted pregnancies (20). A study conducted in August 2021 after the earthquake in southern Haiti highlighted the need for government efforts (e.g., Ministry of Health policies) to focus on improving menstrual health (MH) among young women, especially during disasters. This would involve ensuring access to adequate MH resources,

including safe home and school environments for MH management (e.g., locked latrines), thereby reducing the risk of adverse health and psychosocial outcomes (21).

Bangladesh:

Since 2014, Bangladesh has included Sexual and Reproductive Health (SRH) in its disaster risk reduction and management plan. The plan ensures access to maternal and newborn health services, family planning, and psychosocial support during disasters. The country also formed a rapid response team to deliver SRH services to affected populations (22). Additionally, during disasters and crises, the sexual and reproductive health working group (led by the United Nations Population Fund (UNFPA)) has aided the health sector in ensuring comprehensive SRH service availability and access. This support includes advocacy, innovation, collaboration, and prioritization of resources. For example, SRH services were a priority from the onset of the Rohingya refugee crisis in 2017, leading to improvements in skilled delivery attendance, genderbased violence services, abortion care, and family planning (23).

The 2022 flooding in northern and northeastern Bangladesh saw the implementation of the empowerment of midwives in disaster response program planning. Deploying midwives in rural primary health centers as a response to climate-induced natural disasters proved successful in establishing quality SRHR services (24). Access to Sexual and Reproductive Health and Rights (SRHR) for women becomes increasingly limited during and after climate change-related events in Bangladesh. Limited SRHR service access heightens women's risk of physical, mental, and psychological harm and affects their capacity and resilience to climate change (25). In response to the 2017 floods, reproductive health kits, capacity building, community awareness, and post-abortion care were implemented to reduce maternal mortality and morbidity (26).

Indonesia:

Following the 2006 tsunami, Indonesia experienced disruptions in the availability of contraceptives and access to family planning services, potentially leading to increased rates of

unplanned pregnancies (27). In 2007, the government integrated the global Minimum Initial Service Package (MISP) for Reproductive Health in Crises into the National Technical Guidelines for Health Crisis Response on Disaster. The MISP includes measures for preventing and managing sexual violence, reducing HIV transmission, and preventing increased maternal and neonatal morbidity and mortality (28). Additionally, the Ministry of Health Regulations Number 61, 2014 on Reproductive Health, addresses maternal and reproductive health issues, including sexual violence, using maternal and reproductive health terminology (29).

Evaluations of reproductive health programs during disasters in Indonesia revealed that they are not yet optimal in terms of inputs, processes, and outputs. Improvements are recommended in the management of these programs, particularly in establishing specific divisions for reproductive health teams during disasters (30). Assessments by District Health Offices have highlighted a lack of reproductive health program planning during disasters. Hence, there is a need for specialized plans for reproductive health programs during disasters, which is crucial in determining or adjusting the reproductive needs of each refugee, including the provision of reproductive health kits (31). Indonesia is now focusing on revitalizing its disaster management structures and enhancing multi-sectoral coordination (32).

Pakistan:

Pakistan enacted the National Disaster Management Act (NDMA) in 2010 and subsequently integrated Sexual and Reproductive Health (SRH) into its national disaster risk management action plan in 2017. The 2010 floods in Pakistan affected approximately 500,000 pregnant women, with 1.5 million women requiring emergency obstetric care. During the disaster, 1,700 women gave birth, and hundreds experienced childbirth complications. Pregnant women faced risks such as retained placenta, obstructed labor, and fetal distress. The scarcity of healthcare facilities and providers compounded the challenge of managing maternal health issues, often leading to maternal deaths in these conditions (33). Pakistan's maternal mortality rate stands at 186 deaths per 100,000, with rural areas experiencing a 26% higher ratio (34).

A 2013 study revealed low SRH awareness among Pakistani adolescent girls and women, highlighting the need for health facilities to raise awareness about available reproductive health services (35). The government's SRH priorities in the national action plan include enhancing the free availability of emergency contraception, particularly condoms, menstrual hygiene, developing a referral system for SGBV survivors through mapping of GBV services in both public and private sectors, sensitizing male community members about STIs/HIV and addressing associated stigma, family planning programs, and strengthening transport availability for emergency obstetric and newborn care services (36, 37).

India:

The National Disaster Management Authority (NDMA), under the Government of India, is tasked with developing policies, plans, and guidelines for disaster management (38). Since 2013, India has implemented the Minimum Initial Service Package (MISP) for Sexual and Reproductive Health (SRH) services in disasters and emergencies. The MISP covers ensuring access to maternal and newborn health services, family planning, managing the consequences of sexual violence, addressing adolescent needs, and reducing HIV and other sexually transmitted diseases (STDs). Furthermore, the NDMA, in partnership with UNFPA, has conducted MISP training of trainers (ToT) as a primary initiative (39). Child marriage, prevalent in India due to a lack of awareness, contributes to increased rates of maternal and neonatal mortality and malnutrition among young mothers and newborns (40).

Lebanon:

Lebanon's public health system has plans for comprehensive SRH services, including their integration into existing health services in disasters and crises. The implementation of MISP, particularly focused on the reproductive health of Syrian refugees in crisis services, has been a key objective. MISP components include preventing and managing the consequences of sexual violence, reducing HIV transmission, preventing excess maternal and neonatal morbidity and

mortality, preventing unintended pregnancies, and planning for comprehensive services and their integration into existing health systems. Additionally, the Ministry of Public Health (MoPH) has adopted various measures such as managing public healthcare (PHC) facilities that provide care for RH and other issues, raising awareness about RH within and outside the centers through educational programs, training staff on clinical protocols for RH, equipping hospitals to manage high-risk pregnancies and emergency obstetric cases, and detecting RH-related diseases like cervical cancer (41).

United States (USA):

Since 2004, the Division of Reproductive Health (DRH) at the Centers for Disease Control and Prevention (CDC) has been involved in Emergency Preparedness and Response (EPR). However, the implementation of Sexual and Reproductive Health (SRH) at disaster scenes has encountered some limitations. For example, after Hurricane Ike hit the Gulf Coast region of the United States in 2008, women's access to various types of contraceptives was found to be inadequate. Of the 975 women using contraception before the hurricane, 13% reported difficulties in obtaining contraception afterward. Factors significantly associated with this lack of access included race and evacuation from primary residence (42).

DRH progressively formalized its emergency response efforts by establishing an EPR activity in 2011, followed by a dedicated EPR team in 2018. The mission of the EPR team is to advance public health science and enhance the capacity of the public health system and workforce to optimize reproductive and infant health before, during, and after public health emergencies (43). Since 2011, DRH has participated in CDC's public health emergency responses to various crises, including the Ebola outbreak in West Africa, the Zika virus in the Americas, U.S. hurricane responses, and the COVID-19 pandemic. These public health emergencies highlighted the need for continued coordination and multidisciplinary approaches to maternal and infant health (MIH) (44).

Chapter Four

Mapping National and

Provincial Disaster Management Plans

for SRH in I.R. IRAN

Iran's Experience in Providing SRH Services during Disasters:

Iran has encountered several disasters in recent years, including earthquakes and floods, prompting it to address the Sexual and Reproductive Health (SRH) needs of the affected populations (45). For instance, after the 2017 earthquake in Kermanshah province, Iran's Ministry of Health and Medical Education established mobile clinics to offer healthcare services, encompassing SRH services. These included emergency obstetric care, family planning, and psychosocial support for survivors of gender-based violence (2). The 2018 assessment of reproductive health service management in Iran revealed that the provided RH services in disasters were not optimal, primarily due to limitations in human resources (HR), RH service facilities, and related infrastructure. A notable issue was the lack of pre-disaster planning for reproductive health services, leading to coordination challenges among local, regional, and national health systems in delivering these services during disasters (46). Prioritization typically occurred post-disaster, with inadequate inter-institutional coordination and suboptimal monitoring of reproductive health services (11). However, the evaluation of SRH services following the 2017 Kermanshah earthquake indicated that the management of pregnancy and safe delivery in the affected areas was satisfactory (47). Additionally, Iran has shown significant advancements in improving SRH services in recent years, boasting one of the highest contraceptive prevalence rates in the region and notable progress in reducing maternal mortality (3). Despite these achievements, there remains a need for further improvement, especially in catering to the SRH needs of vulnerable groups, such as those impacted by disasters.

Iran has achieved notable progress in enhancing sexual and reproductive health (SRH) services in recent years. The country boasts one of the highest contraceptive prevalence rates in its region, with over 70% of married women using modern contraception (4). Additionally, Iran has significantly reduced its maternal mortality ratio, decreasing from 38 deaths per 100,000 live births in 2000 to 25 deaths per 100,000 live births in 2017 (3). The country has also focused on addressing the SRH needs of vulnerable groups, such as refugees. Iran is home to one of the world's largest refugee populations, hosting over 3 million refugees and asylum seekers (48). To meet the SRH needs of refugees, Iran has launched several initiatives, including offering free healthcare services, which encompass SRH services, to refugees (2).

Despite these advancements, Iran still faces challenges in improving SRH services. For instance, there is a pressing need to expand access to SRH services for marginalized groups, including rural communities and ethnic minorities (4). Moreover, addressing the issue of child marriage remains a significant challenge, particularly in rural areas (4).

In summary, while Iran has made strides in enhancing SRH services and responding to the SRH needs of populations affected by disasters, there remains a need for ongoing improvement. Continued efforts to address the SRH needs of vulnerable populations are essential to ensure that everyone has access to the necessary SRH services for healthy and fulfilling lives.

Challenges in Iran's Health System to Provide SRH Services:

Although Iran has made advancements in enhancing sexual and reproductive health (SRH) services, several challenges still need to be addressed:

- 1. Limited Access in Rural Areas: Despite improvements, access to SRH services in rural areas remains limited. Women in these areas often face difficulties in accessing family planning services and may have to travel considerable distances to reach healthcare facilities that offer SRH services.
- Stigma Surrounding SRH Services: There is still a stigma associated with SRH services in Iran. Cultural and social norms may deter some individuals from seeking these services, as discussions about sexual and reproductive health are often discouraged.
- Child Marriage: Child marriage continues to be a significant issue, especially in rural areas. A 2019 UNFPA report indicates that 17% of girls in Iran are married before the age of 18. Child marriage poses numerous risks to girls' health and well-being, including a heightened risk of maternal mortality and morbidity (49).
- 4. Limited Comprehensive Sexuality Education: Access to comprehensive sexuality education in Iran, particularly in schools, is limited. This lack of education can lead to

insufficient awareness and knowledge about sexual and reproductive health, contributing to adverse outcomes like unintended pregnancies and sexually transmitted infections.

5. Access Challenges for Marginalized Populations: Marginalized groups in Iran, such as refugees and ethnic minorities, may experience barriers in accessing SRH services. Refugees, for instance, might encounter language obstacles and discrimination when seeking healthcare services, including those related to SRH.

To address these challenges, sustained efforts are necessary to enhance access to SRH services, tackle stigma and cultural barriers related to SRH, and improve awareness and knowledge about sexual and reproductive health. Through these measures, Iran can continue to progress in improving the health and well-being of its population.

Stakeholders in Iran's Health System for Providing SRH in Disasters:

In Iran, several key stakeholders are responsible for providing sexual and reproductive health (SRH) services during and after disasters. The primary organization is the country's Ministry of Health and Medical Education, along with its affiliated healthcare facilities. This Ministry coordinates disaster response efforts and ensures the provision of healthcare services, including SRH services, to affected populations. Other significant stakeholders involved in delivering SRH services during and after disasters in Iran include:

- The Iranian Red Crescent Society (IRCS): As a humanitarian organization, the IRCS offers emergency medical services and disaster relief. It has been instrumental in responding to various disasters like earthquakes and floods and may participate in providing SRH services to affected populations.
- Non-governmental Organizations (NGOs): Various NGOs contribute to SRH service provision during and after disasters. For instance, the Iranian Family Planning Association, an NGO, offers family planning and reproductive health services in Iran.

 United Nations Agencies: Agencies such as the United Nations Population Fund (UNFPA) often provide technical assistance and support to the Iranian government in addressing SRH needs during disasters.

The Ministry of Health and Medical Education is the central body responsible for SRH services in disaster scenarios, with other entities like the IRCS, NGOs, and UN agencies providing support and assistance.

Additionally, the Iranian government, particularly through the Ministry of Health and Medical Education, plays a crucial role in addressing the SRH needs of disaster-affected populations. The UNFPA has collaborated with the Iranian government, particularly evident following the 2017 earthquake in Kermanshah province, where it provided technical support to establish mobile clinics offering SRH services (50). The UNFPA has also been instrumental in enhancing access to SRH services for refugees and other vulnerable groups, supporting the provision of free healthcare services, including SRH services, to these populations in Iran (45, 50).

While NGOs and other organizations contribute to SRH service provision, the Iranian government remains primarily responsible for coordinating and delivering healthcare services, including SRH services, during and after disasters.

Sexual and Reproductive Health in Iran's National Disaster Plans:

1. SRH in Iran's Disaster Management Law:

Iran's Disaster Management Law was ratified during a public meeting of the Iranian parliament on Monday, 29th July 2019, and subsequently announced by Iran's President via letter No. 68739 dated 26th August 2019. As per Article 1, this law aims to enhance societal capabilities in forecasting, prevention, risk and vulnerability reduction, and effective response to natural hazards, disasters, and emergencies. It focuses on ensuring safety, bolstering resilience through integrated management in policy making, planning, coordination, implementation, and research areas. This also includes centralized information, organization and reconstruction of damaged areas, vigilant monitoring of disaster-related organizational activities, and contributing to the country's sustainable development in crisis management.

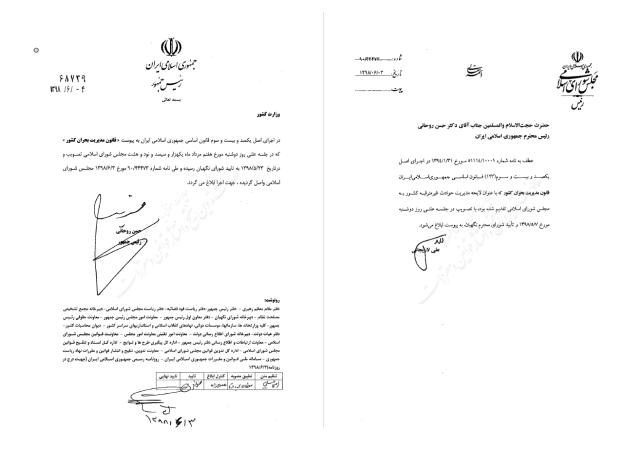


Figure 1: I.R. Iran's Disaster Management Law

The law's evaluation indicates that it does not directly address sexual and reproductive health (SRH). However, it indirectly references issues such as sustainable development, community resilience, population education, etc. Moreover, Article 14 specifies that the Iranian Red Crescent Society and the Ministry of Health are responsible for rescue operations for disaster and emergency victims, their transportation to medical centers, emergency sheltering, attending to victims' needs, and providing relief services.

2. SRH in National Disaster Management Strategic Plan:

The National Disaster Management Strategic Plan was ratified by the National Disaster Management Council in December 2020, marking it as one of the most pivotal legal documents for national-level disaster management. This plan led to the approval of three additional national programs in 2020: the National Disaster Risk Reduction Program, the National Disaster Preparedness and Response Program, and the National Disaster Recovery and Reconstruction Program.

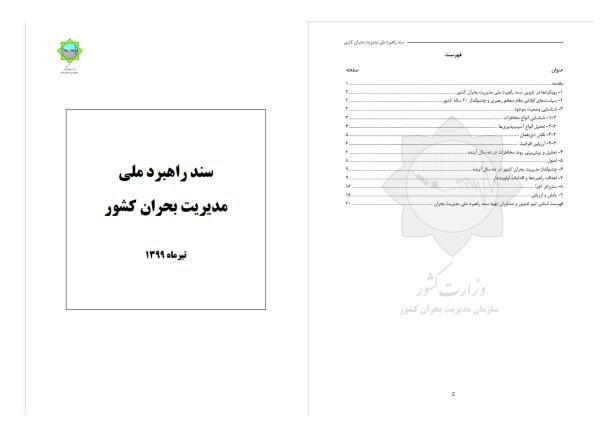


Figure 2: National Disaster Management Strategic Plan and Its Outlines

The plan is structured into 9 sections, encompassing 5 goals, 15 strategies, and various priority measures under each strategy. In its principles section, the plan broadly outlines essential steps to address major environmental and climate changes, sustainable development goals,

food security, and health needs in disaster management. Actions related to Sexual and Reproductive Health (SRH) in this plan include:

- Capacity building and developing methods for providing relief, search, rescue, and health services in emergencies, with a focus on utilizing advanced technology.
- Developing mental and social health programs for families and communities affected by disasters.
- Assessing, expanding, integrating, and prioritizing responses to the needs of vulnerable groups, including the elderly, children, women, and people with disabilities, in all support programs of responsible organizations.
- Developing **livelihood support programs for low-income and vulnerable families,** and implementing public insurance services.
- Developing and updating policies, programs, and guidelines for physical, mental, and social recovery services for disaster victims.

3. SRH in the National Disaster Risk Reduction Program:

The National Disaster Risk Reduction Program, approved by the National Disaster Management Organization (NDMO) in November 2020, primarily focuses on institutional and physical measures in the health sector to be undertaken by the Ministry of Health for disaster resistance.

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Figure 3: National Disaster Risk Reduction Program and Its Outlines

Within this program, certain actions relate indirectly to Sexual and Reproductive Health (SRH) in disasters and emergencies:

- The 42nd priority action under the 4th objective emphasizes the comprehensive evaluation, expansion, integration, and prioritization of responses to the needs of vulnerable groups, including the elderly, children, women, and individuals with disabilities. This encompasses all aspects of support, rehabilitation, and reconstruction efforts conducted by responsible organizations.
- A key focus of this action is to organize annual educational meetings for women, educating them about earthquakes and appropriate responses during such events.

From the evaluation of the National Disaster Risk Reduction Program, it's evident that SRH is not a major or prominent issue. The term 'needs' is used generally and could be interpreted more specifically to include health needs, and particularly SRH needs. While the program acknowledges that vulnerable groups include the elderly, children, women, and individuals with disabilities, it does not explicitly detail SRH needs (51).

4. SRH in the National Preparedness and Response Program:

The National Preparedness and Response Program, endorsed by the High Council of Disaster Management in November 2020, outlines the national framework, tasks, and processes for disaster preparedness and response.



Figure 4: National Disaster Preparedness and Response Program and Its Outlines

Regarding sexual and reproductive health (SRH), the program does not explicitly specify actions, but it indirectly addresses several priority measures, including:

- Assessing, expanding, integrating, and prioritizing responses to the needs of vulnerable groups, such as the elderly, children, women, and people with disabilities, across all support programs of responsible organizations.
- Utilizing the capacities of non-governmental organizations (NGOs) to enhance community mental and social resilience, with a focus on the elderly, children, and women.
- Participating in the provision and distribution of facilities and assistance, concentrating on the elderly, children, and women.
- Collaborating with the Ministry of Health and the Welfare Organization to provide general and specific needs for all affected individuals (53).
 While the National Preparedness and Response Program encompasses measures that indirectly support SRH, it lacks specific sections dedicated to addressing the SRH needs of affected populations, particularly in the context of disasters.

5. SRH in the National Reconstruction and Rehabilitation Program:

The National Reconstruction and Rehabilitation Program, one of three programs under the National Disaster Management Plan, was approved by the High Council of Disaster Management in November 2020. This program is bifurcated into two main parts: reconstruction, which deals with the rebuilding of buildings and infrastructures, and rehabilitation, which focuses on psychosocial recovery.



Figure 5: National Disaster Reconstruction and Rehabilitation Program and Its Outlines

The program recognizes women as a vulnerable group needing support after disasters. In relation to sexual and reproductive health (SRH), the program includes several phrases addressing SRH in disaster situations:

- Implementation of a data bank for the social status of various groups, including women, to offer better and specific services such as key female persons, women NGOs, womenspecific services, women-specific economy.
- Prioritizing vulnerable groups, including pregnant and breastfeeding women, for temporary sheltering.

- The Ministry of Health is tasked with implementing training programs for women on the prevention of communicable diseases.
- The Housing Foundation is responsible for employing effective risk communication programs about housing tailored for women.
- For psychosocial recovery preparation, family centers such as family and women empowerment centers should be established and enhanced.

Specific services for women should include:

- Psychosocial screening
- Reproductive health consultancy services
- Regular examinations for pregnant women
- Health and nutritional services for mothers
- Gender-based violence consultancy services
- Adequately distanced and numbered health facilities (WCs) for women
- Ensuring women's security and safety in public spaces
- Services tailored for female-headed families
- Distribution of relief packages for women by female rescuers
- Group activities for women
- Training in parenting, environmental health, and life skills (52).

The program emphasizes the responsibility of the Ministry of Health to implement these strategies and programs, with the coordination and cooperation of the Welfare Organization and the Red Crescent Society of Iran as collaborating organizations.

6. Sexual and Reproductive Health in Provincial Disaster Plans:

Despite thorough document searches and consultations with experts, none of Iran's provinces have finalized and approved their provincial disaster plans. Consequently, it is not feasible to study and evaluate reproductive health services in these plans.

Sexual and Reproductive Health in Health System Stakeholders:

1. SRH in the National Document of Women's Health of the Islamic Republic of Iran:

The National Document of Women's Health of the Islamic Republic of Iran, developed in 2018 by Iran's Academy of Medical Sciences, is a key document for the enhancement of women's health in Iran. This document has three general objectives:

- To enhance women's health across physical, psychological, social, and spiritual dimensions, prevent diseases, and reduce women's health risk factors throughout their life stages.
- To reinforce the crucial role of women in promoting health at individual, family, and societal levels and to increase their participation in policy making, decision making, and implementation at various levels.
- To modify and eliminate social, political, legal, economic, and cultural barriers related to women's health.

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		هدف اختصاصی ۱۳ :توانمندسازی و حمایت از تقشهای مختلا		
		هدف اختصاصی ۱۳: افزایش مشارکت زنان در سطوح عالی س		
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Figure 6: Iran's National Document of Women's Health of the I.R. Iran and Its Goals

Regarding reproductive health, the document outlines the following strategic objectives:

- Reducing maternal mortality due to pregnancy and childbirth complications.
- Decreasing infant and under-five children mortality rates.
- Lowering the rates of unwanted and high-risk pregnancies and enhancing the coverage of effective contraceptive methods.
- Reducing cesarean delivery usage.
- Decreasing the number of unsafe births.
- Reducing the rates of sexually transmitted diseases, including HIV and AIDS.
- Lowering infertility rates.
- Minimizing risky behaviors.

The evaluation of this document, in the context of the current study, reveals that it emphasizes the following issues in disasters or emergencies:

- Providing psychosocial support services in disasters.
- Educating mothers and families on accident prevention.
- Assessing the status of children's accidents in rural and urban areas.
- Improving emergency services for child incidents.
- Retraining medical staff on delivery and prenatal care services, particularly the provision of emergency obstetric services for women in disasters and emergencies.

2. SRH in the Emergency Operation Plan of the Ministry of Health:

The third edition of the Emergency Operation Plan (EOP) developed by the Ministry of Health (MOH) classifies the health system's functions during disasters and emergencies into 11 scopes. The sixth scope is specifically dedicated to Population and Family Health (PFH) in these situations. In this section of the EOP, health policymakers, emergency management officials, and other stakeholders, including donors, are advised to prioritize the integration of PFH into the disaster management system, plans, and programs as follows:

Priority 1: Integrate PFH into inter-sectoral activities, disaster risk management policies, and plans at both national and local levels.

Priority 2: Include PFH in disaster health risk assessments and develop early warning systems for vulnerable groups.

Priority 3: Create a learning and awareness environment to enhance knowledge of key PFH risks, improving social well-being, safety, and resilience at all levels.

Priority 4: Identify and mitigate risks for vulnerable communities, providing PFH services by reducing risk factors.

Priority 5: Strengthen the resilience of existing facilities to offer PFH services during disasters and emergencies, and prepare for response and recovery operations.

With regards to the importance of Sexual and Reproductive Health (SRH), the EOP emphasizes the following points to managers and SRH service providers:

- SRH is a human right.
- SRH is a major public health priority, especially in disasters and emergencies.
- A wide range of adverse impacts can be prevented by timely provision of SRH services during and after disasters and emergencies.
- Skilled health workers, appropriate facilities, and equipment are vital for providing fertility and family health services.
- SRH services should be continuously promoted as an integral part of primary health care.
- The Minimum Initial Service Package (MISP) for SRH is crucial for reducing maternal and newborn mortality and should be implemented from the onset of disasters and emergencies without the need for a pre-assessment.
- Local officials and healthcare providers are often the first to identify vulnerable groups for SRH and support them in disasters and emergencies.
- The MISP outlines critical priorities for SRH in disasters and emergencies, including preventing increased maternal and newborn mortality and morbidity and monitoring the comprehensive and integrated provision of SRH services in primary health care.

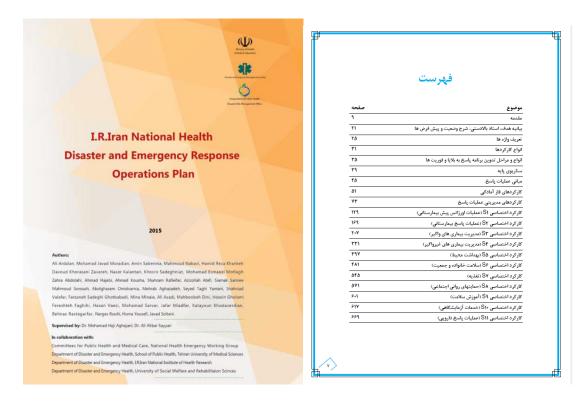


Figure 7: National Health Disaster and Emergency Operation Plan and Its Specific Functions

In the Emergency Operation Plan (EOP) developed by the Ministry of Health, specialized functions for Family and Population Health (FPH) are categorized into seven scopes, which include maternal health services, infant health services, child health services, youth, adolescents and school health services, middle-aged health services, Sexual and Reproductive Health (SRH) services, and elderly health services. Specifically addressing SRH, one of these scopes in the EOP section is directly related to providing SRH care in disaster-affected areas. The SRH care providers are expected to offer the following services:

- Estimating the number and SRH status of married women aged 15-49 in the affected area, with adjustments made for age.
- Identifying women who need priority SRH services in disasters and emergencies, including
 women with high-risk pregnancies, those undergoing Assisted Reproductive Technology
 (ART) treatment during a disaster, couples facing infertility, or women at risk of unplanned
 pregnancy.

- Ensuring initial assessment, counseling, and examination for SRH services.
- Ensuring that individuals experiencing fertility-related complications after a disaster receive examinations by a doctor or midwife, followed by necessary treatment or referrals, whether urgent or non-urgent.
- Determining the need for spacing items and necessary medications for infertile couples undergoing ART treatment, considering emergency situation challenges, and ensuring service provision to these couples and women at risk of pregnancy in affected areas.
- Ensuring the provision of SRH services and necessary training for women who have experienced sexual assault and those at risk of sexual violence or assault.
- Setting up an effective referral system in the affected areas for those in need of emergency SRH services and ensuring follow-up.
- Implementing an SRH service registration system in the affected areas.
- Ensuring the security of shelters or temporary housing, particularly for women and girls, and addressing sexual violence perpetrators, which is the responsibility of police personnel in the affected areas.

Additionally, the EOP emphasizes priorities such as providing healthcare for pregnant and breastfeeding women, health services for their infants, ensuring access to contraceptives for infection prevention and family planning, and preventing violence against women and girls. These priorities are integral to other functions of PFH, such as maternal health services, infant health services, youth and adolescent health services, and middle-aged health services (53).

3. SRH in the Emergency Operation Plan of the Iranian Red Crescent Society:

The Iranian Red Crescent Society (IRCS) introduced its Emergency Operation Plan (EOP) in 2019, organizing its activities into 22 emergency response functions. Functions number 7, 13, and 16 are particularly relevant to Sexual and Reproductive Health (SRH) services in disasters and emergencies, as detailed below:

- Function 7: Emergency Medical, Health, and Rehabilitation Services: In coordination with the Ministry of Health (MOH), the IRCS offers a range of health services. These include general and emergency medical services, nurse care, pharmaceutical support, maternal and child healthcare, psychosocial, and environmental services (54). All services are provided following approved guidelines.
- Function 13: Psychosocial and Cultural Services: The IRCS delivers psychosocial and cultural services to disaster victims, with a focus on vulnerable groups. Services encompass setting up psychosocial stations in affected areas, dispatching psychosocial teams, and providing mental health services to affected families.
- Function 16: Family Reunion: The IRCS undertakes efforts to reunite missing persons with their families in disaster-affected areas. Activities include managing a missing person data bank to facilitate these reunions.

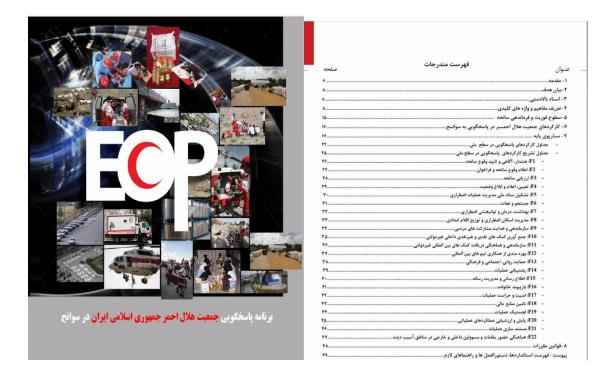


Figure 8: IRCS Emergency Response Operation Plan and Its Specific Functions

4. SRH in the Emergency Operation Plan of Iran's Welfare Organization:

Although our investigations did not uncover an approved emergency operation plan for Iran's Welfare Organization, a review of previous disasters reveals that the organization conducts various activities and programs in response to such events. A notable example is the provision of psychosocial support services to vulnerable groups, including children, women, elderly people, and individuals with disabilities, through a program titled "MOHEB." This program is among the most important initiatives undertaken by the organization

Chapter Five

Recommendations for Implementing SRH in Iran's Disaster Plans

Sexual and Reproductive Health in National Disaster Plans:

1. SRH in Iran's Disaster Management Law

The evaluation of the Disaster Management Law indicates that it indirectly refers to sexual and reproductive health in disasters. A significant advantage of this law is the clear definition of the responsibilities of all health system stakeholders. According to the law, the Ministry of Health is tasked with coordinating and providing health services, including sexual and reproductive health services in Iran. Consequently, it is evident that the primary responsibility for providing health services during disasters lies with the Ministry of Health, which plays a central role in policy making, planning, advocacy, coordination, and implementation of SRH in disasters.

2. SRH in the National Disaster Management Strategic Plan

As previously noted, the National Disaster Management Strategic Plan strongly emphasizes prioritizing the response to the needs of vulnerable groups and ensuring healthcare delivery during disasters. Given the comprehensive scope of this national-level document in addressing various issues, it is expected that more detailed programs and plans regarding SRH during disasters and emergencies will be incorporated into the three programs resulting from the National Disaster Management Strategic Plan (51).

3. SRH in the National Disaster Risk Reduction Program

A review of the National Disaster Risk Reduction Program reveals that sexual health has not been explicitly addressed in this program. The primary focus of this program is on institutional and physical risk reduction within the health system. Therefore, it is recommended that sexual health be included in future regulations and guidelines related to this program.

4. SRH in the National Preparedness and Response Program

This study reveals that the National Preparedness and Response Program pays limited attention to sexual and reproductive health (SRH). In the specific functions of this program, S4, titled "Providing Health for Victims," addresses communicable disease control, laboratory services, medical services, environmental health services, psychosocial services, and the provision of safe water and food. However, it does not explicitly mention SRH services. The current program's omission of SRH is identified as one of its main challenges. While a comprehensive inclusion of SRH was anticipated, it is recommended to adopt an active and proactive approach in providing SRH services in both national and provincial preparedness and response programs.

5. SRH in the National Reconstruction and Rehabilitation Program

The study indicates that the National Reconstruction and Rehabilitation Program has addressed various aspects of women's needs before and after disasters, including housing, education, safety, security, nutrition, and health. For example, it highlights that public education should be a preventive measure against the spread of communicable diseases, especially among women. Furthermore, the program identifies the Ministry of Health as the primary entity responsible for its implementation. Conclusively, the National Reconstruction and Rehabilitation Program appears to be a comprehensive component of the National Disaster Management Strategic Plan regarding the needs of women and girls in disasters. It includes critical SRH services such as STIs, family planning, GBV, maternal, and psychosocial services (54). An important question arises as to why these aspects are included in the rehabilitation program but not in the preparedness program. It is evident that SRH should be considered in all phases of disaster management, especially during the preparedness and response phases.

Sexual and Reproductive Health in Provincial Disaster Program:

The current study found that none of Iran's provinces have successfully finalized and approved their provincial disaster plans. While this makes it impossible to study and evaluate reproductive health services in these plans, it presents an excellent opportunity to implement appropriate approaches, strategies, and plans for Sexual and Reproductive Health (SRH) in provincial disaster plans, based on the findings and suggestions of this study.

Sexual and Reproductive Health in Health System Stakeholders:

1. SRH in the National Document of Women's Health of the Islamic Republic of Iran:

This study reveals that the national document on women's health in Iran includes various strategies, plans, and programs regarding SRH to prevent, prepare for, respond to, and recover from disasters. However, it appears that the document lacks a comprehensive approach to emergencies and disasters. Considering that Iran is one of the most disaster-prone countries in the world and women

are among the most vulnerable groups in disasters, it is recommended to develop a comprehensive plan for women's disaster resilience, ensuring the provision of sexual and reproductive services.

2. SRH in the Emergency Operation Plan of the Ministry of Health:

The study indicates that the Emergency Operation Plan (EOP) of the Ministry of Health (MOH) is one of the most comprehensive programs at the national level in terms of SRH. The document acknowledges SRH as a human right and a vital public health priority, especially in disasters and emergencies. It states that timely provision of SRH services can prevent a wide range of adverse impacts during and after disasters and emergencies. The document highlights the importance of skilled health workers, proper facilities, and equipment, provided by responsible authorities. It emphasizes the provision of the Minimum Initial Service Package (MISP) for SRH from the onset of disasters and emergencies without the need for pre-assessment.

The study concludes that all domains of SRH, including family planning, maternal and child health, prevention and management of SGBV, prevention of STIs, and psychosocial support, are covered in this program. Since, the EOP of the MOH was developed and approved prior to the National EOP, it is recommended to revise it based on the National Disaster Strategic Plans and their related programs.

3. SRH in the Emergency Operation Plan of the Iranian Red Crescent Society:

The current study indicates that the Iranian Red Crescent Society (IRCS) is capable of performing various health-related tasks in coordination with the Ministry of Health (MOH). However, its focus primarily lies on sheltering, rescue and relief services, and family reunion. In terms of providing Sexual and Reproductive Health (SRH) services, the IRCS adheres to the directives and regulations set by the MOH and the International Federation of Red Crescent and Red Cross Societies (IFRC). The study suggests that the EOP of the IRCS should be revised and implemented promptly, aligning it with national plans and IFRC strategies.

4. SRH in the Emergency Operation Plan of Iran's Welfare Organization:

This study reveals that there is no approved Emergency Operation Plan (EOP) for Iran's Welfare Organization. Moreover, the study notes that the National Reconstruction and Rehabilitation Program, a higher-level plan, designates various tasks to Iran's Welfare Organization. Therefore,

it is recommended that the Welfare Organization develop and implement a comprehensive EOP based on the responsibilities outlined in the national plans and programs, as well as the EOP of the MOH.

Conclusion:

Iran's Disaster Management Law was enacted in 2019 following its approval by Iran's president and the Iranian parliament on Monday, 29th July 2019. Studies and documents reviewing reproductive health in Iran indicate that this issue has not been directly addressed in the National Disaster Law. This document delineates the roles of various governmental and public organizations responsible for healthcare services, such as the Ministry of Health (MOH), the Iranian Red Crescent Society (IRCS), and Iran's Welfare Organization. Additionally, the National Disaster Management Strategic Plan emphasizes prioritizing and responding to the needs of vulnerable groups, ensuring healthcare delivery during disasters.

The lack of consideration for Sexual and Reproductive Health (SRH) in the National Disaster Risk Reduction Program and the National Preparedness and Response Program is identified as a significant challenge in the development and implementation of these programs. It is recommended to adopt an active and proactive approach to providing SRH services in national and provincial preparedness and response programs in the future.

This study found that the National Reconstruction and Rehabilitation Program is a comprehensive part of the National Disaster Management Strategic Plan, particularly in addressing the needs of females in disasters. Regarding SRH services, this program includes almost all critical services such as STIs, family planning, gender-based violence (GBV), maternal, and psychosocial services (51, 52, 55, 56).

In the National Crisis Management Strategy document, the Ministry of Health is recognized as the primary organization responsible for providing necessary healthcare services to affected populations. The Welfare Organization and the Red Crescent Society are also identified as collaborating organizations. As such, these organizations should have their own Emergency

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Operation Plans (EOP) for each healthcare service segment in disasters and emergencies. The Ministry of Health and the Red Crescent Society have independently developed EOPs in disasters and emergencies according to their organizational responsibilities (54). However, an approved EOP for the Welfare Organization was not found.

In the Ministry of Health's approved EOP, a key function in the response phase is dedicated to family and population health, explicitly outlining activities for providing healthcare to pregnant women, maternal and child care, essential medications and equipment, safe deliveries, family planning services, and the prevention of violence against women and girls, all within the framework of the Minimum Initial Service Package (MISP) in disasters and emergencies (53). Furthermore, the Red Crescent Society's EOP underscores the development of reproductive health instruction and the provision of reproductive health services within the MISP framework in affected regions.

No approved EOP was found at the provincial level in Iran. Considering Iran's vast size and diverse ethnicities, cultures, customs, and traditions across different provinces, tailoring the EOP to each region's cultural and traditional context, alongside available resources and capacities at the provincial level, could enhance acceptance and effectiveness among target groups. In this approach, EOP implementation in affected regions would be more community-based, improving the effectiveness and success of response activities.

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