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Building resilience for sexual and reproductive health at the community level: learning from three crisis-affected provinces in Pakistan

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ABSTRACT

Pakistan regularly faces natural disasters and has a longstanding disaster risk management infrastructure. It is also a nation with high maternal and newborn mortality. Rahnuma-Family Planning Association of Pakistan, with support from the US Centers for Disease Control and Prevention, the Women's Refugee Commission and the International Planned Parenthood Federation South Asia Region's Sexual and Reproductive Health Programme in Crisis and Post Crisis Situations Initiative, embarked on building community capacity to prepare for and respond to sexual and reproductive health (SRH) risks in select disaster-prone areas in Pakistan, and linking communities to existing disaster risk management structures at national, regional and district levels.

The initiative began with a training of trainers at the national level, which was cascaded to six union councils (UCs) in three districts in Khyber-Pakhtunkhwa, Punjab and Sindh provinces. Participants developed action plans for their respective UCs that addressed gaps in implementing the Minimum Initial Service Package (MISP) for SRH, the international standard of care for SRH in emergency settings. Communities spent 1.5 years implementing their action plans to strengthen their capacity to respond to SRH needs in the event of an emergency.

Project learning highlights the benefits of investing in preparedness to strengthen core services and linking communities to existing formal structures. Action planning led to immediate gains and longer-term benefits. The MISP for SRH was integrated into disaster risk management at all levels. Community mobilisation, awareness raising and the creation of blood donor groups and emergency transport contributed to averting mortality at the community level.

SUMMARY BOX

⇒ Global learning shows that emergency preparedness activities are more effective when communities and governments work together to identify and build on existing capacities to mitigate risks and vulnerabilities.

⇒ Project learning highlights the benefits of investing in preparedness through action planning and linking communities to formal disaster risk management structures, to strengthen core sexual and reproductive health (SRH) services and community capacity to respond to SRH needs in the event of an emergency.

⇒ This project reflects on the importance of institutionalising SRH into disaster risk management efforts and linking community initiatives with national, regional and district structures to prevent excess morbidity and mortality.

CONFLICT, DISASTER AND SEXUAL AND REPRODUCTIVE HEALTH IN PAKISTAN

Pakistan is highly vulnerable to both violence and natural disasters, with a history of political instability and recurrent large-scale natural disasters, including earthquakes and flooding.[1] In Sindh province, most of the violence is concentrated in Karachi, which experienced a 10-fold increase in violence between 2006 and 2014. Punjab province is increasingly militarised, and insecurity in Khyber-Pakhtunkhwa (KP) province, which borders and surrounds the Federally Administered Tribal Areas region, has also increased in recent years.[2] Pakistan additionally experiences frequent natural disasters with widespread damage: the 2010 floods resulted in nearly 2000 deaths, over 1.7 million destroyed homes and roughly 18 million affected persons, many of whom reside in regions impacted by insecurity.[3]

Against this volatile geopolitical environment, Pakistan experiences high maternal and child mortality rates. The maternal mortality ratio is 186 deaths per 100 000 live births,[4] while the infant mortality rate is 74 per 1000 live births.[5] The estimated induced abortion rate is 50 per 1000 women aged 15–49.[6] According to the 2017–2018 Pakistan Demographic and Health Survey (DHS),

modern contraceptive use by currently married women aged 15–49 has stagnated over the last 5 years at 26% in 2012–2013, and 25% in 2017–2018. Overall, 17% of currently married women have an unmet need for family planning.[7]

Exposure to gender-based violence (GBV) against women and girls is a major public health concern. As per the 2017–2018 DHS, 28% of women aged 15–49 have experienced physical violence since age 15, and 6% have experienced sexual violence. Thirty-four per cent of ever-married women have experienced spousal physical, sexual or emotional violence, although this proportion is much higher, at 52% in KP province.[7] Further, within KP, sexual violence is widespread.[8] A 2020 retrospective study that examined utilisation of maternal health services in women reporting spousal violence in the 2017–2018 DHS found that exposure to emotional violence decreased the likelihood of institutional delivery and the recommended four or more antenatal visits.[9]

The intersections of conflict, natural disasters and gender inequities in Pakistan have negative consequences for women and girls, particularly regarding access to sexual and reproductive health (SRH) services.[10] During the 2005 earthquake and its aftermath, pregnant women were not able to access skilled delivery care and often delivered in their tents, with cases of sepsis reported from retained products after delivery.[11 12] Safe abortion services were also difficult to access.[10] In the aftermath of the 2008 earthquake, domestic violence reportedly increased among those that moved to temporary shelters.[11] A qualitative study among women who gave birth during the 2011 floods in Sindh province similarly found that women did not have much say or control over decisions around relocation. Women reportedly gave birth in unhygienic conditions.[13]

EMERGENCY AND DISASTER RISK MANAGEMENT EFFORTS AT THE GLOBAL LEVEL

Conflicts and natural disasters are recognised to disproportionately affect the poorest and most vulnerable, particularly women, children, adolescents, those expressing non-binary gender identity or sexual orientation and persons with disabilities.[14] Women and girls face elevated rates of maternal death, sexual assault and other forms of GBV, unintended pregnancy, unsafe abortions and sexually transmitted infections (STIs), including HIV. Data show that women and girls are disproportionately affected in terms of their access to SRH services, primarily based on pre-existing societal vulnerabilities.[15]

Since 1997, the Inter-agency Working Group on Reproductive Health in Crises' Minimum Initial Service Package (MISP) for SRH has been the standard of care for SRH interventions in humanitarian settings. The standard was recently updated in 2018,[16] with increasing global recognition of the set of priority interventions to be implemented at the onset of every new emergency.[17]

In the early 2000s, the United Nations International Strategy for Disaster Reduction's (now United Nations Office for Disaster Risk Reduction) *Hyogo Framework for Action 2005–2015: Building the Resilience of Nations and Communities to Disasters* guided global dialogue and encouraged international and national stakeholders to invest in approaches that build community and country capacity to prevent, mitigate the impact of and prepare for emergencies.[18] The subsequent *Sendai Framework for Disaster Risk Reduction 2015–2030* calls for increased attention to resilience and identifies health—specifically SRH—as a critical aspect of strengthening individual and community resilience.[19]

Global learning shows that preparedness activities are more effective when community members and governments work together to identify and build on existing capacities to mitigate risks and vulnerabilities.[20] Emerging guidance on initiating, assessing and implementing SRH preparedness efforts call for engaging and building relationships with communities as critical first responders; developing a community assessment of risks and capacities and creating an action plan with the community; building on opportunities to advance preparedness quickly at local levels; linking communities to national preparedness systems; and leveraging community networks.[21]

EMERGENCY AND DISASTER RISK MANAGEMENT EFFORTS IN PAKISTAN

Pakistan has placed great emphasis on establishing disaster risk management structures. In 2006, the Government of Pakistan established the *National Disaster Management Ordinance*, which was replaced in 2010 by the *National Disaster Management Act*.[22] The 2017 *National Action Plan for Disaster Risk Management* detailed the disaster management infrastructure with Disaster Management Associations at the national, provincial and district levels.[23]

The 2014 *National Policy Guidelines on Vulnerable Groups in Disasters* recommends women's participation at all levels of the disaster management system. It also highlights the particular needs of internally displaced women and acknowledges the impact of their limited mobility in disaster risk management processes.[24]

Studies have shown the effects of policy developments at the health systems level. A 2019 study assessed the status of preparedness for crisis management in KP and Punjab provinces, using the World Health Organization's (WHO) toolkit for assessing health system capacity. Based on the authors' assessment of acceptable, partial or inadequate preparedness levels, maternal and child health and SRH achieved an adequate level of preparedness, at 66.7%. Health services for displaced persons also fared one of the highest.[25] Building on the established policy infrastructure, our project aimed to strengthen capacity and services at the community level, and create linkages with existing national, regional and district disaster management systems.

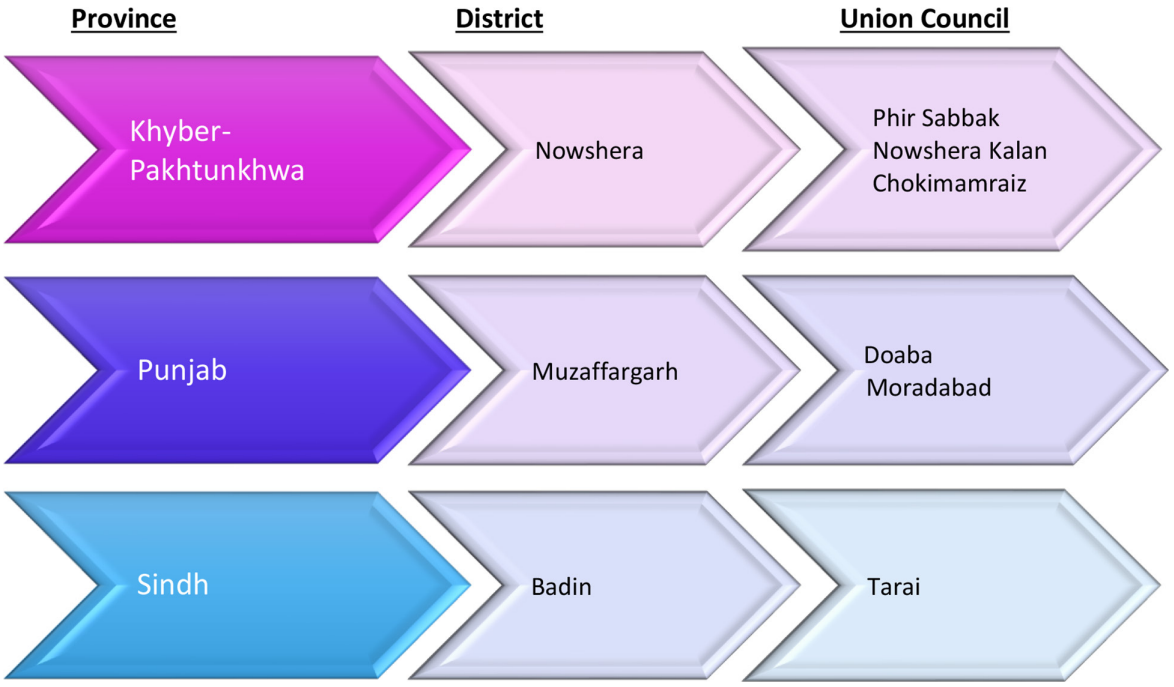

Figure 1 Project locations.

PROJECT

Rahnuma-Family Planning Association of Pakistan (Rahnuma-FPAP), with support from the US Centers for Disease Control and Prevention, the Women's Refugee Commission (WRC) and the International Planned Parenthood Federation (IPPF) South Asia Region's Sexual and Reproductive Health Programme in Crisis and Post Crisis Situations Initiative, implemented a 5-year project in 2016–2020 to build the evidence base and tools for incorporating SRH into disaster risk reduction efforts for communities affected by crises. The team adapted the WRC/United Nations Population Fund's (UNFPA) *Facilitator's Kit: Community Preparedness for Reproductive Health and Gender* to establish a supportive and coordinated environment for community-level actions on SRH in select union councils (UC) in three districts in KP, Punjab and Sindh provinces (see figure 1 for project locations and table 1 for SRH indicators from the project provinces). The *Facilitator's Kit* is a 3-day training that aims to build community capacity to prepare for and respond to risks and inequities faced by women, girls and marginalised and underserved populations in humanitarian emergencies.[26] Please see the online supplemental appendix for our reflexivity statement around author contributions.

The initiative began with a training of trainers at the national level by engaging the National Disaster Management Agency (NDMA) and the National Health Emergency Preparedness and Response Network (NHEPRN), key UN agencies and representatives from the select disaster-prone provinces. Training was cascaded to the three districts and six UCs. In each of the UCs, Rahnuma-FPAP's 18 master trainers with expertise in the MISP and training facilitation trained roughly 45 people from women's and youth groups; the District Administration,

Table 1 Sexual and reproductive health indicators from the project provinces

Indicator	National	KP	Punjab	Sindh
Modern contraceptive use by currently married women aged 15–49*	25%	23%	27%	24%
Traditional method used by currently married women aged 15–49*	9%	15%	16%	11%
Unmet need for family planning among currently married women*	17%	21%	16%	18%
Percentage of ever-married women aged 15–49 who have experienced spousal physical, sexual or emotional violence*	34%	52%	32%	18%

*Pakistan National Institute of Population Studies (NIPS) and ICF International. 2019. Pakistan Demographic and Health Survey 2017–2018. Islamabad, Pakistan and Rockville, Maryland, USA: NIPS and ICF.
KP, Khyber-Pakhtunkhwa .

Department of Health and the local UCs; international non-governmental organisations; community leaders; and Rescue 1122, Pakistan's emergency ambulance services. Participants were selected based on their existing and potential roles in the community to address SRH preparedness.

During the community trainings, participants developed action plans for their respective UCs to address gaps in implementing the MISP for SRH. Gaps were identified through a community needs and capacity assessment that compared the MISP standard to what services were available and functioning in each of the UCs. Action plan priorities focused on creating a referral system for sexual violence survivors through mapping GBV services in the public and private sectors; sensitising male members of the community about STIs/HIV and addressing associated stigma; establishing a 'Blood Donors' group for possible blood transfusions; enhancing availability of free condoms and emergency contraception (EC); introducing birth planning to women; and strengthening transport availability for emergency obstetric and newborn emergencies. The mix of participants of different genders and organisations helped with the development of realistic action plans. Many of the UC priorities were comparable based on common service gaps and similar cultural sensitivities across provinces.

Communities, led by the trained participants from various stakeholder groups, spent 1.5 years implementing their action plans. Rahnuma-FPAP followed-up with trainees every 2 months; developed information, education and communication materials; advocated for SRH preparedness through various media outlets; provided mentorship; and monitored the implementation of action plans.

To complement community level efforts, at the policy level, Rahnuma-FPAP coordinated closely with the NDMA, Provincial Disaster Management Associations (PDMAs) and District Disaster Management Associations (DDMAs). They engaged public departments, established and held regular reproductive health (RH) working group meetings and conducted interactive sessions with parliamentarians. See table 2 for a timeline of project activities.

IMPLEMENTATION OF ACTION PLANS

Despite no major disaster occurring during the project period, the work had immediate gains as well as longer-term benefits. Based on the implementation of their action plans, more than 30 awareness sessions were held for 700 community members in the six UCs on SRH priorities in emergencies and community roles in preparedness. Community-based support groups for women, men,

Table 2 Timeline of activities

	Year 1		Year 2		Year 3		Year 4		Year 5	
Semi-annual activities	1–2	3–4	1–2	3–4	1–2	3–4	1–2	3–4	1–2	3–4
Building the community-level workforce										
Conduct ToTs on community integration of SRH and DRR using the SRH and DRR curriculum.		x	x				x	x		
Develop materials for advocacy and capacity-building at all levels.		x	x	x			x	x		
Train the community-level health workforce to prepare for and respond to SRH risks in emergencies and develop action plans.			x	x	x	x	x	x		
Monitor the implementation of action plans and provide follow-up to trainees.			x	x	x	x	x	x		
Establish mechanisms to improve trainee mentorship.							x	x		
Assess the implementation of action plans in project sites.						x	x	x	x	x
Conduct policy advocacy with NDMA.		x	x	x	x	x	x	x		
Establish and maintain RH coordination structures at the district level.		x	x	x	x	x	x	x	x	
Train NDMA, law enforcement and others at the national and subnational levels.		x					x	x	x	

DRR, disaster risk reduction; NDMA, National Disaster Management Agency ; RH, reproductive health; SRH, sexual and reproductive health ; ToT, Training of trainers.

adolescents and mothers-in-law were further formed that met regularly. In Chowki Mamrez UC, KP province, as a result of peer group activities in the community, the local Rahnuma-FPAP clinic saw a 17% increase in young clients seeking contraceptive services in 2019 from 2015 (see table 3).

In Nowshera Kalan UC, KP province, a blood donor club comprising 37 donors was established after testing the blood samples of 40 men in the UC. In 2019–2020, the Blood Donor group donated blood to nine patients who were in critical condition after two buses collided in a traffic accident.

In Doaba UC, Punjab province, a transporter group was created to provide transport for obstetrical emergencies. The group transported four labouring women to the hospital during the heavy monsoon season when no other transportation was available.

In all UCs, a GBV referral system was developed, and awareness was provided to communities to respond to cases and refer survivors to appropriate services. Based on efforts, the UCs saw increased reporting of intimate partner violence, reflecting enhanced confidence among women and adolescent girls to seek assistance.

In addition, in all UCs, women and girls learnt about menstrual hygiene management with the distribution of dignity kits and information about EC that women requested be made accessible late at night. During awareness sessions, 135 EC pills were distributed, and women learnt about the availability of EC at Rahnuma-FPAP outlets and through community outreach workers.

Achievements at the community level were supported by critical developments at the national, provincial and district levels. Over 20 members of parliament and policymakers at the national and provincial levels were sensitised to the MISP and community preparedness practices. A Memorandum of Understanding was signed at the national level between the NDMA and Rahnuma-FPAP to integrate the MISP into disaster risk management efforts. This partnership had trickle down effects to provincial and district levels. RH working groups were formed and strengthened at the DDMA level. Other developments included the inclusion of the MISP into the National Planning Division's 2020–2021 *National Action Plan*. The MISP was further integrated into Rescue 1122's community response team activities, and clean delivery kits were placed in their ambulances.

REFLECTIONS AND LESSONS LEARNT

Valuable lessons were learnt in this project to build community resilience for SRH. One challenge was the initial broader focus on comprehensive SRH during the action planning process—such as antenatal care and activities intended to foster norm changes around gender—rather than an emphasis on the limited life-saving activities of the MISP. Even at the end of the project, awareness among trained community stakeholders was lower for MISP objectives that pertained to sensitive topics, especially GBV and HIV. Results from the project's endline evaluation showed that 88.6% (n=31) of trained community stakeholders identified the prevention of unintended pregnancies as a component of the MISP. On the other hand, only 40% (n=14) identified the prevention of morbidity and mortality due to HIV as a core MISP objective. As a result, there was varied understanding of what activities comprised each of the MISP objectives, as well as execution of activities intended to address gaps in MISP preparedness. The shift from comprehensive SRH to limited, priority SRH services is a commonly reported challenge for development-focused actors, as they are accustomed to offering and are responsible for providing comprehensive SRH services in stable times.[17] As such, this project offered opportunities for actors to take a thoughtful approach to ensure priority life-saving SRH services targeted in the MISP can be made available in emergencies.

The project also confirmed that investing in preparedness is indeed beneficial for emergencies and to strengthen core services in times of stability. The action planning process highlighted gaps in critical SRH services, including shelter and legal aid for sexual violence survivors, mechanisms to identify pregnant women and referral and transport systems for obstetrical emergencies. The SRH trainings improved service provision, and community level awareness-raising directly led to increased service utilisation in Rahnuma-FPAP clinics, creating demand for SRH services. Project sites additionally experienced a shortage of MISP supplies, including delivery kits and HIV post-exposure prophylaxis kits. This prompted follow-up with the NHEPRN, WHO and UNFPA to strengthen the supply chain.

A clear vision, plan and coordination within the RH Working Group and across sectors, in addition to the involvement of relevant government agencies, such as the NDMA, PDMA and DDMA, have been critical to securing political and financial support for community-driven efforts. The importance of coordination and planning have been widely documented, including in Pakistan and other countries.[27] An assessment of MISP implementation in post-earthquake Nepal found that facilitating factors for successful implementation included robust preparedness; leadership and commitment among varying level actors; resource mobilisation; strong national level coordination; community engagement in planning, coordination and outreach; and supply chain management. On the other hand, barriers included inadequate MISP training for RH coordinators and managers; ineffective communication between national and district level stakeholders; staffing shortages; under-resourced facilities in rural areas; and insufficient attention given to local GBV and HIV organisations.[28] This project heavily focused on coordination, participation and inclusion at all levels, with a strong monitoring component for real-time problem-solving. Community stakeholders could elevate any concerns to Rahnuma or to the district-level

Table 3 Action plan priorities and outputs/outcomes by union council

KP	Action plan priorities	Output and outcomes
UC Chowki Mamrez	1. Develop a referral system for SGBV survivors by mapping GBV services in the public and private sectors.	Six referral partners were identified, including one NGO, Akhuwat, the Police and the Health and Population Department.
	2. Sensitise male members of the community on STIs/HIV and address associated stigma.	One session was conducted in the Youth Resource Centre on 10 September 2018, with 30 participants. Different groups were organised by gender. Peer groups then arranged meetings in their respective areas. The Rahnuma-FPAP clinic saw 17% more young clients for services.
	3. Enhance EC and menstrual hygiene awareness among adolescents, women and girls.	One session was conducted at Chowki Mamrez Girls High School on 24 September 2018, with 27 girl participants.
UC Nowshera Kalan	1. Sensitise male members of the community on STIs/HIV and address associated stigma.	One session was conducted on 26 August 2018, with 17 participants. Further, 10 religious and community leaders were sensitised.
	2. Establish a 'Blood Donors' group.	A blood donor club comprising 37 donors was established after testing the blood samples of 40 men in the UC. They had given their contact number and address to be shared with blood banks. In 2019–2020, the Blood Donor group donated blood to nine patients in critical condition after a major traffic accident when two buses collided near Nowshera Kalan UC.
	3. Enhance EC and menstrual hygiene awareness among adolescents, women and girls.	One session was conducted in the UC on 24 August 2018, where 23 girls/women participated. Four additional sessions were later conducted. In awareness sessions, 135 EC pills were distributed and EC supplies have been made available from the FPAP outlets and community outreach workers. One Peer Educator Group was formed with eight members to represent the district level.
	4. Enhance free availability of condoms.	Four distribution points for free condoms were initially identified, including two shopkeepers and two persons for their Hujra (part of the house for guests). Thereafter, three new outlets were established.
	5. Strengthen transport availability for emergency obstetric and newborn care (EmONC).	TBAs and lady health workers (LHWs) followed 24 pregnant women, providing home visits and other support. The Nowshera Department of Health provided transportation to pregnant women for EmONC services.
UC Pir Sabaq	1. Sensitise male members of the community on STIs/HIV and address associated stigma.	One session was conducted on 5 September 2018, with 23 participants.
	2. Introduce birth planning to every pregnant woman.	Two LHWs and two female community activists were engaged to assist pregnant women develop birth plans.
	3. Enhance EC and menstrual hygiene awareness among adolescents, women and girls.	One session was conducted at Pir Sabaq Girls High School on 20 September 2018 with 20 girls/women. Two more awareness sessions were conducted in 2019 where 36 girls and women participated.
Punjab	**Action plans**	**Outputs and outcomes**
UC Muradabad	1. Develop a referral system for SGBV survivors by mapping GBV services in the public and private sectors.	Three referral points for medical and social assistance were developed. Two sessions with 20 women and 18 men were conducted.
	2. Sensitise married women of reproductive age on STIs/HIV.	Two sessions per quarter were planned with 25 women.
	3. Strengthen transport availability for EmONC.	A contact list of 20 local transporters was finalised. The Rescue 1122 service office was mobilised to respond to SRH in emergencies; clean delivery kits were placed in ambulances.
	4. Enhance EC and menstrual hygiene awareness among adolescents, women and girls.	One awareness session was held with 25 women/girls. Forty hygiene kits and 75 safe delivery kits were distributed by December 2018.
UC Doaba	1. Develop a referral system for SGBV survivors by mapping GBV services in the public and private sectors.	Two technical support meetings were held with 14 women and 12 men. Referral mechanisms/points for medical and social assistance were developed, and contact numbers were made available. Fifteen blood donors were identified. Fifteen local transporters were also identified; the transporter group provided hospital transport to four women in labour during the heavy monsoon when no transport was available.
	2. Sensitise male members of the community on STIs/HIV and address associated stigma.	By the end of 2018, two awareness sessions on STIs/HIV were conducted with 40 men and youth.
	3. Enhance EC and menstrual hygiene awareness among adolescents, women and girls.	One awareness session was held with 25 women and girls. Forty hygiene kits and 60 safe delivery kits were distributed.
	4. Strengthen transport availability for EmONC.	A transporter group was created and transported four labouring women to the hospital during the monsoon.
Sindh	**Action plans**	**Outputs and outcomes**

Continued

Table 3 Continued

KP	Action plan priorities	Output and outcomes
UC Tarai	1. Sensitise married women of reproductive age on STIs/HIV.	The RH working group met quarterly at the district level.
	2. Enhance EC and menstrual hygiene awareness among adolescents, women and girls.	Two 'medical camps' were organised on family planning and SRH where technical assistance and support for action plans were provided to communities.
	3. Develop a referral mechanism for SGBV survivors.	Referral system developed.
	4. Strengthen transport availability for EmONC.	Ambulance system developed for EmONC.

EC, emergency contraception; GBV, gender-based violence ; NGO, non-governmental organisation; Rahnuma-FPAP, Rahnuma-Family Planning Association of Pakistan; RH, reproductive health; SGBV, sexual and gender-based violence; SRH, sexual and reproductive health ; STIs, sexually transmitted infections ; TBA, traditional birth attendant; UC, union councils .

RH Working Groups as they worked to implement the action plans.

Project learning further reinforced the value of identifying and using local resources to build community capacity and foster ownership. The WRC/UNFPA *Facilitator's Kit* was developed to address SRH preparedness at the community level, given the role that communities play in the first response. While the project highlighted the need for refresher trainings on SRH priority activities, as well as sustained funding for ongoing improvements at the community level, stakeholders appreciated efforts to address the SRH needs of women and girls, even in the absence of a large-scale disaster or outbreak of violence. The project also advances key components of localisation frameworks, such as those advocated by NEAR, a network of local and national civil society organisations.[29]

The project has additionally highlighted the need to facilitate greater inclusion of marginalised and underserved populations actively and systematically in the action planning process. This was further reflected in the endline activities, which showed that while 88.6% (n=31) of trained community stakeholders identified married women as a target group for the MISP, only 60.0% (n=21) and 31.4% (n=11) identified adolescents and transgender communities, respectively, as possible at-risk groups. These findings reflect relatively low levels of awareness, even among trained community stakeholders, about the SRH needs of subpopulations. Implementing a stronger community assessment focused on identifying at-risk groups, their needs and existing community capacities prior to action planning is thought to better ensure that those most vulnerable are included in all aspects of planning and preparedness efforts. This is also thought to prevent the further reinforcement or perpetuation of stigma and negative social norms that can impede their access to life-saving services.

Lastly, the COVID-19 pandemic and its movement restrictions have highlighted the importance of community preparedness and the need to examine alternative community-based service delivery models for service continuity. This is particularly relevant where access to certain services, especially emergency obstetrical care and clinical care for survivors of sexual assault, is time sensitive and profoundly impacts morbidity and mortality. While awareness-raising activities were initially halted at the onset of the pandemic, Rahnuma-FPAP has continued to provide essential SRH services to all communities. Their advocacy further managed to integrate SRH into the *Federal National Health Response Plans for COVID-19*.

CONCLUSION

Emergency preparedness and recovery are two entry points within the continuum of a humanitarian emergency that provide an opportunity to strengthen local capacity to prevent, mitigate the impact of and prepare for future crises.[19] Both development and humanitarian actors increasingly appreciate the need to invest in preparedness for SRH in advance of conflicts and natural disasters, focusing on building community capacity.[21 30] This project thus provides an example of efforts to strengthen capacities and preparedness for SRH at the community level.

Efforts to strengthen emergency and disaster risk management systems, including SRH services, require a continued investment of resources to sustain capacities and deliver services to meet the needs of those most at risk.[20] With support from the Australian Government, IPPF and Rahnuma-FPAP are maintaining preparedness initiatives, and the RH working groups at the district level are supporting ongoing community efforts. This project reflects on the importance of institutionalising SRH into disaster risk management efforts and linking initiatives with national, regional and district structures to prevent excess morbidity and mortality.

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REFERENCES

1 World Bank Group. Climate change knowledge portal for development practitioners and policy makers: Pakistan. 2021 2022.
2 US Institute for Peace. Mapping conflict trends in Pakistan 2014.
3 Disasters Emergency Committee. Disaster risk reduction in Pakistan: the contribution of Dec member agencies, 2010-2012 2012.
4 National Institute of Population Studies (NIPS) Pakistan, ICF International. 2019 Pakistan maternal mortality survey summary report 2020.
5 National Institute of population studies Pakistan and ICF international. Pakistan demographic and health survey 2012-13. *National Institute of Statistics and ICF International* 2013.
6 Sathar Z, Singh S, Rashida G, *et al*. Induced abortions and unintended pregnancies in Pakistan. *Stud Fam Plann* 2014;45:471–91.
7 National Institute of Population Studies, (NIPS), ICF International. Pakistan demographic and health survey 2017-18 2019.
8 International Crisis Group. Women, violence and conflict in Pakistan 2015.
9 Hassan S-U-N, Memon E, Shahab M, *et al*. Utilization of maternal healthcare services in women experiencing spousal violence in Pakistan: a comparative analysis of 2012-13 and 2017-18 Pakistan demographic health surveys. *PLoS One* 2020;15:e0239722.
10 Murthy RK. Review of sexual and reproductive health and rights in the context of disasters in Asia 2009.
11 Burki E, Marie Stopes Society. The Pakistan earthquake and the health needs of women. *Humanitarian Practice Network*;6.
12 Miller AC, Arquilla B. Disasters, women's health, and conservative Society: working in Pakistan with the Turkish red crescent following the South Asian earthquake. *Prehosp Disaster Med* 2007;22:269–73.
13 Maheen H, Hoban E. Rural women's experience of living and giving birth in relief camps in Pakistan. *PLoS Curr* 2017;9. doi:10.1371/currents.dis.7285361a16eefbeddacc8599f326a1dd. [Epub ahead of print: 31 Jan 2017].
14 Every woman every child. deep dive report: commitments in support of humanitarian and fragile settings 2015-2017 2018.
15 Barot S. GPR in a state of crisis: meeting the sexual and reproductive health needs of women in humanitarian situations, Guttmacher policy review:20:24 2017.
16 IAWG on RH in Crises. Inter-agency field manual on reproductive health in humanitarian settings 2018.
17 Krause SK, Chynoweth SK, Tanabe M. Sea-change in reproductive health in emergencies: how systemic improvements to address the MISP were achieved. *Reprod Health Matters* 2017;25:7–17.
18 United Nations International Strategy for Disaster Reduction. Hyogo framework for action 2005-2015: building the resilience of nations and communities to disasters 2005.
19 United Nations Office for Disaster Risk Reduction. Sendai framework for disaster risk reduction 2015- 2030 2015.
20 Tanabe M. Building national resilience for SrH: learning from current experiences. *Women's Refugee Commission* 2016.
21 Planning F. International Planned Parenthood Federation, John Snow, Inc., Women's Refugee Commission, and United Nations Population Fund. Ready to Save Lives: Sexual and Reproductive Health Care in Emergencies 2020.
22 National Disaster Management Authority,, Government of Pakistan. National disaster risk management framework 2007.
23 Pakistan National Health Emergency Preparedness and Response Network. National action plan for the implementation of Bangkok principles on health aspects of the Sendai framework for disaster risk reduction 2017.
24 The Economist Intelligence Unit. The South Asia Women's Resilience Index 2015.
25 Ul-Haq Z, Shah BH, Ardakani M, *et al*. Health system preparedness in Pakistan for crisis management: a cross-sectional evaluation study. *East Mediterr Health J* 2019;25:553–61.
26 Women's Refugee Commission and, UNFPA. Community Preparedness: Reproductive Health and Gender: A Facilitator's Kit for a 3-day Training Curriculum 2015.
27 Das JK, Padhani ZA, Jabeen S, *et al*. Impact of conflict on maternal and child health service delivery – how and how not: a country case study of conflict affected areas of Pakistan. *Confl Health* 2020;14:1–32.
28 Myers A, Sami S, Onyango MA, *et al*. Facilitators and barriers in implementing the minimum initial services package (MISP) for reproductive health in Nepal post-earthquake. *Confl Health* 2018;12:35.
29 Network for Empowered Aid Response, (NEAR). Near localisation performance measurement framework 2019.
30 Tran N-T, Dawson A, Meyers J, *et al*. Developing institutional capacity for reproductive health in humanitarian settings: a descriptive study. *PLoS One* 2015;10:e0137412.