elrha

Innovation for Sexual and Reproductive Health in Humanitarian Crises

Where we are now and
how to move the agenda forward

CONTENTS

ABOUT ELRHA

We are Elrha. A global charity that finds solutions to complex humanitarian problems through research and innovation.

We are an established actor in the humanitarian community, working in partnership with humanitarian organisations, researchers, innovators, and the private sector to tackle some of the most difficult challenges facing people all over the world.

We equip humanitarian responders with knowledge of what works, so that people affected by crises get the right help when they need it most. We have supported more than 200 world-class research studies and innovation projects, championing new ideas and different approaches to evidence what works in humanitarian response. Elrha has two successful humanitarian programmes: Research for Health in Humanitarian Crises (R2HC) and the Humanitarian Innovation Fund (HIF).

The R2HC aims to improve health outcomes for people affected by humanitarian crises by strengthening the evidence base for public health interventions. Our globally-recognised research programme focuses on maximising the potential for public health research to bring about positive change and transform the effectiveness of humanitarian response.

The HIF aims to improve outcomes for people affected by humanitarian crises by identifying, nurturing and sharing more effective and scalable solutions. The HIF is our globally-recognised programme leading on the development and testing of innovation in the humanitarian system. Established in 2011, it was the first of its kind: an independent, grant-making programme open to the entire humanitarian community.

> We equip humanitarian responders with knowledge of what works, so that people affected by crises get the right help when they need it most.

ACKNOWLEDGEMENTS

The Geneva Centre of Humanitarian Studies is a unique teaching, research and policy centre for humanitarian action. We are a joint centre of the Graduate Institute of International and Development Studies and the University of Geneva, two internationally renowned centres of academic excellence.

The Health in Humanitarian Crises Centre at the London School of Hygiene and Tropical Medicine The Health in Humanitarian Crises Centre brings together multidisciplinary researchers working to advance health and health equity in crises-affected countries through research, education, and translation of knowledge into policy and practice. The Centre is part of the London School of Hygiene & Tropical Medicine, which is renowned for its research, postgraduate studies and continuing education in public and global health. The university has an annual research income of more than £180 million and is one of the highest-rated public health research institutions in the UK and globally.

Science Practice is a design and research agency that works with science and innovation funders to design responsible and impactful programmes to tackle some of our most pressing challenges.

Our donors

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Designed by Blue Stag.

List of acronyms

CHW	Community health worker
CSE	Comprehensive sexuality education
EmONC	Emergency obstetric and neonatal care
ENC	Essential newborn care
FGD	Focus group discussion
GBV	Gender-based violence
HCP	Healthcare provider
HIF	Humanitarian Innovation Fund
HIV/AIDS	Human immunodeficiency virus/acquired immune deficiency syndrome
HSS	Health systems strengthening
IAWG	Inter-Agency Working Group on Reproductive Health in Crises
ICPD	International Conference on Population and Development
IDP	Internally displaced persons
IPPF	International Planned Parenthood Federation
KII	Key informant interview
LGBTQIA+	Lesbian, gay, bisexual, transgender, queer, intersex, asexual+
LICs	Low-income countries
LMICs	Low and middle-income countries
MHM	Menstrual hygiene management
MISP	Minimum Initial Service Package for Sexual and Reproductive Health in Crisis
NGO	Non-governmental organisation
PrEP	Pre-exposure prophylaxis
PLWHA	People living with HIV/AIDS
SGBV	Sexual and gender-based violence
SRH	Sexual and reproductive health
STI	Sexually transmitted infection
UN	United Nations
WHO	World Health Organization
WRA	Women of reproductive age

FOREWORD

Driven by our focus on finding solutions to complex humanitarian problems through research and innovation, we commissioned a report to better understand how innovation can be utilised for sexual and reproductive health (SRH) in humanitarian crises.

Having published the Humanitarian Health Evidence Review and contributed to WHO & IAWG research prioritisation exercises, our Research for Health in Humanitarian Crises (R2HC) programme had a clear understanding of research needs and priorities for the humanitarian SRH community of practice. At the same time, our Humanitarian Innovation Fund (HIF) programme, with its area of focus dedicated to gender-based violence (GBV), had identified an abundance of calls for innovative solutions and hackathons addressing SRH in humanitarian crises, but noted their lack of strategy in addressing key problems and diverse interpretations of 'innovation'.

It was in this context that we identified a key opportunity to undertake this work to better understand what innovation means to the community of practice, what types of innovation are being utilised now, and to develop best practice and guidance on how to innovate for the sector. We set forward by establishing a diverse and expert Steering Committee (Appendix 2) and offering guidance to the authoring team.

We are now pleased to be able to share the findings of this report. In addition to providing an analysis of 'where we are' in terms of innovation for the humanitarian SRH sector, it offers a clear strategy and 'next steps' on how to meaningfully innovate for SRH. **This report will serve as Elrha's strategic blueprint in our aims to improve SRH outcomes in humanitarian crises through research and innovation, and we are confident it will serve to convene actors in the sector around responsible and impactful innovation.**

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BACKGROUND

An estimated 32 million women and girls of reproductive age (15-49) are living in emergency settings, all of whom require comprehensive SRH information and services (Singh et al., 2018b).

Unintended pregnancies pose a significant global health burden, particularly in low-income countries (LICs). 61% percent of women and adolescent girls who die every day due to complications during pregnancy and childbirth are from displaced populations (Ivanova et al., 2019). Conflict and displacement contribute to maternal mortality and morbidity by disrupting established infrastructure (Ackerson and Zielinski, 2017), access to healthcare centres, breakdown of familial, social and community networks (Donovan, 2018) and an increase in gender-based violence, including sexual violence.

In 1994 the International Conference on Population and Development (ICPD) in Cairo recognised the right of refugees to SRH, including family planning. To this end, the Inter-Agency Working Group (IAWG) on Reproductive Health in Crises developed the Minimum Initial Service Package (MISP) to be implemented at the onset of crisis and beyond into comprehensive SRH service integration as soon as possible (Lisam, 2014). Whilst progress is being made in SRH service availability in humanitarian crises, for example through increased funding, significant challenges remain in the implementation and utilisation of these services (Singh et al., 2018a).

Within the SRH sector, well-defined, effective and evidence-based interventions already exist to save the lives of women and girls. However, previous systematic reviews, and more recently a study in 10 conflict-affected countries, have demonstrated that the challenging environment of humanitarian crises requires creative ways of delivering these interventions (Singh et al., 2021).

Through this work, we are interested in building a better understanding of what are seen as innovative interventions or practices in SRH, and how these compare to existing ways of framing innovation in the humanitarian sector. The aim is to identify and outline opportunities where further innovation could help address the increasingly complex challenges presented by SRH in humanitarian settings.

How do we define SRH?

SRH encompasses a broad range of health services and includes the ability of a person to exercise their sexual and reproductive rights. The ICPD Programme of Action 1994 states that - 'Reproductive health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity, in all matters relating to the reproductive system and to its functions and processes. Reproductive health therefore implies that people are able to have a satisfying and safe sex life and that they have the capability to reproduce and the freedom to decide if, when, and how often to do so'. Additionally, the WHO working definition of SRH includes the right to - 'the highest attainable standard of sexual health, including access to sexual and reproductive healthcare services... to sexuality education and bodily integrity...to pursue a satisfying, safe and pleasurable sexual life'.

In humanitarian settings, the MISP sets out a number of core SRH services that must be implemented at the onset of a crisis. These include provision of contraception, comprehensive abortion care (including safe abortion care (SAC) and post-abortion care (PAC)), gender-based violence (GBV) prevention and response, sexually transmitted infection (STI) and human immunodeficiency virus (HIV) prevention and treatment, and safe pregnancy, delivery and newborn care.

For the purposes of mapping innovations in this study, we followed the definition of SRH set by the ICPD and WHO and included in our scope all services provided under the MISP, except for GBV prevention and response. The rationale for excluding GBV was to avoid duplication of ongoing work by Elrha and others specifically targeted at innovations in the GBV sector. However, we also wanted to look beyond the MISP to include innovations implemented as part of comprehensive SRH. This included comprehensive sexuality education (CSE) and access to accurate information, advocacy and rights-based programming, especially for marginalised populations, and innovations which focus on specific sub-groups, including adolescents, sexual minorities and people with disabilities. We also included innovations around dignity kits and menstrual hygiene management (MHM)[1] as part of comprehensive SRH requiring a multisectoral response. With this in mind, though we use the term SRH throughout this report, we mean this to include both sexual and reproductive health and rights, or SRHR.

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1. We understand there is a growing move within the SRH sector to rename MHM as Menstrual Health and Hygiene (MHH). However, we will use MHM throughout this report as it is currently more widely recognised.

How do we define humanitarian crises settings?

For the purpose of this study, we defined a humanitarian crisis setting as one in which '**an event or series of events has resulted in a critical threat to health, safety, security or well-being of a community or other large group of people**' (IAWG, 2010). The community affected by crises is no longer able to cope and external assistance, whether from the national or international level, is required. The event can be a natural hazard-driven disaster or a man-made disaster (Rodo, 2019), and settings can range from acute to stabilised. While we recognised that some forcibly-displaced populations live in stable, high-income settings, we focused only on interventions implemented in low- and middle-income countries (LMIC), as the majority of humanitarian settings occur in LMICs and the resources available in high-income countries to deal with humanitarian emergencies are different and much greater than those in LMICs (Casey et al., 2015).

We excluded:

- Countries that are not included in the Development Assistance Committee (DAC) list of official development assistance (ODA) (DAC, 2021) (eg. Greece, including refugee camps).
- General populations in low- or middle-income countries (LMICs), including those that have been affected by COVID-19, unless also qualifying as a humanitarian crisis setting as above.
- Other vulnerable population groups, such as migrants, slum dwellers, or rural communities that are not otherwise affected by a humanitarian crisis.

In the next section of the report, we conduct a brief review of the recent literature identifying priority SRH gaps in humanitarian settings. Later in the report, we explore the extent to which humanitarian SRH innovations map onto these recognised gaps.

SRH gaps in humanitarian crises settings

Humanitarian crises exacerbate vulnerability to poor sexual and reproductive health outcomes among affected populations due to reduced access and utilisation of SRH services and supplies, damaged health facilities, depleted human resources, and increased poverty (Warren et al., 2015). Insecurity, population movements, and limited financial and human resources, make it more difficult to deliver SRH services than in stable settings. As a result, insufficient investments for SRH services during humanitarian crises lead to gaps in addressing unmet rights and needs of key populations. The responsibility of humanitarian actors to respond to SRH unmet needs of those in crises has been increasingly recognised over the past two decades.

A 2015 study from three crisis-affected countries in sub-Saharan Africa found that only five of 63 assessed health facilities provided adequate emergency obstetric and newborn care (EmONC), and only three provided elements of clinical management of rape (Casey et al., 2015). Safe abortion was an alarming gap across all facilities, despite unsafe abortion having been estimated to cause 25–50% of maternal deaths in refugee settings. Progress in advancing and improving the quality of SRH in emergencies has been made in terms of policies, guidelines and funding, but there remains an urgent need to address gaps in implementation, quality of care, utilisation of SRH services, monitoring and evaluation.

A systematic review with 15 selected studies on health services delivery in humanitarian crises in 2015 indicated that the MISP was not systematically implemented and that core SRH services, such as safe abortion, contraception, and care for adolescents were being neglected (Warren et al.,2015). In this review, many studies evaluated the effectiveness of family planning interventions based on education, but few studies looked directly at the provision of or access to family planning.

A recent synthesis of evidence from case studies from ten conflict-affected countries assessing the provision of sexual, reproductive, maternal, newborn, child and adolescent health and nutrition interventions (Singh et al., 2021) described the coverage and spectrum of interventions delivered in these countries. Despite large variations between countries, antenatal care, basic emergency obstetric care (BEmONC) and comprehensive emergency obstetric care (CEmONC) were prioritised in all ten conflict settings. However, many lifesaving services for key populations, including the majority of reproductive, newborn, and adolescent health services were not prioritised and delivered everywhere, including interventions to address stillbirths. The differences in coverage between countries could be attributed to both the intensity and nature of the conflict, and the capacity of the health system prior to conflict. The study found that the humanitarian system has developed novel solutions to bring lifesaving services closer to populations using new modes of delivery, including: remote management; use of mobile clinics to deliver services to remote areas; recruitment of lay workers who have good knowledge of their community; promotion of community-based services to bring services closer to populations; and delivery of integrated packages of services at the point of care to avoid populations having to attend several times.

There is increased guidance on newborn care in humanitarian settings and increased focus on improving coverage and quality of newborn health interventions. A systematic review of health interventions in humanitarian settings conducted at the London School of Hygiene and Tropical Medicine (LSHTM) found that the Essential Newborn Care (ENC) services most commonly reported were thermal care and feeding support, whereas delaying of cord clamping and administration of vitamin K were the least reported (Rodo, 2019). Further research and innovation related to newborn care in humanitarian crises are needed. However, there are existing cost-effective and evidence-based interventions that can be delivered at the lowest health care level, which have not been prioritized by humanitarian actors and are rarely available in crises settings (Chynoweth et al., 2018).

Progress in advancing and improving the quality of SRH in emergencies has been made in terms of policies, guidelines and funding, but there remains an urgent need to address gaps in implementation, quality of care, utilisation of SRH services, monitoring and evaluation.

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Young people, including adolescents, continue to be a neglected group in humanitarian settings. Despite the specific needs and vulnerabilities faced by young people, most services provided are not organised to recognise and meet these needs. A systematic review of 14 studies on SRH interventions for young people in humanitarian settings found evidence that while some SRH interventions for young people were being implemented, there were insufficient details of intervention components and outcome measurements to adequately map these interventions, especially those for comprehensive abortion care, prevention of mother-to-child transmission of HIV/STIs, urogenital fistulae, female genital mutilation (FGM). There was also insufficient detail of interventions targeting lesbian, gay bisexual, transgender, queer, intersex, asexual (LGBTQIA+) populations, and person with disabilities (Jennings et al., 2019).

While some progress has been made with regards to the availability of SRH services in humanitarian crises, significant challenges remain with respect to utilisation of these services. A systematic review of 23 studies to assess the utilisation of SRH services during humanitarian crises, found increased utilisation of SRH services through peer-led and interpersonal education and mass media campaigns, community-based programming and a three-tiered network of community-based providers for reproductive and maternal services (Singh et al., 2018a). There were no studies evaluating the utilisation of interventions focused on prevention of mother-to-child transmission (PMTCT), STI treatment and prevention, vaginal injuries and fistula, post abortion care, safe abortion, or the MISP as a comprehensive package of interventions.

Despite overall progress, there are persistent gaps for key groups in crisis-affected populations. Most policy and programmatic efforts are still tailored towards heterosexual persons, and women of reproductive age (Heidari et al., 2019). Certain groups, such as adolescents and older women, male survivors of sexual violence, sex workers, people living with disabilities, or those of diverse sexual orientations and gender identity and/or expression continue to face significant obstacles in accessing information and services in humanitarian settings.

Despite overall progress, there are persistent gaps for key groups in crisis-affected populations.

In addition to identifying gaps in programming in humanitarian crises settings, significant work has taken place to identify critical evidence gaps and research priorities for sexual, reproductive, maternal, neonatal and child health in these settings. This includes the Inter-Agency Working Group on Reproductive Health in Crisis (IAWG) workshop on SRH research priorities in 2018 (IAWG, 2018) and the World Health Organization research prioritisation exercise in 2018-2019 (Kobeissi et al., 2021).

The aim of these exercises was to produce an initial list of potential research questions focusing on implementation and impact research that would directly benefit SRH programming. For the IAWG, priority areas where more evidence is needed included maternal and newborn care, in particular home-based care delivered by community health workers (CHW) and promotion of respectful care; family planning, in particular increasing access to and skills in providing long-acting reversible contraception (LARC) and emergency contraception (EC); safe abortion, in particular increasing access and uptake of global SAC/PAC guidelines as outlined in the MISP; quality of care, using data for evidence-based decision-making; better SRH supply chain management to implement the MISP and strategies to move from MISP; and comprehensive SRH services in post-conflict settings.

WHO adds to these: a focus on improving SRH outcomes for adolescents; the integration of mental health/psychosocial support into SRH, plus capacity building and support for health workers; surveillance methodologies to capture data on maternal and perinatal mortality; strategies to provide maternal and perinatal health services, and impacts of unconditional cash transfers on reducing maternal mortality; task shifting approaches for intrapartum and immediate postpartum service delivery to the home or to primary health centres; essential newborn care in improving newborn outcomes; effective models to provide pregnancy/newborn care education to relevant care givers; effective models to care for vulnerable newborns (small and sick) as well as the most effective models to collect, interpret, and act on valid mortality data (including stillbirths); and strengthening approaches to monitor newborn mortality for better accountability.

The table on the following page combines both programmatic and research gaps identified within the literature. As the IAWG and WHO evidence gaps were intended as questions for research, and so focused on quite specific aspects of SRH, we took the main focus of the questions and extrapolated them into wider implementation components. The table divides these priorities into gaps in services provided, gaps in populations targeted by interventions and gaps in the capacity of various components that make up the health system. It is important to note that this is a list of priority gaps and is not intended as an exhaustive list of all gaps in the sector. These gaps were discussed with Elrha and the Steering Committee during the inception phase and were found to align with the experiences of prominent SRH practitioners working in humanitarian crises settings.

Table of priority humanitarian SRH sector gaps[2]

	Gaps
Services	• Safe abortion/post-abortion care and advocacy • Family planning, especially long-acting reversible contraceptives (LARCs) and emergency contraception (EC) • Interventions addressing neonatal mortality, including stillbirths • Interventions addressing utero-genital fistulae and female genital mutilation/cutting (FGM/C) • Quality maternity care, including respectful care • Home-based maternity care by community health workers (CHWs) • Home or community-based newborn care • Pregnancy and newborn care education for caregivers • Integrated mental health/psychosocial support (PSS) and SRH services
Populations	• Vulnerable newborns (small and sick) • Adolescents (10-19) and young people (up to 24) • Older people (particularly women) • People with disabilities • LGBTQIA+ • People living with HIV/AIDS • Sex workers • Urban refugees and refugees outside of camp settings
Capacities	• MISP to comprehensive SRH implementation • Skilled healthcare providers across SRH components • Collection and monitoring of data on maternal and neonatal mortality • Use of data for evidence-based decision-making • SRH supply chain management

What does innovation mean for the humanitarian SRH sector?

The meaning and role of innovation in the humanitarian sector has evolved significantly over the past decade. While creative problem-solving under the constraints of humanitarian crises is not new, the past decade has seen an uptake of tools and frameworks intended to establish innovation as an intentional, managed practice in the sector. It has also seen an evolution in how innovation is perceived by the sector – from an emphasis on new, disruptive and often digital solutions to a more nuanced understanding of innovations as both novel inventions as well as

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2. Gender-based violence-related gaps not included

adaptations of products, processes, or paradigms from elsewhere to humanitarian settings. As a starting point for this research, we used the HIF–ALNAP definition of innovation – 'An iterative process that identifies, adjusts and diffuses ideas for improving humanitarian action.' (Obrecht and Warner, 2016).

Through this research, we sought to understand how the humanitarian SRH sector defines innovation, what its defining features are, and to what extent this differs from other sectors. Rather than aiming to create another theoretical framework, we saw this exercise as one that could help give a common framing and direction to the sector, as well as identify any discrepancies between how the sector speaks of the ambitions of innovation and the types of interventions that are being implemented on the ground.

Overall, a consolidated definition and categorisation of SRH innovation in humanitarian settings should help clarify where innovation is actually taking place, and where further attention and efforts are needed.

Why talk about SRH innovations now?

The COVID-19 pandemic poses a significant risk to the delivery of SRH services as health systems struggle to cope with increased COVID-related patient load, service users are fearful of attending health facilities, contraceptive supply chains are disrupted, and key SRH services are de-prioritised or put on hold (Cousins, 2020, Coalition, 2020, Lokot and Avakyan, 2020, Riley et al., 2020). An increase in needs means that family planning, safe abortion care and GBV services, in particular, will require innovative modes of delivery to ensure women and girls can safely access these vital services during COVID-19 restrictions.

As well as the pandemic, changes in the nature and scale of humanitarian crises require new ways of accessing hard-to-reach populations, particularly those who are marginalised, on the move or internally displaced, who often 'fall through the cracks' (Chynoweth et al., 2018, IAWG, 2010). Through this research, we sought to identify innovations that were developed by or for frontline workers to support them in their work and in reaching these key populations.

Finally, the future funding environment for international aid is uncertain, in large part as a result of the economic consequences of the COVID-19 pandemic. The UK, one of the largest international aid donors, will reduce its foreign aid budget significantly in 2021. In this context, funders may look to invest limited resources more strategically, prioritising innovations with the greatest potential for impact, sustainability and scalability.

OUR METHODOLOGY

Recognising the real opportunities both research and innovation present in contributing towards increasing access to essential information, and quality, comprehensive and safe SRH services in humanitarian crises, Elrha commissioned this situational analysis.

The purpose was to gather key information to inform Elrha's work as well as that of others innovating to address the SRH needs of women, girls and SRH practitioners in humanitarian crises.

The overall aim of the research was to provide a clear understanding of the current status of SRH and innovation and identify opportunities where innovation could address unmet needs or priorities within the sector and identify potential areas for further research and development.

The consortium drew on our established research experience in SRH, practitioner experience and networks at policy and implementation level, and previous experience working with the HIF on the identification of innovation and investment opportunities within the humanitarian system. We were able to capitalise on close links with key organisations such as UNFPA, IPPF, ICVA and IAWG to reach out to a wide range of organisations including local providers.

The first task of the project was to define what is understood by innovation, noting differences between different types of professionals (e.g. midwives, gynaecologists, family planning campaigners) and different types of organisations (e.g. local versus international, public versus private providers and by world region). The second task was to identify common patterns in the characteristics of innovations, which generate some consensus amongst the wide range of actors involved in the delivery of SRH services. This was conceptualised by an innovation framework. The third task was to identify and collate the various innovations being implemented in the sector, reaching out to a wide range of SRH practitioners and providers, and to analyse these by innovation type and against humanitarian SRH sector gaps.

Methods used to collect data included: a review of peer-reviewed and grey literature on innovation and humanitarian sexual and reproductive health; 22 online, semi-structured, qualitative interviews with SRH practitioners from national and international organisations; 29 responses to a mixed-methods online survey distributed to SRH practitioners to gather specific examples of SRH innovations across a diverse range of humanitarian settings; and the development of 3 innovation spotlights to highlight examples of innovative practice. We also hosted two international webinars to engage key SRH stakeholders and encourage participation and sharing of knowledge. For more details of these methods, including the research questions used to frame the study, ethical considerations and limitations of the approach, see Appendix 1.

Engagement with Elrha and the Steering Committee

Elrha established a Steering Committee for this research, composed of experts from across the humanitarian sexual and reproductive health sector and those with specific knowledge of innovation and its application in humanitarian settings. Members were selected from both the Global North and the Global South and represent major INGOs and international agencies within the sector, with roles focusing on programming, monitoring and evaluation, and research and learning.

Elrha and the Steering Committee were actively engaged at all stages of the research, and advantage of their expertise and extensive networks was taken to provide feedback on the initial research design and subsequent draft reports, identifying participants for interview, participating in international webinars, and providing input to the identified innovations. See Appendix 2 for list of Steering Committee members.
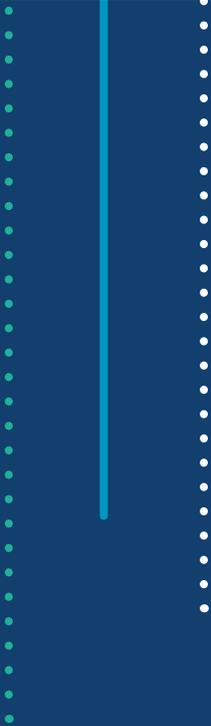
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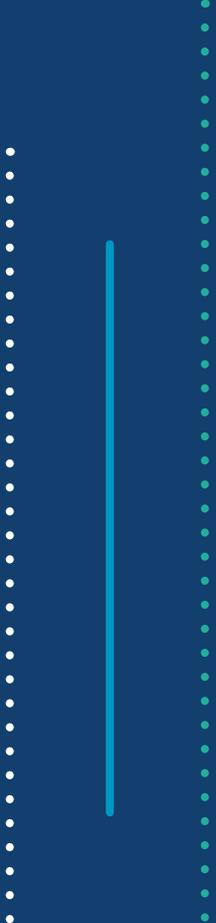
AN OVERVIEW OF INNOVATION IN THE HUMANITARIAN SRH SECTOR

Setting the scene: the evolving concept of 'humanitarian innovation'

The concept of innovation in humanitarian crises is not new. Most of the early literature around humanitarian innovation from the early to mid-2010s would often reinforce this point by highlighting that creative problem-solving is a core feature of humanitarian practice. What changed in the early-mid 2010s - starting, among others, with the publication of ALNAP's paper on *Innovations in international humanitarian action* (Ramalingam et al., 2009) and the establishment of Elrha's Humanitarian Innovation Fund in 2011 - was an explicit shift in framing around the opportunity presented by innovation, together with a suite of tools, frameworks, and practices from the private sector. In the following decade, these tools and practices have evolved, been adapted and reimagined, and new ones have been created to better suit the challenges faced both by communities affected by crises and the humanitarian sector itself.

As a starting point for this research, we carried out a rapid review of the available literature on humanitarian innovation to understand how the humanitarian sector understands innovation more broadly. The review included key reference papers on the subject such as Innovations in international humanitarian action (Ramalingam et al., 2009), More than just luck: Innovation in humanitarian action (Obrecht and Warner, 2016), and Evaluating Humanitarian Innovation: HIF-ALNAP working paper (Obrecht et al., 2017), Humanitarian Innovation: The state of the art (Betts and Bloom, 2014), as well as more recent strategic publications by international NGOs Innovation at UNHCR (UNHCR, 2019), UNICEF Global Innovation Strategy and Framework 2.0: The 'ABCs' of innovation (UNICEF, 2020), and Elrha's Humanitarian Innovation Guide (HIF-Elrha, 2021) – the first step-by-step guide to managing innovation in the humanitarian sector.

While reviewing these resources, we noted an evolution alongside adaptations in framing, tools used and frameworks regarding innovation. For example, models such as the 4Ps of innovation (Francis and Bessant, 2005) that group innovation into four categories – product, process, position or paradigm[3] – were introduced in the early 2010s as a way of starting to think and make sense of innovation. The limitations of this model were soon acknowledged by the sector as the lines between these categories are often blurred when it comes to humanitarian innovation.

As part of this review, we noted the availability of frameworks to distinguish humanitarian innovation from basic programming (Obrecht and Warner, 2016), criteria for what successful humanitarian innovation looks like (Obrecht et al., 2017), and models for the journey of an innovation from recognising a problem or opportunity through to scaling (see Innovation process in the Humanitarian Innovation Guide (HIF-Elrha, 2021).

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3.   See 'How can innovation thinking be applied' in the Humanitarian Innovation Guide for further details on the 4Ps categorisation.

Over the years, new concepts and practices were introduced and adapted to the humanitarian sector from fields such as design or software development. Some of these concepts include 'design thinking', 'human-centred design', 'agile' practices, and 'lean' methodologies. While these terms are often used interchangeably across the humanitarian sector, they refer to a series of practices or tools intended to support the effective, inclusive, and sustainable development of innovations that address a real need in the humanitarian sector.

Practices shaping humanitarian innovation

Design thinking: Design thinking encourages organisations to focus on the people they're creating for and leads to human-centered products, services and internal processes. Its key elements include empathy, ideation and experimentation (IDEO, 2021).

Human-centred design: A creative approach to problem solving…that starts with the people you're designing for and ends with new solutions that are tailor made to suit their needs (IDEO, 2021).

We note in the following section that the terms '**human-centred design**', '**user-centred design**', or '**community-centred design**' are often used interchangeably in the humanitarian sector. We acknowledge that there are nuances between each of these terms and that different organisations will explicitly refer to one of these terms in their internal practices. For the purpose of this report, we will use the term '**human-centred design**' to refer to an approach that ensures that a process, service or solution works well according to how people can, want or need to use it, instead of designing a product or service that requires people to adapt or change in some way, or else be excluded.

Lean: The Lean Startup provides a scientific approach to creating and managing startups and getting a desired product to customers' hands faster. (The Lean Startup, 2021).

Agile: Agile is a software development process that works in iterative, incremental cycles known as sprints. Unlike traditional development methods, agile is flexible and

In the past few years, several organisations including the HIF, have developed guidance on the use of specific practices such as human-centred design methods in humanitarian settings (Hamilton et al., 2020, Bourne, 2019, Pivotal, 2017).

As these practices become more established in the humanitarian sector, the conversation has similarly evolved from designing innovations fit for those affected by crises to co-creating innovations with them. Programmes such as the MIT D-Lab Humanitarian Innovation Program (MITD-Lab, 2021) are exploring novel ways of enabling co-creation and refugee-led design by making design thinking practices and tools, such as prototyping, widely available to people with little or no formal schooling.

Looking to understand 'humanitarian innovation' in the current global climate, shaped by calls to advance the overdue decolonisation of the humanitarian sector, raises new considerations. As evident in this rapid review, most of the tools, language, frameworks and practices of humanitarian innovation have originated in the global North. While these may offer valuable skills and tools for solving problems, the promotion of these practices has often taken place to the detriment of indigenous creative knowledge or practices which were unwittingly silenced, or not given the same opportunities to evolve and adapt to humanitarian settings and demonstrate their potential (Jimenez and Roberts, 2019).

This rapid overview of the evolution of the concept and practices of innovation in humanitarian settings intends to set the scene for our exploration of innovation in the humanitarian SRH sector. Definitions used in practice will often make reference to different themes and practices outlined above.

Sample definitions of innovation

Innovation as a process

"An iterative process that identifies, adjusts and diffuses ideas for improving humanitarian action" (Obrecht and Warner, 2016).

"Innovation is the process of translating an idea or invention into a good or service so that it creates value" (UNHCR, 2019).

Innovation as an outcome

"UNICEF defines innovation as a new or significantly improved solution that contributes to progress for children and accelerates results for children or young people" (UNICEF, 2020).

"[...] new ideas and approaches to solving some of today's greatest sexual and reproductive health and rights challenges. The innovation may be to reach a new target group, introduce a model of service delivery, or to address a sensitive issue, and often aims to benefit a marginalized, vulnerable or disempowered group" (IPPF, 2021).

When it comes to defining innovation in humanitarian settings, definitions often cover a combination of the following elements:

What it is – innovation is often described as either an outcome (e.g., an idea or an invention or, more specifically, a product, service, policy, partnership model) or a process (e.g., a way to achieve an improvement).

What it aims to achieve – an improvement or an added value for the sector/wider system.

How it achieves this – increasingly, definitions have explicitly highlighted the dynamic and participatory nature of innovation by including references to co-creation, iteration or human-centred approaches, as well as emphasising the importance of local problem-solving practices and knowledge.

Who it is for – some definitions explicitly highlight the communities that are meant to directly benefit from innovation.

How these elements come together, and which features of innovation are highlighted, will depend on the specific organisation, its culture, and the overall context in which it is operating. As part of this research, we were interested in understanding how the humanitarian SRH sector defines innovation, which of the above themes and practices are most present, and whether SRH humanitarian innovation presents any distinct features.
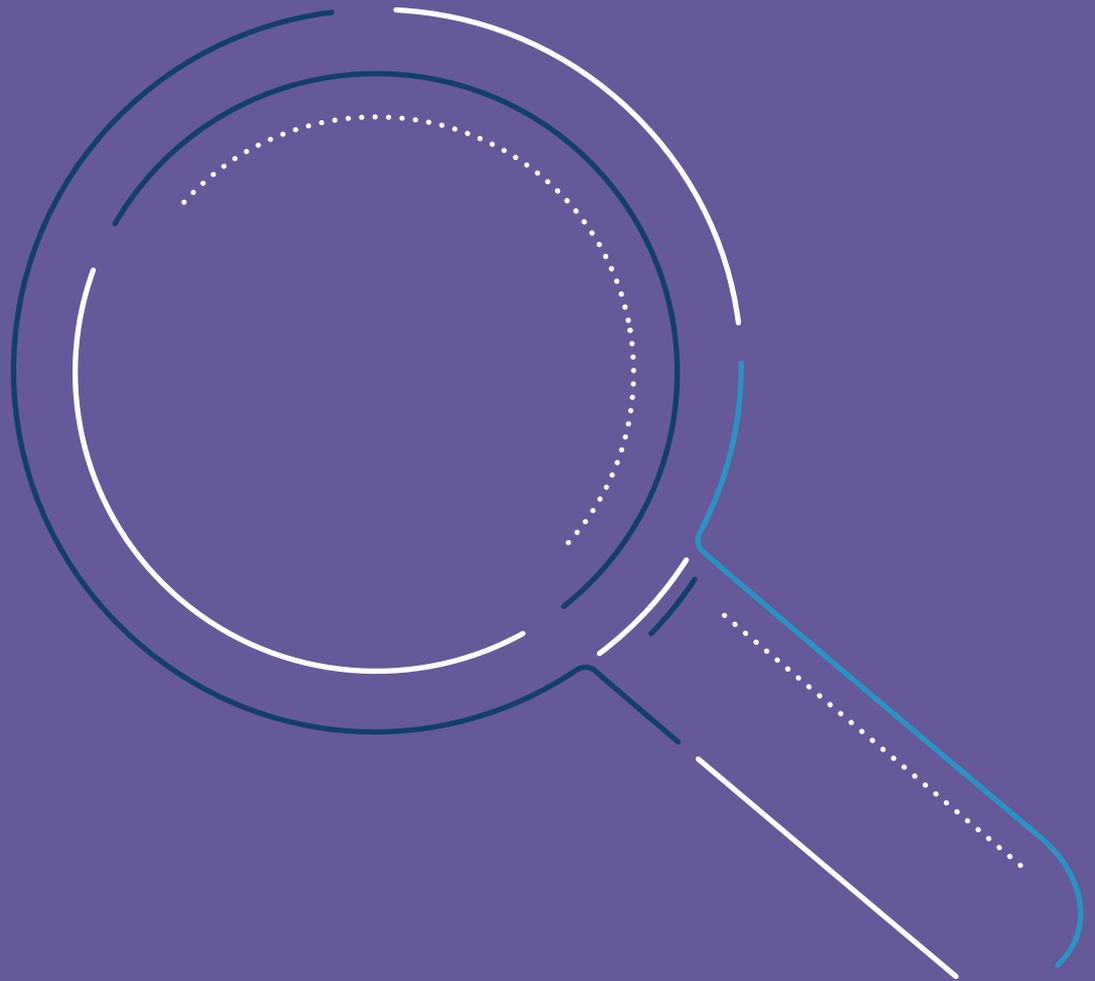
What did we find?

How the SRH sector understands humanitarian innovation

> *"Innovation is improving opportunities and capacities to deliver quality services in the humanitarian sector."*
>
> (Key informant interview (KII), 2021)

To learn what the humanitarian SRH sector understands by innovation, we interviewed 22 representatives from international and local humanitarian NGOs, at headquarters, regional and local levels working in the SRH humanitarian sector. As a high-level observation, the interviewees seemed to consistently take a broad view with regards to the meaning of innovation, while placing a greater emphasis on what it achieves and how.

Below are three high-level insights regarding how innovation is understood in the humanitarian SRH sector:

A nuanced understanding of innovation

"Innovation means new initiatives that contribute in a unique way or an adaptation. [...] old interventions applied to a new setting or a new population."
(KII, 2021)

"Innovation is not necessarily something new, but the transference of something that's working well in a development setting to a humanitarian setting, with adaptations."
(KII, 2021)

"There is the misconception that innovation has to be expensive technology [...]. Innovation can be small like changing the layout of an operating theatre or introducing a new checklist for IUD insertion."
(KII, 2021)

Representatives, whether at headquarter level or closer to implementation, had a nuanced understanding of what innovation means. This means that they recognised innovation as both the invention of new interventions, as well as the adaptation of existing ones to new contexts or users. Similarly, most of the interviewees stated that innovation can be both incremental – "doing what we do but better" – or radical – "doing something completely different"(Bessant, 2014) – depending on the context and the challenge being addressed. A few explicitly stated that innovation is not about the extremes – new, radical, flashy – but about incremental improvements.

Similarly, digital solutions were seen as one of many different types of innovation and not synonymous with innovation in and of itself.

Innovation as a broad concept

"Innovation is understood as a broad thing – initiatives that creatively bring solutions to problems, new ideas or adapting existing ideas that link to SRH challenges."
(KII, 2021)

"[Innovation is] not always a new thing. It can be innovative ways to manage a high-impact evidence-based intervention to address unresolved basic issues."
(KII, 2021)

Interviewees all shared the understanding that innovation can take many forms. Some interviewees defined innovation as a process, or a way of achieving improvements, while others referred to innovation as the resulting ideas or solutions. Some interviewees used open language such as 'ideas', 'solutions', 'interventions', 'improvements' when talking about innovation, while others referred to explicit categories such as services, products, delivery mechanisms, technologies, even cultural or paradigm changes. Few interviewees explicitly named policy or advocacy as a type of innovation.

Innovation as a human-centred and design-led approach

> *"Innovation is about a design process [...] that means including adolescents and children in human-centred design."*
> (KII, 2021)

> *"Innovation can be a focus on creative thinking and acting, the way that we design and deliver interventions, the way we engage stakeholders or the way we roll out programmes and the intervention narrative."*
> (KII, 2021)

Most interviewees explicitly referred to design practices and principles when trying to define or frame innovation. Practices frequently described included iteration, stakeholder or user engagement, prototyping and co-design. We understood this to indicate the high prevalence of design thinking and practices, at least at a conceptual level, among those engaging with innovations in humanitarian settings. Across the interviews, we heard explicit references to 'human-centred design', 'user-centred design', or 'community-centred design'. While we note above that there is a distinction in nuance between these terms, our understanding is that these were used interchangeably to denote a process by which solutions are designed with the people who will benefit from them to best align with how they can, want or need to use them.

What does 'good' humanitarian SRH innovation look like?

A precise definition of innovation may be elusive or challenging to articulate, but what it should achieve, and how, are much more familiar aspects that can guide emerging practices and activities. As part of the interviews, respondents were also asked to describe the key features that come to mind when trying to describe innovation. The following is a list of the most common features mentioned:

1. Novel

> *"Innovation means newness or going where no one has gone before."*
> (KII, 2021)

All interviewees noted that an innovation must have an element of novelty, whether this is a new solution (invention), or the adaptation of an existing solution to a new humanitarian context, or user group.

2. Tackles a known humanitarian SRH problem

> *"[...] an approach to find solutions to often complex and long-standing problems."*
> (KII, 2021)

"[Innovation] should bring relief."

(KII, 2021)

A second common feature of innovations noted in all of the interviews was that innovations must focus on addressing a known humanitarian SRH problem. Interviewees had different ways of framing this point, reflecting that innovations are either expected to solve the problem or bring a significant improvement to the existing state.

3. Human-centred and iterative

"Innovation will depend on the target population and the country context and how that is changing."

(KII, 2021)

All interviewees spoke about the importance of involving those who will ultimately benefit from the innovation in the process of developing it – either from the point of defining needs, sourcing potential solutions or co-designing these. Iteration was seen as a key component of this process and was understood as responding to feedback and learning as the process evolves. Noting that conversations happening elsewhere in the humanitarian sector, where the emphasis is increasingly on community-led innovations, it is worth noting that most interviewees spoke of co-creation with communities, but not explicitly about innovations being originated by communities. Similarly, few interviewees spoke explicitly about involving stakeholders in the latter stages of the innovation process such as monitoring and evaluation, sharing lessons learned or scaling interventions.

4. Sustainable and scalable

"Innovation is more than a one-time thing."

KII

Interviewees noted the sustainability of solutions as either a need for interventions to be scalable beyond a single application, or contextual so that efforts to develop a solution are capitalised and can have a greater impact. This point was often mentioned alongside the need for innovations to be sustainable – understood as operating beyond a grant or the pilot stage.

5. Collaborative

"We need more innovation in how we engage people and bring in all stakeholders."

KII

The collaborative nature of humanitarian SRH innovation was raised in several interviews. Interviewees reflected on how 'good' humanitarian innovation will bring together a suite of relevant and complementary stakeholders to support the development, and the scaling and acceptance, of the intervention. Interviewees spoke about the importance of establishing relationships with local actors including government, local organisations, community leaders and private organisations to ensure the suitability and sustainability of the proposed intervention.

6. Generates Learning

> *"Initiatives should be cost-effective, scalable and also able to generate evidence. There is a lack of data in SRH and evidence from innovations that can be used to influence service providers and policy makers."*
>
> (KII, 2021)

All interviewees spoke of the need for innovations to address humanitarian SRH challenges or offer improved solutions. Though only a few interviewees explicitly mentioned the need for innovations to generate 'evidence', we took this to mean that there is insufficient learning to back up the extent to which an intervention is addressing a problem. In a similar vein, several interviewees spoke of the need for better practices around documenting and sharing lessons learned from developing and implementing innovations in the humanitarian SRH sector. Interviewees spoke about the importance of capturing and sharing emerging practices, and some even referred to documentation as an innovation itself.

7. Regenerative

> *"Innovations grow from innovations."*
> (KII, 2021)

Innovations, by encouraging a creative, collaborative and iterative approach, can nurture a context where other potential solutions can be explored and supported to flourish.

This list of identified characteristics of what constitutes innovation overlaps with existing frameworks or features of innovation identified through our rapid literature review (e.g., see (Obrecht and Warner, 2016) for criteria for successful humanitarian innovations). These findings indicate that, at least in principle, the SRH humanitarian sector has a shared, broad understanding of humanitarian innovation and its ambitions.

In addition to the above characteristics, there is one further that we would like to propose.

8. Ethical

While none of the interviewees explicitly mentioned 'ethical' as a feature of humanitarian SRH innovation, we deem it important to make this explicit in this report. Elrha's new Ethics for Humanitarian Innovation resource, available on the Humanitarian Innovation Guide, suggests a values-based approach for ethical innovation. In taking this approach, innovation can address a wide range of ethical issues, such as the principles of accountability and justice, and interrogate concepts such as rights, power, managing expectations and doing no harm. This becomes particularly critical when innovation processes include the active participation - where relevant and suitable - of marginalised or vulnerable populations such as women and girls living in humanitarian settings. This is also particularly relevant to the SRH sector where ensuring women, girls and marginalised groups can access their reproductive rights is key, especially in relation to family planning and safe abortion care.

Spotlight on effective human-centred design practices

A justification for the innovative nature of many humanitarian SRH interventions is that they take a human-centred design approach to their development process. This includes, for example, involving women and girls, or humanitarian practitioners, in the process of identifying and defining needs, brainstorming and co-creating potential solutions, or providing feedback on iterations. However, this co-creative process is rarely written up. This means that during this review it was often difficult to assess what was particularly innovative about a co-designed process, or the resulting solution, apart from it being 'new to us'.

While participatory practices in humanitarian programming are not new, the past decade has seen an increase in the promotion, uptake and adaptation of design thinking and human-centred design practices in the sector, particularly when looking to develop innovative solutions to pressing challenges.

For example, since 2017, Elrha's HIF now integrates key principles of human-centered design, participation and ethics into all Innovation Challenges. Other humanitarian funders such as MSF have adopted a similar approach, requiring the involvement of end users in the process of developing ethical innovations (*MSF Ethics framework for innovation (Sheather et al., 2016*). These practices and expectations point to the fact that the humanitarian sector has reached a certain level of familiarity and knowledge when it comes to developing innovations in a human-centred way.

For example, in Dzaleka refugee camp in Malawi, Plan International used girl-centred design principles to co-create a tailored laundry bag to allow girls to wash and dry their

menstrual products with privacy. The team started by spending a week with the girls conducting insights generation activities to map out their lives and understand how any intervention might fit with their needs and priorities. Next, girls participated in ideation workshops with sector experts to discuss different options available to them. The girls were then presented with a prototype which they provided feedback on, changing the colour to make it acceptable to them and adding a unique and discreet identification number for each girl. The final design was approved by the girls and a product was created that will not only allow them more freedom and dignity during menstruation, but also provides an opportunity to generate income from selling the laundry bag to others.

Looking across the other projects identified in this research which utilised human-centered design, a key insight was that although most key informants spoke about projects including women and girls in the development process, most consultation involved asking for feedback on predefined options rather than creating opportunities for the women or girls to define their needs and lead co-production activities.

What's next?

From the interviews, we understood that new approaches are needed to genuinely and equitably involve those who will benefit from the innovation, as is called for in effective human-centered design process. This involvement is required at each stage in the innovation process, but particularly in solution design or co-production. Rather than inclusion in consultation processes, co-production should ultimately lead to ownership of interventions by women, girls and marginalised populations to ensure sustainability and increase the likelihood of scale-up.

A shared understanding of humanitarian SRH innovation across the sector

To support the SRH humanitarian sector to grow in a shared direction, we deem it important for there to be shared tools and understanding. With this aim in mind, building on the research insights and noting conversations happening in the wider humanitarian sector, we propose the following definition of humanitarian SRH innovation. We are proposing this as a working version for the humanitarian SRH sector to carry on iterating and adapting to local contexts and needs.

A working definition of humanitarian SRH innovation:

An iterative, co-creative process that leads to improved, inclusive and sustainable solutions to pressing SRH challenges faced by women, girls, marginalised populations and humanitarian practitioners.

We propose this framing of the definition and the prioritisation of these features because:

- **"Iterative and co-creative"** – Where appropriate and ethical, we encourage innovators to take an iterative and co-creative approach at each stage of the innovation process – from developing solutions with those who will most benefit from them, to co-designing and implementing evaluation strategies, and all the way to co-creating uptake strategies. To emphasise the value and importance of this type of co-creative relationship and ownership of innovations, we propose placing this at the forefront of the definition.
- **"Process"** – we propose framing innovation as a 'process' to acknowledge the various iterative steps implied by an innovation project – from identifying a problem or an opportunity through to co-designing it; implementing it in humanitarian settings; gathering evidence on its effectiveness and impact; and, finally, developing and implementing a scale strategy.
- **"Improved, inclusive and sustainable"** – are desirable features of innovation that were consistently mentioned in conversations with SRH sector actors. While 'improvement' was often seen as a core feature, 'inclusive' and 'sustainable' were more often framed as ambitions.
- **"Women, girls, marginalised populations"** – to acknowledge also marginalised populations including LGBTQIA+, people with disabilities and older people.
- **"Humanitarian practitioners"** – to emphasise that some SRH innovations will directly target humanitarian practitioners and their work, to enable them to provide improved SRH support for women, girls, and marginalised populations.

It is important to note that this proposed definition avoids making any explicit reference to '**novelty**'. This is deliberate as it seems well understood by the SRH humanitarian sector that innovation can refer to both completely 'new', or solutions 'adapted' to new settings or communities. To contextualise the insights from the interviews, we explored the extent to which these views on humanitarian SRH innovation align with SRH innovations being implemented in humanitarian settings. The next section details our approach and insights gained from an exercise that solicited and mapped SRH humanitarian innovations addressing recognised gaps in the SRH humanitarian sector.
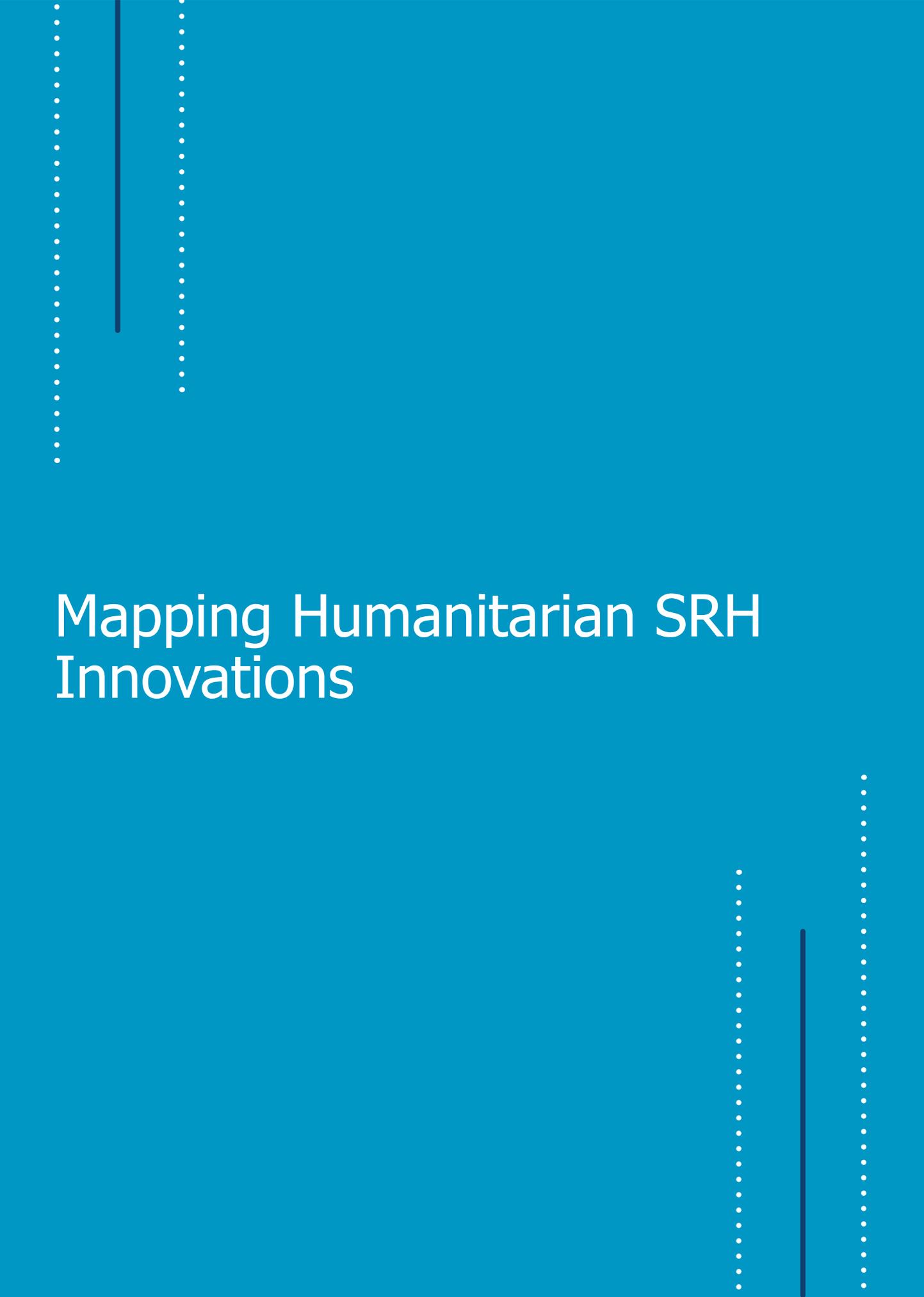
Mapping Humanitarian SRH Innovations

MAPPING HUMANITARIAN SRH INNOVATIONS

Further to conversations around the defining features of humanitarian SRH innovations, we explored two further questions:

? To what extent does the sector's conceptual understanding of SRH innovations align with SRH innovations implemented in humanitarian settings and how these are developed?

? To what extent are existing and emerging SRH innovations addressing priority gaps in the SRH humanitarian sector?

To begin, we developed an internal set of criteria to help distinguish SRH humanitarian innovations from standard programming, building on the features outlined by the key informants and existing innovation eligibility criteria (Obrecht and Warner, 2016). However, we noticed that many of the examples gathered from the literature, interviews and online survey did not have enough documented information about the intervention's development process to enable these criteria to be applied. Based on information generated from the interviews, although the sector's conceptual understanding of innovation was detailed and contained elements of inclusion, collaboration, evidence-generation, sustainability and scalability, in reality this equated to the "gold standard" of what innovation should look like, rather than the reality of current at implementation level.

We therefore created a simplified version of the criteria, based on the feasibility of gathering relevant data, and developed the following simplified criteria as the basis for examining SRH innovations:

1. **Relevance for SRH sector:** Is the intervention addressing a (well) defined problem or opportunity for improvement in the SRH sector?

2. **Fit with the humanitarian sector:** Is the intervention aimed at, or has it been trialled in a humanitarian setting/ with people affected by humanitarian crisis?

3. **New learning for the humanitarian sector:** Does the intervention intend to, or has it led to, new knowledge or evidence for the humanitarian sector if in design/pilot stage? This would include learnings regarding either the success or failure of an intervention in humanitarian settings, as both could contribute new knowledge to the sector.

If the answer to all of the above was **yes**, then the intervention was added to the list of innovations.

We wanted to keep these eligibility criteria simple and succinct to allow us to be inclusive when collating example interventions. In particular, we decided to use '**new learning for the humanitarian sector**' as a criterion as we understood from the interviews that the humanitarian SRH sector had a broad definition of innovation, including both **inventions** (interventions new both within and outside of the humanitarian sector) as well as **adaptations** (existing interventions but new to the humanitarian sector).

The focus on new knowledge for the humanitarian sector was also aimed to distinguish innovation from **business as usual** or **adoption** where interventions are known to the humanitarian sector, but are new to a particular organisation, setting or user group (see visual below). The implementation of the latter solutions might lead to new insights and practices for the respective organisations or settings, but would not generate new knowledge or practices for the wider humanitarian sector.

STANDARD PROGRAMMING
Known to organisation/sector

INNOVATION
Unknown to sector/system

Business as usual

Known to sector

Known to organisation

Adoption

Known to sector

New to organisation or context

Adaption

Unknown to sector

Invention

Unknown both within and outside sector

Low   High
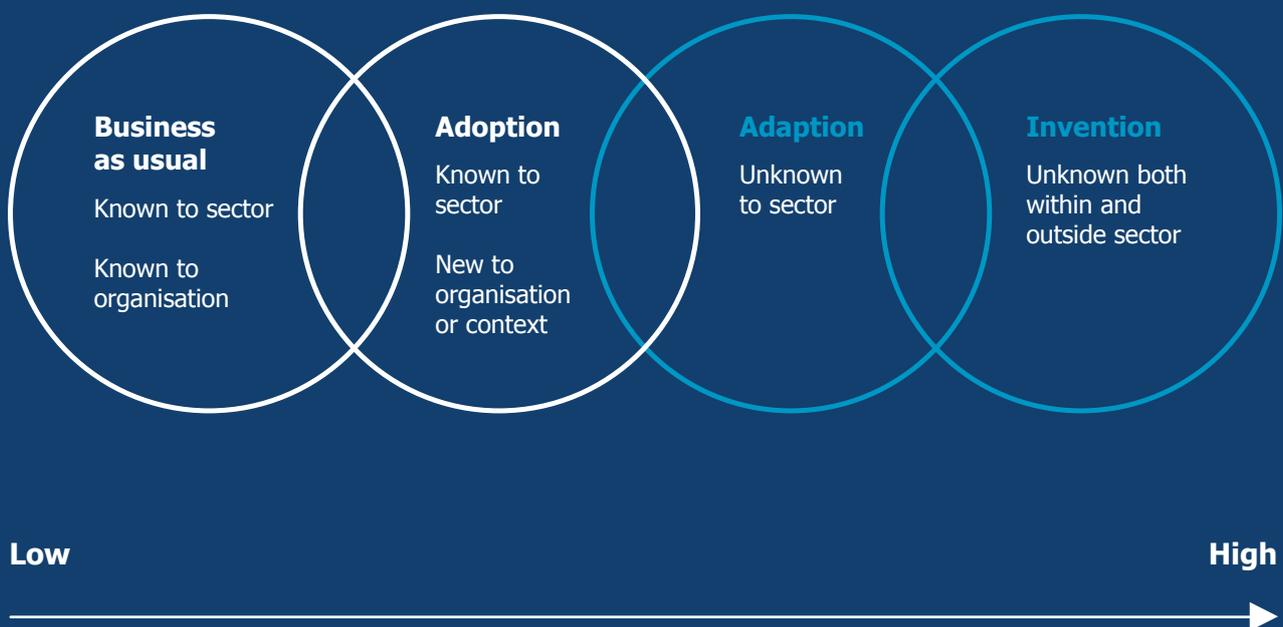
Knowledge generated for the sector/system

Adapted from More than just luck: Innovation in humanitarian action (Obrecht and Warner, 2016)

34
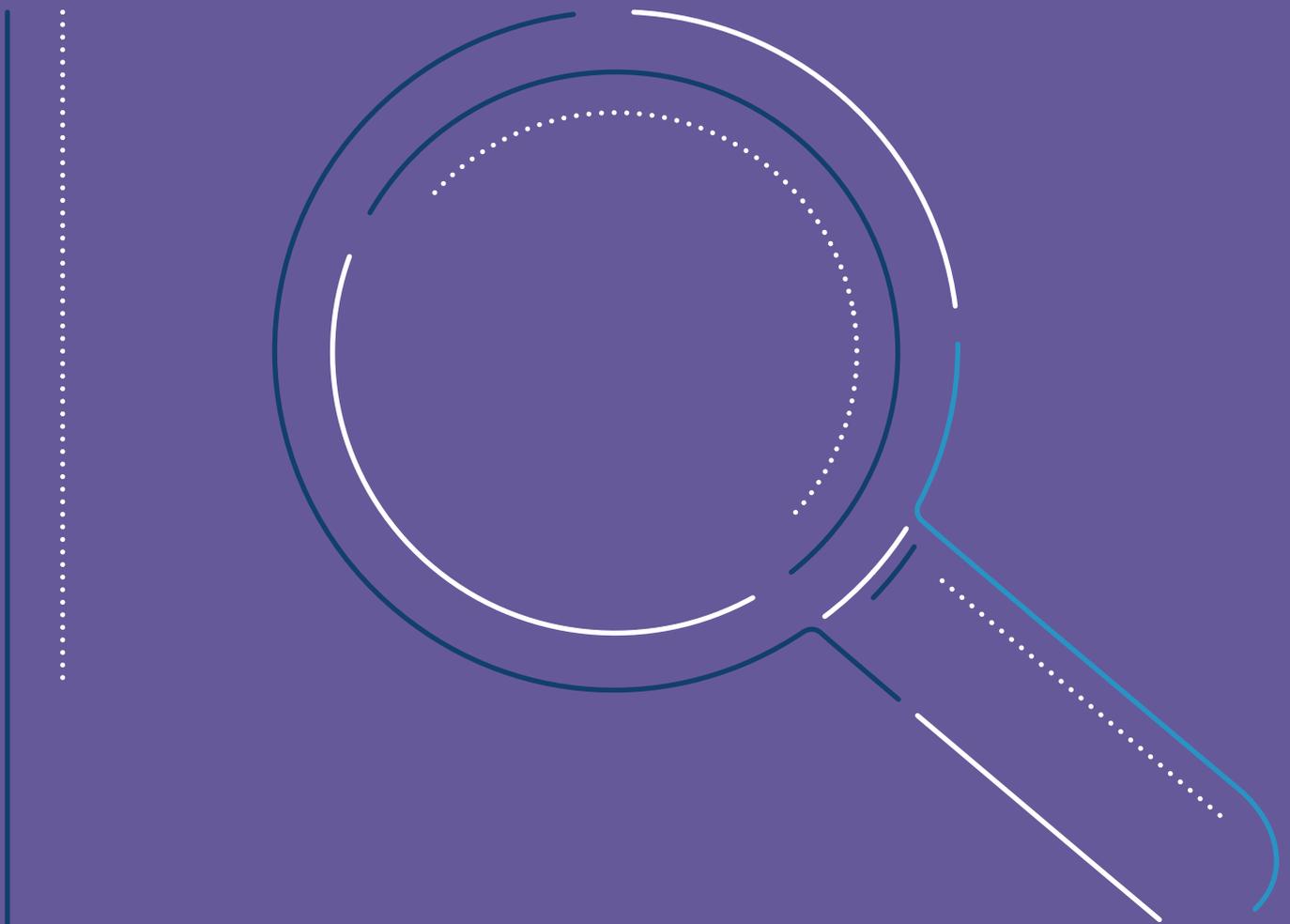
What did we find?

In this section of the report, we present the results of the mapping phase of the research. This includes a descriptive analysis of the examples of innovation collected, including specific details on the participation of key stakeholders, an analysis of the types of innovation identified, a brief look at where innovations lie along the innovation process, and a thorough mapping of the innovations against the key gaps in the humanitarian SRH sector.

Through our mapping, we identified 113 examples of SRH interventions considered to be innovative by different stakeholders.

Forty-four examples were extracted from key informant interviews, 18 examples were collected through the online survey (13 English, 4 French and 1 Spanish), and the remaining 53 examples were found through the literature search of both academic and grey literature and the websites of key organisations.

After applying the eligibility criteria, 26 examples of SRH innovations in crisis settings were identified (see Appendix 3). The main reasons for excluding identified or suggested examples included:

- **Interventions were 'new to the implementer' rather than new to the humanitarian sector:** Many of the examples of humanitarian SRH innovation received or found in the literature were described as innovations *because they were new to a particular organisation or setting*. However, most of these were not new to the broader humanitarian sector. They were either good practices that were already documented and recommended by the WHO for use in humanitarian settings, or were included in the MISP.

  Such examples included: community-based transportation systems for pregnant women; digital platforms, apps and hotlines for SRH information, peer education and school-based CSE; health promotion through community outreach and radio; using TBAs for maternal health; training on reusable sanitary products; newborn resuscitation; midwife consultations with pregnant and postpartum women; dialogue groups with women and girls on SRH topics, and various youth-led activities.

  We acknowledge that adoption of any of these interventions would require substantial effort on behalf of the implementing organisation. However, for the purpose of this research, interventions that were less familiar, or would generate new knowledge for the sector were prioritised.

- **No or limited details about the interventions, what was novel about them and/or how they were implemented:** For most of the examples identified, it was difficult to access publicly available information about how these were developed, who was involved in the process, or any challenges faced. Process documentation was often missing or internal to the implementing organisations', and evidence of impact often scarce.

- **Interventions were not implemented in a humanitarian setting:** As part of our research we also identified a number of innovative SRH interventions that had not yet been trialled in humanitarian settings. For example, interventions targeting the urban poor or people in remote, rural locations were not considered humanitarian settings as defined by the review criteria. Although such population groups often have multiple unmet SRH needs, the contexts in which they were located did not fit within our definition of a humanitarian crisis setting. However, these examples are included in Appendix 4 as there could be opportunities for adaptation and transfer to humanitarian settings.

SRH components

The 26 innovations we identified were diverse and covered a range of sexual and reproductive health components, including safe pregnancy, delivery & postpartum care (7), health system strengthening (5), menstrual hygiene management (5), family planning (3), safe abortion/post-abortion care (3), HIV/AIDS & STIs (3), general SRHR programming (3) and newborn care (2). Some innovations focused on multiple SRH components and so were included in all relevant categories. As the graph shows, the majority of innovations focused on safe pregnancy, delivery and postpartum care, and innovations around newborn care were least common.

SRH components covered by identified innovations

Component	Value
Safe pregnancy, delivery & postpartum care	7
Health system strengthening	5
Menstrual hygiene management	5
Family planning	3
Safe abortion/post-abortion care	3
HIV/AIDS & STIs	3
General SRHR programming	3
Newborn care	2
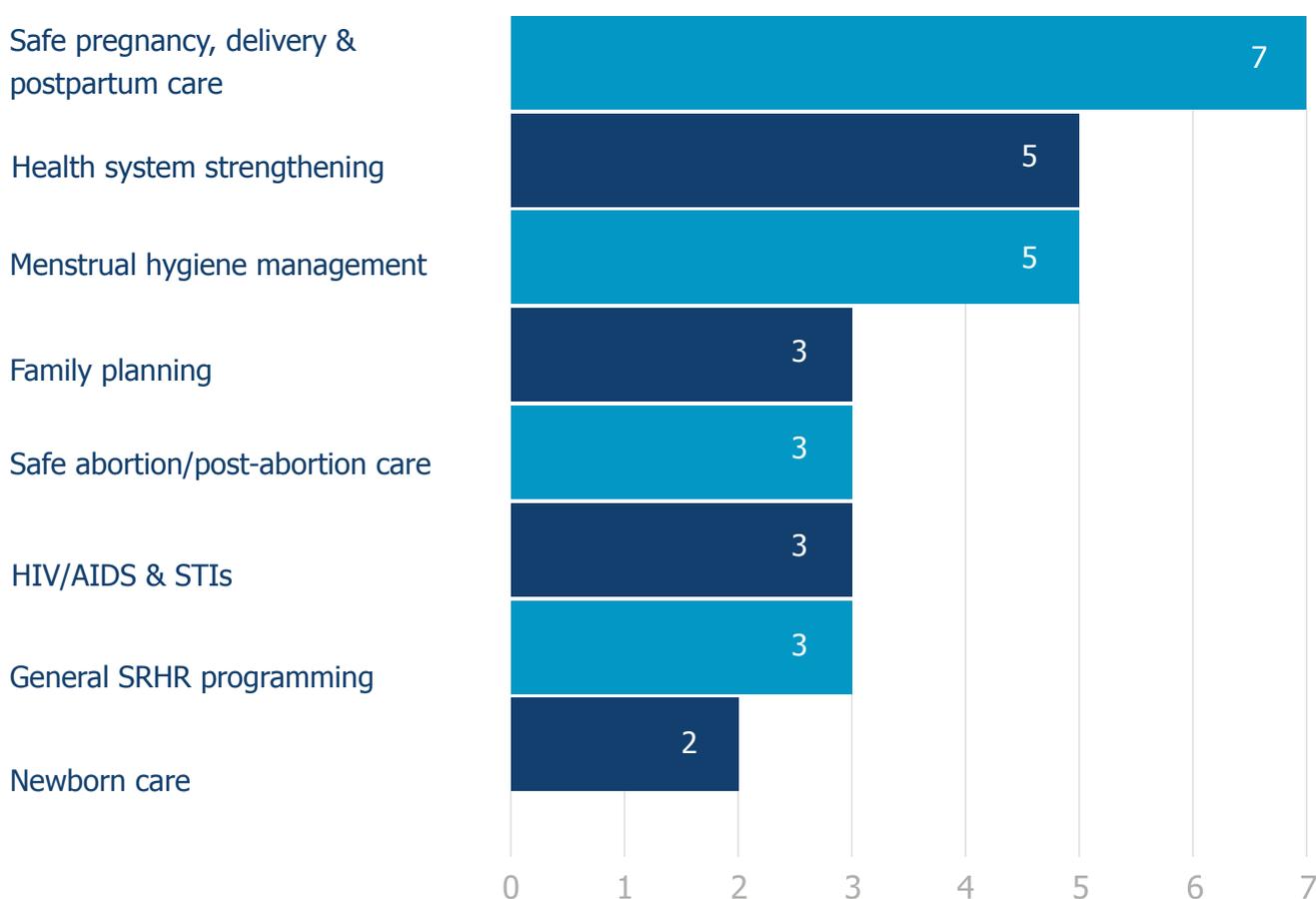
Geographic spread and humanitarian setting

The 26 selected innovations had been designed and/or piloted in 21 different low-and-middle-income countries across Africa, the Middle East, Asia and the Pacific, and South America. Innovations were found in a variety of humanitarian settings, including conflict/post-conflict, natural hazard-driven disasters, public health emergencies and protracted crises. The largest proportion of innovations came from conflict/post-conflict settings (69%).

Visual mapping of the geographic spread and humanitarian setting

'Global' innovations indicate those that have not been tailored to a specific humanitarian setting, rather are considered to have global, or widespread, potential for use/impact. 'Multi-country' innovations are tailored to one or more specific humanitarian settings. The numbered circles indicate their various settings where appropriate.

● Global
● Multi-country

1	PATH & John Snow Inc.	**15**	UNFPA & Health Literacy Promotion Division, Ministry of Health and Sports, Association Francois- Xavier Bagnoud, Myanmar Medical Association, Marie Stopes International
2	Save the Children and Columbia University		
3	PATH Uganda (funded by UNFPA)	**16**	IPPF member association
4	USAID Global Health Supply Chain Program	**17**	IPPF member association
5	IAWG & SCOPE	**18**	MSF
6	IAWG	**19**	Maternity Foundation (Save the Children delivering)
7	MSF		
8	UNHCR Ecuador	**20**	MSF & howtouseabortionpill.org
9	World Hope International & Lehigh University	**21**	MSF
10	CARE Bangladesh	**22**	HERA & Just One Giant Lab (JOGL)
11	YLabs	**23**	MSF
12	Plan International	**24**	Bridge to Health Medical and Dental USA & MedGlobal
13	World Vision Vanuatu, LSHTM. Water Aid Nepal, LSHTM	**25**	Cape Breton University, South Sudan government
14	IFRC	**26**	The Makerere University School of Public Health

Target population

For the majority of innovations, the target population was women of reproductive age (WRA) (10), followed by SRH practitioners/healthcare providers (8), refugees (5) adolescents & young people (3), LGBTQIA+ populations (3), people with disabilities (3) sex workers (2), host communities (2), people living with HIV/AIDS (1), newborns (1) and internally displaced persons (1). Some innovations targeted multiple populations and were included in all relevant categories.

Populations targeted by identified innovations

Population	Count
Women of reproductive age	10
SRH practitioners	8
Refugees	5
Adolescents and young people	3
People with disabilities	3
LGBTQIA+ people	3
Sex workers	2
Host communities	2
People living with HIV/AIDS	1
Newborns	1
Internally displaced persons	1
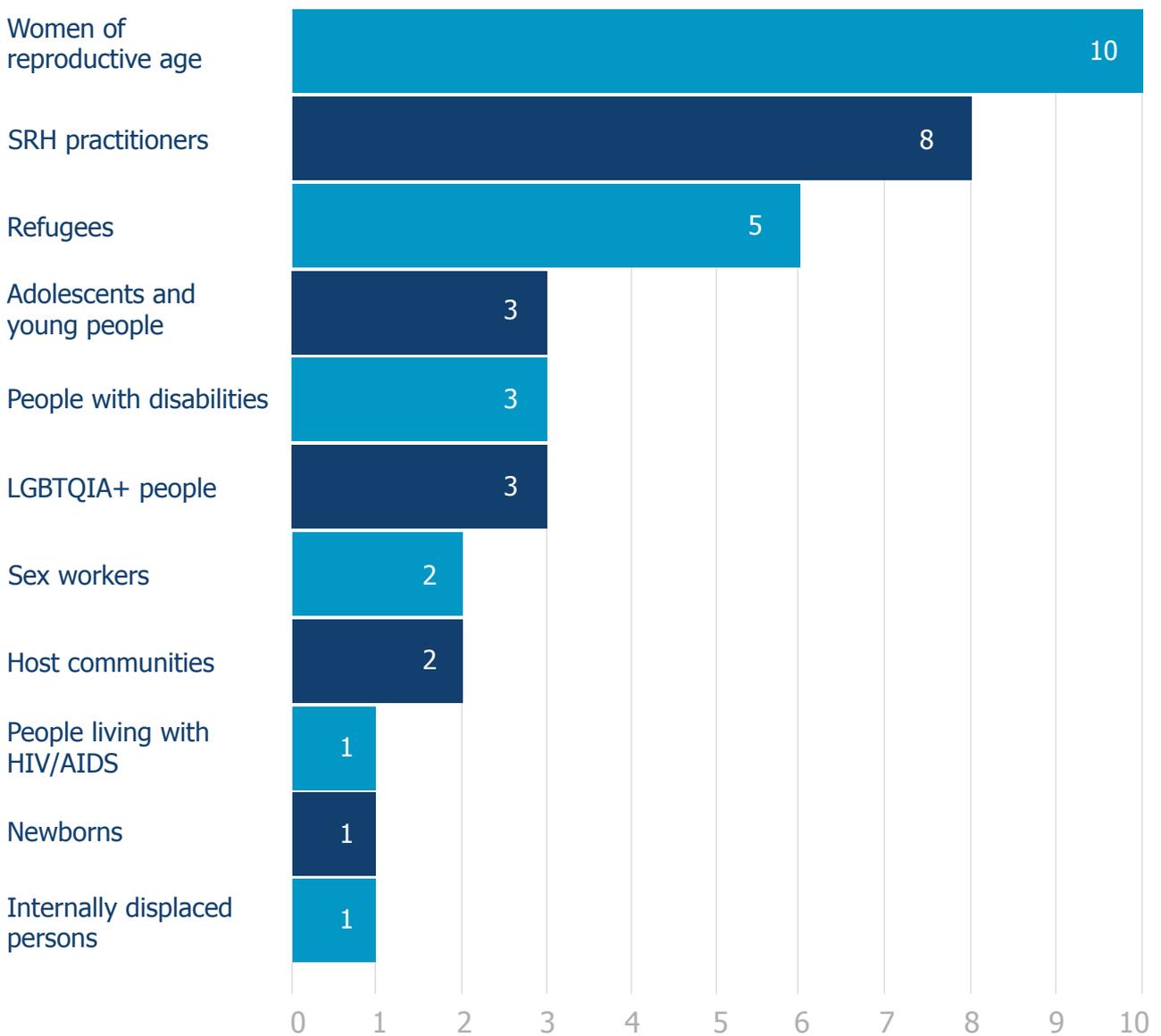
Participation of women, girls and SRH practitioners

Information on the participation of women, girls, marginalised groups and SRH practitioners in the conceptualisation, design, implementation or evaluation stages of the intervention was not readily available for many of the innovations identified (12 out of 26). However, those innovations that did use participatory approaches to engage with these key stakeholders did so in a variety of ways ranging from consultation to co-creation. For example, Plan International used girl-centred design to co-create their innovative solution in Malawi. For other innovations, such as the provision of home-based safe abortion in the Middle East, and the development of modified dignity kits for women and girls with disabilities in Fiji, women, girls and SRH practitioners were consulted on the design of the pilot or product, but details were lacking on the specific participatory mechanisms used. For innovations more clinical in nature, such as the development of an e-partograph for improving referrals for emergency obstetric care in Uganda and the point-of-care ultrasound training for healthcare providers in Yemen, no formal stakeholder consultation was conducted.

Types of innovation

To further analyse the innovations identified, we developed a more granular typology of humanitarian SRH innovations. This categorisation builds on the original 4Ps of innovation – product, process, paradigm, and position – but more explicitly outlines types of innovations that frequently came up in the research, as well as types that were less frequent in practice but that were highlighted by the literature, or in the interviews, as types of innovation that could prove impactful in addressing complex humanitarian challenges such as SRH.

Populations targeted by identified innovations

Product	Service	Advocacy
New/adapted products	New/adapted services	New/adapted policies and

Product: Digital products | Non-digital products

by output

Development & design process	Mode of delivery	Partnership model	Approach to scale/ dissemination
New/adapted ways of developing products or services	New/adapted ways of providing access to products or services	New/adapted partnerships that enable uptake	New/adapted ways to disseminate and scale (incl. business models)

by approach

41

Three of the categories depict types of innovation by output:

Product
- Digital – such as mobile apps, online platforms, telemedicine
- Non-digital – such as health products, checklists/toolkits, training materials

Service – such as service provision, training, education

Advocacy – such as the formulation of new policies or adaptation of existing policies

The remaining four categories depict innovations in terms of how interventions were developed:

Development and design process – such as human-centred design, new ways of developing interventions

Mode of delivery – such as self-care, mobile delivery, community-based delivery

Partnership model – such as new types of partnership or novel ways of partnering

Approach to scale and dissemination – such as novel ways to scale and disseminate innovative practice

The reason some of these categories are explicitly mentioned is to draw attention to them as types of innovation that could be explored. For example, **advocacy interventions** are particularly important in the SRH sector to generate new policies and regulation and enable the implementation of safe services for women and girls. We make a distinction between '**development and design process**' and '**mode of delivery**' as two different types of innovation to give a more granular categorisation of the examples identified.

The mapping matrix below shows the distribution of innovation examples in relation to the SRH component they are addressing and the type of innovation taking place. Some innovation examples focus on multiple SRH components, for example safe pregnancy, delivery and postpartum care and newborn care, or have multiple innovative components, such as a new product together with a novel mode of delivery. These examples have therefore been included in all relevant columns.
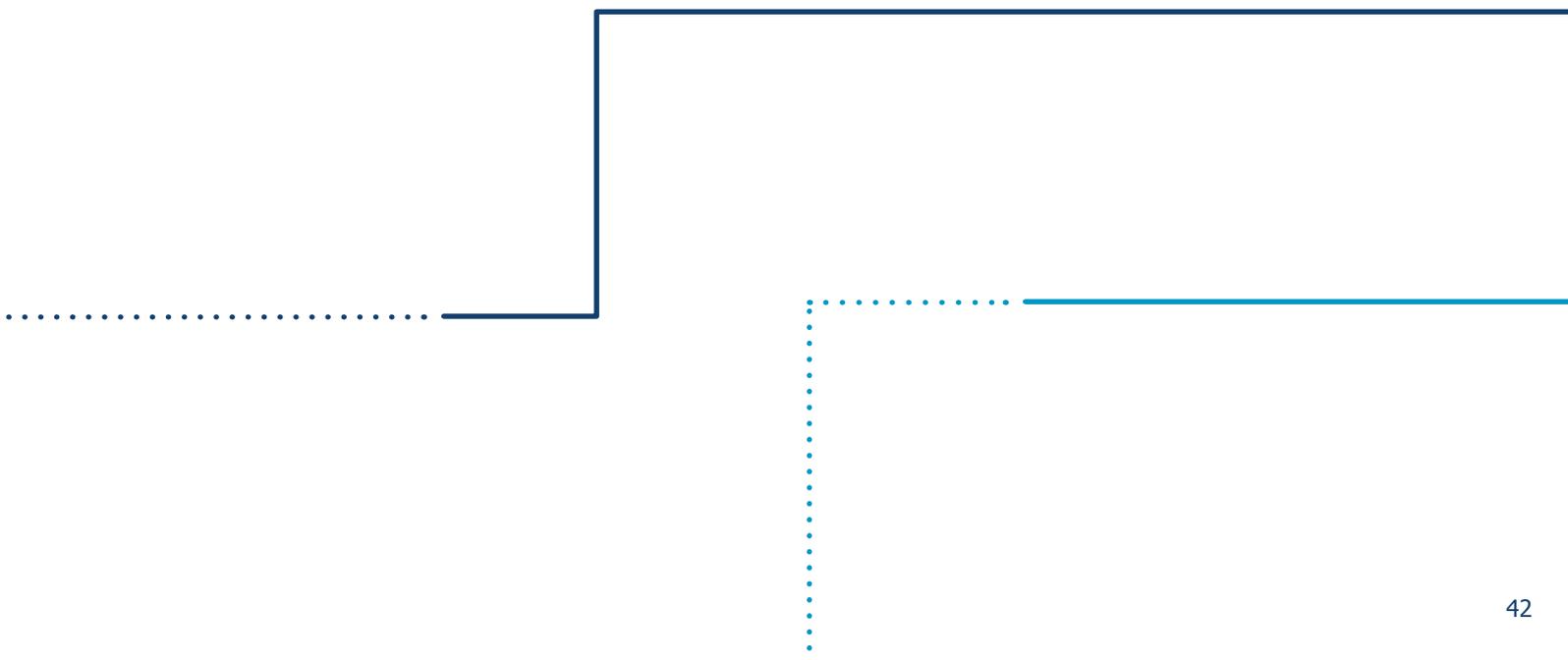
Identified innovations mapped across SRH components and types of innovation[4]

TYPE OF INNOVATION SRH COMPONENT	Product		Service (education, training, care)	Mode of delivery (self-care, community-based, mobile)	Development and design process (how something was created, UCD)	Advocacy	Partnership model	Approach to scale and dissemination
	Digital (mobile apps, online platforms)	Non-digital (drugs, checklists, training materials)						
Family planning	1		1	2				
Safe abortion/post-abortion care			1	1			1	
HIV/AIDS & STIs		1	1					
Menstrual Hygiene Management		2	1	1	4		1	
Newborn care	1		2					
Safe pregnancy, delivery & postpartum care	3	3	2	1			1	1
Health system strengthening	3	1	1		1			
Cross-cutting SRHR	1	2		1	2		1	

4. For accessibility purposes, this table will be followed by the information presented in a narrative format.

The types of innovation include:

- **Products**, both **digital** (6 unique products across 9 SRH components) and **non-digital** (8 unique products across 9 SRH components), and services). **Digital products** included: an app to assist with contraceptive choice making; an integrated call-centre with online platform for better stock management of SRH supplies; a mobile app for young people to learn about CSE and health services and access counsellors; an app to disseminate guidelines on newborn health; an app to facilitate access to SRH services for refugees; and an e-partograph to aid emergency obstetric referrals. **Non-digital products** included: training materials focusing on urinary tract infections and preeclampsia testing and point-of-care ultrasound; a new MUAC (middle-upper arm circumference) tape for malnutrition screening among pregnant women; modified dignity kits for transgender and disabled populations; a checklist for disability-inclusive MHM spaces; tailored MHM products for girls; and a toolkit for mapping MISP during COVID-19 and other outbreaks.

- **Services** (7 unique services across 9 SRH components) included; HIV prevention using pre-exposure prophylaxis (PrEP) for sex workers and transgender populations; a new clinical procedure for treating imperforate hymen in newborns; a campaign for better MHM for people with intellectual impairments; and the availability of online training on medical abortion, self-injectable contraceptives, newborn care and performing ultrasounds.

- **Development and design** (7) included: variations on the use of human-centred design principles to gather insights on SRH priorities and develop solutions (mainly related to MHM); participation of marginalised groups in the design of dignity kits; and a strategy to bring SRH practitioners together to innovate.

- **Mode of delivery** (6) included: use of online platforms and apps to provide health information and deliver training to healthcare providers and clients; use of self-care for family planning and safe abortion; integrating health, water, sanitation and hygiene (WASH) and protection services in one space; and using a large-scale micro-franchised model to extend maternal and child health through community health workers.

- **Partnership models** (4) included: bringing together frontline SRH implementers from across the humanitarian sector; partnering with lawmakers and community-based organisations (CBOs) to support LGBTQIA+ populations; engaging with regional disability forums; and uniting often siloed health, WASH and protection sectors.

- Only one intervention used an innovative **approach to scale and dissemination**, and this was through a micro-franchised enterprise business model.

- We did not find any innovations within the scope of this research related to **advocacy**, either policy making and/or implementation, or novel ways to advocate for SRH.

Spotlight on digital health technologies

The COVID-19 pandemic has been a catalyst for the increasing role of digital technologies in healthcare (Tran et al., 2021) with adaptations being made to allow practitioners to reach populations with routine services remotely. Many of the examples we identified focused on digital or mHealth and included apps to access SRH services and information, telemedicine for consultations, SRH hotlines and online SRH resources. Several examples explicitly stated COVID-19 as the driving force for adopting the intervention. However, digital technologies have been a part of healthcare for several decades (WHO, 2018) and the use of these technologies within the humanitarian sector, particularly with adolescents and young people, is widespread. A systematic review of the use of digital technologies to improve the health of crisis-affected populations found 50 different technologies used in crisis settings by actors and/or populations affected by crisis, including social media, SMS, websites and e-voucher schemes (Mesmar et al., 2016).

The majority of the examples we found in this category centred around health information apps where different target populations can find information on SRH topics, such as contraceptives and HIV/STIs, and be signposted to local services. Many of the examples put forward were adaptations to existing technologies already employed within the SRH sector, such as period tracker apps, telemedicine for maternal care, CSE through online platforms, toll-free numbers for SRH information. As these were unlikely to generate new learning for the sector, we did not include them in the list of innovations.

However, one example that stood out as particularly innovative was the WhichMethod digital decision-making tool to empower adolescents to make informed contraceptive choices in humanitarian settings, developed by Save the Children. WhichMethod represents the adaptation of an existing contraceptive decision-making tool (with a modified algorithm from the US and Mexico) to be both situationally and culturally appropriate for use in humanitarian settings. In addition, Which Method replaces traditional contraceptive counselling with a service provider with a novel mode of delivery using digital health technology, saving time, increasing privacy and removing barriers such as stigma. Finally, human-centred design principles have been used to engage adolescents and young people in the adaptation of the tool, ensuring it is fun, engaging and relevant.

What's next?

The use of digital health in humanitarian settings has the potential to reach the most marginalised communities, particularly in acute settings or pandemics such as COVID-19. Much of the technology needed for this has already been invented and an opportunity now exists to adapt or adopt existing technologies to target key components of SRH where unmet needs remain high, and to respond to the unique needs of marginalised groups. There is also room for invention of new digital products to fill key gaps in the sector, particularly around preventing neonatal and maternal deaths, and scope for innovations piloted or implemented in development settings to be transferred and adapted to suit crisis settings. However, underpinning all these opportunities is recognition that challenges remain around sustainability, digital literacy, network access and the gender digital divide in humanitarian settings. These complexities need to be carefully considered in a holistic way when thinking about applying digital innovations in these settings.

Inventions and adaptations

Of the 26 innovations mapped innovations, 7 were classed as inventions and 19 as adaptations to existing interventions or practices (see Appendix 3 for details). Any examples categorised as adoptions were not included in the list. There is a high proportion of adaptation of existing products, services delivery modes etc. in the sector, versus invention of new ones. This could be as a result of: limited time, resources and funding required for the process of inventing new solutions within the humanitarian sector; prioritisation of delivering essential SRH services with known outcomes in a crisis situation, over new solutions with risk attached; difficulty of including highly mobile populations in the design and implementation of new SRH solutions; and/or populations prioritising meeting their basic needs over engagement in the innovation process. Internally, it may be easier for innovators to find the support they need within their organisation to adapt an already existing SRH solution, with some level of knowledge of how to implement the solution and some evidence or evaluation attached to it, than to initiate the process of inventing a new solution.

Innovation stage

The identified innovations were at different stages in their innovation journeys. For the purpose of this research, we referred to the innovation process developed by the Humanitarian Innovation Fund (see Innovation process, Humanitarian Innovation Guides (HIF-Elrha, 2021)). While we acknowledge that any innovation process is an oversimplification of an innovation's journey as this is rarely as neat or linear, this mapping against different stages can be useful to highlight the level of maturity of innovations in the SRH humanitarian sector. According to the latest available information, one innovation was at the search stage, 5 were at the invention/adaptation stage, 14 were at the pilot stage and 3 were at the scale stage. For 3 innovations, it was not possible to determine the current stage of innovation.

Number of innovations per phase in the innovation process. Adapted from Innovation process, Humanitarian Innovation Guide.

Innovation process

Problem recognition → Search for solutions

Adapt

5

Invent

Pilot solution **14** → Scale solution **3**

Search for solutions **1**
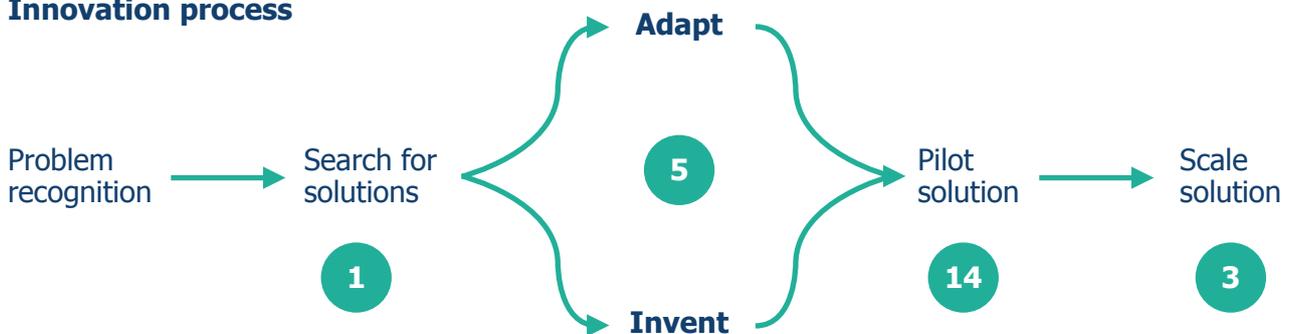
The majority of innovations selected are still at the pilot stage. As with most humanitarian innovations, SRH innovation projects face challenges to move from a pilot phase to full scale. As highlighted in Too tough to scale (Elrha, 2018), it is important to support innovations to be duplicated in other contexts or on a wider scale. The lack of transition from pilot to full scale could be explained by the format of the specific humanitarian grants available to relief agencies which are usually short term. However, this also relates to something highlighted earlier in this report, namely: the lack of documentation and evaluation of the effects of these innovations.

Mapping innovations against key humanitarian SRH gaps

Having identified what current innovative practice looks like across the humanitarian SRH sector, we next explored the extent to which the innovations identified were aligned with the humanitarian SRH priority gaps (see Table of priority humanitarian SRH sector gaps). The purpose of this was to identify whether there are opportunities to address some of the identified gaps through innovation. To do this, we conducted a mapping of the innovations against the gaps in SRH service provision, populations served, and capacity of the SRH health system. The table below shows each innovation and whether or not it focuses on one or more of the key identified gaps.

Identified innovations in humanitarian settings mapped against humanitarian SRH sector gaps[5]

Innovation Example	Gaps in Services									Gaps in Populations								Gaps in Capacities				
	Safe abortion/post-abortion care and advocacy	Family planning, especially LARCs and EC	Interventions addressing neonatal mortality, including stillbirths	Interventions addressing utero-genital fistulae and FGM	Quality maternity care, including respectful care	Home-based maternity care by community health workers	Home or community-based newborn care	Pregnancy and newborn care education for caregivers	Integrated mental health/psychosocial support and SRH services	Vulnerable newborns (small and sick)	Adolescents (10-19) and young people (up to 24)	Older people (particularly women)	People with disabilities	LGBTQIA+	People living with HIV/AIDS	Sex workers	Urban refugees and refugees outside of camp settings	MISP to comprehensive SRH implementation	Skilled healthcare providers across SRH components	Collection and monitoring of data on maternal and neonatal mortality	Use of data for evidence-based decision-making	SRH supply chain management
A digital, interactive decision-making tool to empower adolescents to make informed contraceptive choices in acute humanitarian emergencies (WhichMethod)		✓									✓											
DMPA-SC self-injectable contraceptives "Sayana Press" for refugee women in a camp setting in South Sudan		✓																				
DMPA-SC self-injectable contraceptives digital training resources for health workers and clients		✓																	✓			
Online medical abortion training course for humanitarian practitioners	✓																		✓			
Home-based safe abortion with remote management by midwives in the Middle East	✓																					
PrEP (pre-exposure prophylaxis) to prevent HIV among sex workers and transgender communities in Honduras														✓	✓	✓						
A new partnership to support LGBTQIA+ organisations, people living with HIV/AIDS and sex workers with access to services and justice in Ecuador														✓	✓	✓						
Training HCPs on the use of low-cost urinary tract infection (UTI) and preeclampsia test strips in Sierra Leone					✓														✓			
A new middle-upper arm circumference (MUAC) tape for illiterate TBAs in Burkina Faso to screen pregnant women for malnutrition (Project Fada Ngourma)					✓	✓																
Point-of-care ultrasound training for HCPs in Yemen					✓														✓			
Micro-franchised CHWs to extend maternal and child health care in South Sudan					✓	✓													✓			

Innovation	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
E-partograph to facilitate the referral of women with obstetric emergencies among refugee hosting communities in Uganda			●		●																	
A novel procedure for imperforate hymen in newborns in DRC										●												
The Safe Delivery App (SDA) to train HCPs on maternal and newborn care in Somalia			●		●					●								●				
Using an integrated call-centre with real time data for SRH commodity management in South Sudan																					●	●
Toolkit for mapping the MISP and its adaptation for preparedness and response to COVID-19, other pandemics, and major outbreaks																			●			●
Using girl-centred design to develop MHM solutions in a camp setting in Malawi										●												
Creating safe spaces for MHM among displaced populations in a camp setting in Uganda (Cocoon)																						
Integrating an MHM-friendly laundry space inside a protection centre in a camp setting in Bangladesh																						
Menstrual health and hygiene for people with intellectual impairments in Nepal and Vanuatu (The Bishesta Campaign)													●									
Designing inclusive and MHM-friendly WASH facilities in Lebanon													●									
The Frontline Implementers Support Network to connect and amplify the innovative work of SRHR implementers																			●			
A healthy lifestyle app connecting young people with SRH services and counselling in Myanmar (Love Question Life Answer)										●												
Inclusion in action: Dignity kits for the transgender community in Kelaniya, Sri Lanka														●								
Modified dignity kits for women and girls with disabilities in Fiji													●									
An app to assist Syrian refugees in navigating the health system and accessing services in Turkey (HERA)																		●				
Total no. of innovations	2	3	2	0	6	2	0	0	0	2	3	0	3	3	2	2	1	1	7	0	1	1

5.　For accessibility purposes, this table will be followed by the information presented in a narrative format

Several of the gaps were quite specific, for example focusing on the provision of emergency contraception (EC) and not simply family planning, or on the need for skilled healthcare providers across multiple SRH components rather than simply skilled healthcare providers. However, the information available for many of the innovations identified was less specific and did not describe each component of the intervention in detail. We have therefore made some assumptions, such as expecting a family planning intervention to include the provision of Long-acting Reversible Contraceptives (LARCs) and EC even if this is not explicitly stated within the project description, and have mapped innovations against the broader topic to which they best align e.g. family planning.

Innovations addressing SRH service gaps

For SRH service gaps, 2 innovations addressed safe abortion/post-abortion care, 3 addressed family planning, 2 addressed neonatal mortality (or were expected to contribute to a reduction of neonatal mortality), 5 addressed maternity care (though not specifically focused on the quality of services or respectful care) and 2 addressed home-based maternity care. We did not identify any innovations addressing gaps in utero-genital fistulae and female genital mutilation (FGM), home or community-based newborn care, pregnancy and newborn care education for caregivers, or integrated mental health/psychosocial support and SRH services, which met the study's criteria. Although most of the innovations focused on maternity care, we found no specific mention of improving the quality of care, or how respectful that care was, in the description of those innovations.

Innovations addressing underserved SRH population groups

For gaps in populations served, 1 innovation targeted vulnerable newborns (though not specifically small and sick newborns), 3 targeted adolescents and young people, 3 targeted people with disabilities, 3 targeted LGBTQIA+ populations (particularly transgender people), 2 targeted sex workers, 1 targeted people living with HIV/AIDS, and 1 targeted urban refugees and refugees outside of camp settings. We did not identify any innovations specifically targeting older people. Fourteen of the 26 innovations (54%) targeted a marginalised group; 19 of these were adaptations, while 7 were inventions. Encouragingly, this suggests an increased attention to adapting existing solutions or developing new ones to meet the needs of marginalised groups or those that are hard to reach.

Innovation spotlight

Inclusion in action: Dignity kits for the transgender community in Kelaniya, Gampaha district, Sri Lanka

2018-2019 – IPPF Members, Sri Lanka

The transgender community can be considered extremely vulnerable in crises, sometimes not feeling safe, or not being able to enter temporary shelters, and often excluded from dignity kit distributions. Just before the October 2018 floods, a transgender activist, representing the National Transgender Network of Sri Lanka (NTN-SL) had been attending training at the Family Planning Association of Sri Lanka (FPA-SL). She proposed asking for dignity kits to distribute to the transgender community in her area. The FPA-SL and the Transgender Network used a funding opportunity from the UNFPA Emergency Fund to collaboratively develop specifically tailored dignity/hygiene kits for transgendered persons. The dignity kits were adapted to the needs of the transgender community. Two different kits were designed for two transgender categories: Male Transgender persons (Female to Male), and Female Transgender persons (Male to Female). For example, being able to shave is an integral part of being a transgender woman, which is why it's important to include razors in the kits. Likewise, transgender men require sanitary products which are often not offered to them.

Why is the intervention innovative?

This intervention is one of the first cases of a dignity kit being adapted to fit the needs of the transgender community across the humanitarian sector. The call to adapt the kit came from the transgender community itself and members of the community were involved in the design and distribution of the kit. The innovation process was participatory, using human-centred design principles to ensure the final product was tailored to the needs of those who would use it. Not only does the modified dignity kit better meet the physical needs of transmen and transwomen affected by crisis in Sri Lanka, but it has elevated the voice of a marginalised group and paved the way for gender transformative conversations and learning within the garment factory sector in Gampaha district.

Innovations addressing gaps in SRH capacity

For gaps in capacity of the health system, 1 innovation focused on the MISP (though mainly on adapting to COVID-19 and not specifically MISP to comprehensive SRH implementation), 6 focused on upskilling healthcare providers (though not specifically increasing skills across a range of SRH services), 1 focused on the use of data for evidence-based decision-making, and 1 addressed SRH supply chain management. No innovations were identified that focused on the collection and monitoring of data on maternal and neonatal mortality.

Innovation spotlight

Point of care ultrasound training programme in Yemen

Bridge to Health Medical and Dental USA and MedGlobal, 2020 – ongoing, Yemen

Bridge to Health Medical and Dental USA and MedGlobal, 2020 – ongoing, Yemen Diagnostic imaging is rarely accessible in crisis-affected countries, leaving healthcare providers with little support. Bridge to Health Medical and Dental USA, in partnership with MedGlobal, has developed a point of care ultrasound train-the-trainer programme increasing the efficiency and accuracy of triaging and diagnosing critical patients. The intervention strengthens the healthcare system by training local healthcare providers in the use of a novel cost-effective hand-held ultrasound probe (Butterfly) that can connect to a smartphone or tablet giving low-resource areas access to life-saving diagnostics. Healthcare providers are trained to use the ultrasound probe in hard-to-reach conflict zones and upload scans to a cloud-based system using satellite internet for remote viewing and mentoring in real time by experts across the U.S. and Canada. The experts provide quality assurance, mentoring, and ultimately certification as independent providers, some of them becoming master trainers.

The education curriculum has three components 1) pediatric health, 2) trauma care, and 3) maternal health/complications of pregnancy.

Why is this intervention innovative?

This is an adaptation to a crisis setting of a similar novel train-the-trainer programme using a new cloud-based ultrasound technology developed in Uganda by Bridge to Health. The successful development of this innovative training package and accompanying capacity building activity could provide a model for increasing the use of diagnostic imaging and digital health even in the most acute conflict settings.

Unaddressed gaps from the identified innovations

The following list summarises those gaps highlighted in the humanitarian SRH gap analysis for which we identified either no or only one innovative solution being designed, piloted, implemented or scaled to address the gap:

Services

- Interventions addressing utero-genital fistulae and FGM
- Home or community-based newborn care
- Pregnancy and newborn care education for caregivers
- Integrated mental health/psycho-social support and SRH services

Populations

- Older people
- Urban refugees and refugees outside of camp settings

Capacities

- MISP to comprehensive SRH services
- Collection and monitoring of data on maternal and neonatal mortality
- Use of data for evidence-based decision-making
- Improving the SRH supply chain

In the final section of the report, we consider how to determine whether innovation is what is required to address these key remaining gaps, or if it is simply a case of needing better implementation or scale-up of existing solutions or good practice.

What we know now: how to meaningfully apply innovation to SRH in humanitarian crises

WHAT WE KNOW NOW: HOW TO MEANINGFULLY APPLY INNOVATION TO SRH IN HUMANITARIAN CRISES

For those interested in furthering the potential of innovation in humanitarian SRH settings to address these gaps, we propose the following approach, and unpack specific opportunities within each of these routes.

- **Step 1:** Understand outstanding SRH gaps, barriers that are preventing progress and the strengths and limitations of any existing solutions

- **Step 2:** Decide on a suitable route to pursue

  - ◇ **Route 1 – Adopt:** If relevant, effective solutions exist, as well as good practices around how to implement them in the humanitarian setting of interest, seek funding and support to adopt the solutions and share any new knowledge gained with the wider SRH humanitarian sector

  - ◇ **Route 2 – Scale:** If relevant, promising solutions exist for addressing an identified SRH gap in humanitarian settings but there is little evidence around effectiveness or implementation practice, seek support to further test and scale these solutions as called for by the evidence.

  - ◇ **Route 3 – Adapt:** If relevant, effective solutions exist but they have not been implemented in humanitarian settings (or in the geographies, communities, or cultures of interest), and significant work is needed to understand how these solutions might be implemented in/adapted to these settings and what impact they might have, seek support to adapt solutions to the new humanitarian context and share new knowledge and emerging practices with the broader SRH sector.

  - ◇ **Route 4 – Invent:** If relevant solutions to address an identified SRH gap are missing or have significant limitations, invent solutions in close collaboration with local actors and those who will directly benefit from them.

Step 1

Understand SRH gaps, barriers and existing solutions

Step 2

If solutions exist and there are good practices around implementation	If humanitarian solutions show promise but they are in early stages	If solutions exist but haven't been applied to humanitarian settings	If no solutions exist
Route 1	**Route 2**	**Route 3**	**Route 4**
Adopt	**Scale**	**Adapt**	**Invent**

Step 1: Understand humanitarian SRH gaps, barriers that are preventing progress, and the strengths and limitations of any existing solutions

Section 5 of this report outlined the extent to which the SRH innovations identified within this study overlap with recognised humanitarian SRH gaps. From this mapping, we appreciate that many gaps are still outstanding, despite efforts being made to develop novel solutions.

Nevertheless, this does not imply that innovative solutions are the only option for addressing outstanding SRH gaps. Throughout the interviews, we have consistently heard that SRH challenges require a combination of consistent implementation of recognised and proven solutions, novel delivery methods for known interventions, as well as innovative solutions.

As a result, we recommend that anyone interested in addressing humanitarian SRH challenges first consider the following questions:

- What is causing the problem? What are the barriers? Why do these exist? Who is this a problem for?
- Are there any existing solutions to this problem – within or outside of the humanitarian sector? How have others solved this problem? How much information and evidence is available around the effectiveness of existing solutions, in particular for the identified humanitarian setting? What are the strengths and limitations of existing solutions?

Trying to answer these questions can help clarify whether the next step should be to implement existing practices and tools, adapt them to new settings, or develop new ones.
However, we also heard in the interviews that finding information on existing practices and solutions, as well as details regarding their implementation is a significant challenge. In order to make informed decisions in the sector and to build a robust knowledge base, it is important for existing resources to be widely shared on relevant platforms, and for the sector to provide more frequent and informal spaces for practitioners to meet and share lessons learned. We highlight this as a recommendation at the end of this report.

Step 2: Decide on a suitable route to pursue

Depending on the availability of relevant solutions and best practice, we suggest four routes for those interested in addressing outstanding gaps in SRH humanitarian practice:

Route 1: Adopt existing solutions and share any new knowledge

As mentioned earlier in the report, during our research examples of 'innovative practice' or 'innovations' were often provided because they were new to a specific context. While we acknowledge that adopting any intervention, even if this is recognised as good practice, will require a substantial effort on behalf of the implementing organisation, it is important to distinguish between solutions that are 'new to us' and those that are 'new to the sector'.

Implementing the latter will require a much higher level of tolerance for risk and failure and this becomes particularly important for planning and resourcing.

To identify existing and emerging good practice in SRH humanitarian response, we suggest referring to the following in the first instance:

- WHO recommendations and guidance
- Resources from key humanitarian SRH networks and agencies, such as IAWG
- Relevant compendiums
- Academic and grey literature

While the implementation of existing solutions is not in itself innovation, it is recognised that, in some cases, implementation in a new humanitarian setting might generate new features, approaches or insights.

If these are new to the SRH humanitarian sector, then there will be an element of innovation and it would be valuable for implementers to document and share these widely within the sector to increase awareness amongst others.

Route 2: Scale promising innovations

Based on the information we were able to gather at the time of writing, most of the SRH humanitarian innovations identified through this research were at pilot stage.[6] This means that most organisations were still testing their interventions in humanitarian settings, learning what works and what does not, collecting evidence and building their strategy for wider adoption. These innovations represent a clear opportunity for those interested in further refining emerging solutions available for the humanitarian sector and building further evidence and strategies for their wider adoption.

Nevertheless, the challenges of scaling innovation in the humanitarian sector are well documented (Elrha, 2018), especially during the COVID-19 pandemic. Building on our research findings, we note two additional challenges to scaling SRH innovations in the humanitarian sector: ownership of interventions (products/services) and incentives to scale innovations. A few of the examples identified were innovative because of their mode of delivering an existing product or service. Examples of this include home-based safe abortion care with misoprostol, and the DMPA-SC self-injectable contraceptive. In these cases, it was unclear who should be responsible for driving the adoption of the innovation – those who developed the original product/service or those who developed the innovative delivery approach? In addition to this, KIIs indicated that adapting existing solutions can have legal implications, as well time and resource implications.

When it comes to incentives for scaling, we noted that most of the interventions identified seemed to address a problem faced by people affected by crises in specific local contexts. As a result, the incentive to document and share any emerging practices with a view to developing a strategy for wider uptake might be missing or de-prioritised. The questions of who is responsible for scaling up innovative practices and how they are incentivised to do so would benefit from additional attention from the sector.

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6.   See Pilot stage in the Humanitarian Innovation Guide for details.

Spotlight: The potential of self-care interventions

Multiple examples of self-care interventions emerged from both the literature and interviews on innovation for SRH. These included: HIV/STI self-testing; self-injectable contraceptives; misoprostol for home abortion and for postpartum haemorrhage; and long-term supply of emergency contraception. Although self-care as a concept is not new to the health sector, to the best of our knowledge, there are no systematic reviews and very little published evidence on the effectiveness of self-care interventions in humanitarian settings. Therefore, there remains an opportunity to generate new learning for the humanitarian sector.

Importantly, self-care has the potential to address many of the priorities of the MISP. However, current WHO guidelines on self-care are based on evidence from outside of the complex operating environments present in many humanitarian settings (Tran et al., 2021).

If we take DMPA-SC self-injectable contraception, commonly referred to as Sayana Press®, as an example, the product itself is not new. PATH carried out studies on Sayana Press® in DRC some 20 years ago.

More recently, from January to November 2019, UNFPA funded PATH to expand access to DMPA-SC, self-injection as a contraceptive option, in two refugee-hosting districts (Lamwo and Kiryandongo) in the context of expanding contraceptive options. The project used human-centred design principles to engage women and other key stakeholders in the design and implementation of the intervention following PATH Self-Injection Best Practices. Indeed, multiple other organisations are attempting to roll out self-injectable contraception across humanitarian settings, including Marie Stopes International in Nigeria, Pathfinder in DRC, Jhpiego in Mali and MSF in multiple locations.

Despite its scale, there is still new knowledge to be generated through innovating around the delivery of self-injectable contraception in these settings. For a country like South Sudan, questions remain around whether women without phones or calendars can track when to inject, where they will store their supply, how they will dispose of the used products and, perhaps most importantly, how data on user experience and acceptability will be collected[7]. The use of human-centred design principles, such as those employed by PATH and others, could provide such key insights. Within the humanitarian sector, there is still space for piloting innovations to generate evidence and guide adaptations needed for scalability and transferability of self-care interventions across settings.

Self-care for SRH services also has a great potential to address unmet needs in marginalised populations or in contexts of limited access to healthcare, such as conflicts or pandemics.

Self-managed medical abortion, using misoprostol, does not require in-person visits to healthcare facilities and, instead, offers an option to women living in places where abortion is not readily available.

In MSF pilot projects in the Middle East, women self-manage most of the process at home, taking the misoprostol, undergoing the bleeding and cramping and managing side effects, while also knowing when to seek emergency care if needed.

What's next?

Self-care interventions have the potential to address many of the priority gaps and to meet the needs of key marginalised populations identified within the SRH in crises sector. Because these methods are already available for use and so the opportunity lies in funding the adaptation and piloting of self-care interventions specifically in humanitarian settings.

Route 3: Adapt relevant, proven innovations from development to humanitarian settings

As part of our research, we also identified a number of innovative SRH interventions not yet trialled in humanitarian settings. These included interventions targeting the urban poor or people in remote, rural locations in what were considered development settings according to the criteria for this review. We would like, however, to highlight a number of examples (18) which we consider to be innovative, and which show promise for adaptation and transferability to humanitarian settings. Currently, these innovations are either not implemented at all in humanitarian settings, or there is very little evidence of widespread use, and there is a need for new knowledge to be generated for the humanitarian SRH sector.

As we did for the innovations identified in humanitarian settings, the table below shows a mapping of innovations identified in development settings against the key gaps in the humanitarian SRH sector categorised by the same service, population and capacity gaps.

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7.   Information provided by interview participant

Innovations in development settings mapped against humanitarian SRH sector gaps[8]

Column groups: **Gaps in Services** (columns 1–9), **Gaps in Populations** (columns 10–17), **Gaps in Capacities** (columns 18–22).

Service columns:
1. Safe abortion/post-abortion care and advocacy
2. Family planning, especially LARCs and EC
3. Interventions addressing neonatal mortality, including stillbirths
4. Interventions addressing utero-genital fistulae and FGM
5. Quality maternity care, including respectful care
6. Home-based maternity care by community health workers
7. Home or community-based newborn care
8. Pregnancy and newborn care education for caregivers
9. Integrated mental health/psychosocial support and SRH services

Population columns:
10. Vulnerable newborns (small and sick)
11. Adolescents (10-19) and young people (up to 24)
12. Older people (particularly women)
13. People with disabilities
14. LGBTQIA+
15. People living with HIV/AIDS
16. Sex workers
17. Urban refugees and refugees outside of camp settings

Capacity columns:
18. MISP to comprehensive SRH implementation
19. Skilled healthcare providers across SRH components
20. Collection and monitoring of data on maternal and neonatal mortality
21. Use of data for evidence-based decision-making
22. SRH supply chain management

Innovation Example	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
A ride-hailing app being used to order and deliver SRH commodities, including contraceptives, HIV tests & safe delivery kits, in Uganda (Safeboda)		X					X				X				X							
A youth-designed and led contraceptive uptake project in Ethiopia, Nigeria and Tanzania (Adolescents 360)		X																				
The use of microarray patch (MAP) technology to deliver PrEP and hormonal contraception		X									X			X	X	X						
A new telemedicine abortion policy in Nepal	X																					
Human papillomavirus (HPV) self-sampling in Latin America and the Caribbean																						
Backpack "Mobikits" for improved reproductive, maternal, newborn & child health for HIV+ women and girls in Kenya			X		X	X	X			X					X							
The use of heat-stable carbetocin to prevent postpartum haemorrhage					X	X																
The use of the non-pneumatic anti-shock garment (NASG) to prevent postpartum haemorrhage and shock					X	X																
A blood pressure cuff for hypertension in pregnancy with a traffic light warning system (CRADLE VSA)					X																	
A public-private partnership to reduce maternal and newborn mortality in Uganda and Zambia (Saving Mothers, Giving Life)			X		X					X												

8. For accessibility purposes, this table will be followed by the information presented in a narrative format

A ride-hailing app to transport women to deliver in health facilities in Mozambique (Chopela-Mama)				▇																		
A portable prenatal kit for healthcare providers and women in rural Guatemala (Healthy Pregnancy)				▇	▇																	
Blending oxygen and Bubble CPAP for newborn care (Vayu-bCPAP)		▇								▇												
A hypothermia bracelet to monitor the temperature of newborns in India (The BEMPU Hypothermia Bracelet)		▇								▇												
The distribution of menstrual cups to out-of-school-girls with a tracking app to monitor uptake and use in Malawi											▇											
Self-disinfecting menstrual underwear and laundry bags in Bangladesh											▇											
A novel partnership with the transport network in Zimbabwe to sensitise communities on SGBV/SRH																						
An SRH health promotion digital platform co-designed with Rwandan youth (CyberRwanda)	▇																					
Total no. of innovations	1	4	4	0	7	5	1	0	0	4	7	0	0	1	3	1	0	0	0	0	0	0

Innovations addressing SRH service gaps

For SRH service gaps, 1 innovation addressed safe abortion/post-abortion care, 4 addressed family planning, 4 addressed neonatal mortality (or were expected to contribute to a reduction of neonatal mortality), 7 addressed maternity care (though not specifically focused on the quality of services or respectful care) and 2 addressed home-based maternity care. No innovations meeting the review criteria were identified that address: gaps in utero-genital fistulae and FGM; home or community-based newborn care; pregnancy and newborn care education for caregivers; or integrated mental health/psychosocial support and SRH services which met the study's criteria.

Innovations addressing underserved SRH population groups

For gaps in populations served, 4 innovations targeted vulnerable newborns (though not specifically small and sick newborns), 6 targeted adolescents and young people, 1 targeted LGBTQIA+ populations (particularly transgender people), 1 targeted sex workers, 3 targeted people living with HIV/AIDS. No innovations were identified that specifically target older people, people with disabilities, or urban refugees and refugees outside of camp settings.

Innovations addressing gaps in SRH capacity

For gaps in capacity of the health system relevant to SRH, we did not identify any innovations which focused on capacity building of either the health workforce or the health system itself.

As with innovations identified in humanitarian settings, most innovations in development settings focus on innovations around safe pregnancy, delivery & postpartum care addressing key gaps in quality maternity services. However, the innovations in development settings had a stronger focus on newborn care, also identified as a key gap. There is less focus on menstrual hygiene management in development settings, which could be a result of greater privacy and availability of menstrual products for women and girls in more stable settings and so less need for innovative solutions. We found a greater focus on innovations that target adolescents and young people in development settings, perhaps as a result of more time available to develop youth-led or youth-driven activities in settings which are more stable. However, there was less focus on innovations targeting people with disabilities in development settings, which could reflect greater visibility of this community within camp settings, and therefore increased attention to finding solutions to address their needs.

Though it is important to note these innovations are not a comprehensive list of all innovative practice taking place in development settings, they do provide opportunities for adaptation and some are particularly well-suited for use in low-resource and less stable settings and to address key gaps. For example:

- The Vayu b-CPAP device for respiratory support for newborns is inexpensive and does not require a compressed air tank or a constant electricity supply to function.
- Backpack "Mobikits" for maternal and newborn care in Kenya are solar-powered and provide an opportunity to increase critical care for HIV+ mothers locally.
- The non-pneumatic anti-shock garment for preventing post-partum hemorrhage is simple to use and does not require extensive training.

Some innovations, such as the ride-hailing apps to deliver SRH commodities and to facilitate transportation to health facilities, could be particularly useful for urban refugees or populations which are more dispersed. Others use self-care to reduce the need for frequent visits to health clinics, such as the Human Papilloma Virus (HPV) self-testing and microarray patch technology for contraception and PrEP, which could be pivotal for populations on the move. For more details of these innovations, see Appendix 4.

Route 4 – Invent new solutions

Finally, if no solutions exist, or are readily accessible to help address an identified humanitarian SRH challenge, there is an opportunity to invent new solutions. Ideally, these should be co-designed in collaboration with local actors and those who will directly benefit from the innovations to ensure that these reflect local practices, needs and contexts. Building on insights from the humanitarian SRH stakeholders consulted for this research, the invention of new solutions should follow an iterative approach that enables progressive learning and refinement. The Humanitarian Innovation Guide offers a series of guidance and activities that can support innovators with the generation and development of early-stage ideas to address critical humanitarian SRH gaps.

Regardless of the route taken, we highlight the importance of ensuring innovations address a well-defined problem for the humanitarian SRH sector, generates new learning for the humanitarian sector, leads to measurable improvements on existing practice, and takes an iterative, co-creative, inclusive and ethical approach. We are aware that this is an ambitious ask – but it is one that reflects the expectations and ambitions of the humanitarian SRH community.

To foster this type of innovation, there was an expressed need from key informants for a more inclusive, collaborative and transparent ecosystem. Three specific recommendations stood out from the interviews which apply regardless of the appropriate route, or approach:

1. **Promote inclusive, flexible and long-term funding designed to support systemic innovation** – Humanitarian SRH innovation funding needs to be flexible and adaptive to accommodate its iterative and exploratory nature. Innovation funding needs to be long-term to nurture the development of trusting relationships with local stakeholders and co-creating interventions. Funding should support SRH innovation across the different humanitarian clusters as the challenges faced by women, girls and marginalised groups are often intertwined.

2. **Foster innovation practices grounded in local knowledge and lived experiences** – Local understanding and lived experience of humanitarian settings or SRH service use brings invaluable knowledge to projects. This knowledge becomes particularly important when dealing with something as highly personal and culturally influenced as SRH. The prevalence of practices originated in the global North - such as design thinking or human-centred design approaches - can in themselves become a barrier to recruiting and nurturing local expertise and problem-solving approaches.

3. **Create opportunities for knowledge generation and knowledge exchange** – All key informants mentioned the need for more opportunities for knowledge generation and exchange around existing and emerging SRH interventions relevant to humanitarian settings. Our decision to include the extent to which an intervention generated new knowledge for the humanitarian sector as an eligibility criterion for SRH innovations reflects the importance of this. Opportunities to share new SRH practices and interventions are often limited to one-to-one conversations or webinars. More spaces to meet, share, reflect and learn together are needed. Across the interviews, the explicit need for understanding the details of how a particular SRH innovation came into being, how it was implemented, who was involved and how, was emphasised. Without such information, the sector is at risk of reinventing processes and tools, as similar challenges are likely to arise in different settings. An initiative like The Frontline Implementers' Support Network developed by IAWG (IAWG and SCOPE, 2021) could provide such a forum for humanitarian SRH innovation. A more collaborative culture, and incentives to nurture and support the sharing of existing and emerging SRH practices is also critical.

The findings from this review suggest that actors working in the humanitarian SRH sector have a broad yet nuanced understanding of humanitarian innovation, what it should aim to achieve and what the key features of any innovation should be. Through mapping exercises and interviews, we gained a sense of the work that is ongoing to address critical gaps in humanitarian SRH, and where innovation offers opportunities to better understand and address these gaps. In conclusion, we bring these insights together to provide **a clear pathway to change and call to action for the community of practice to utilise innovation for SRH in humanitarian crises.**

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Appendices
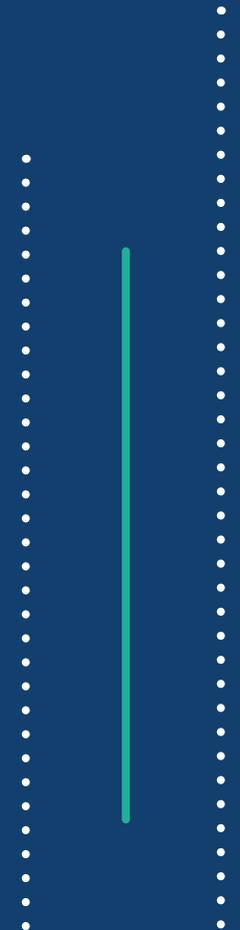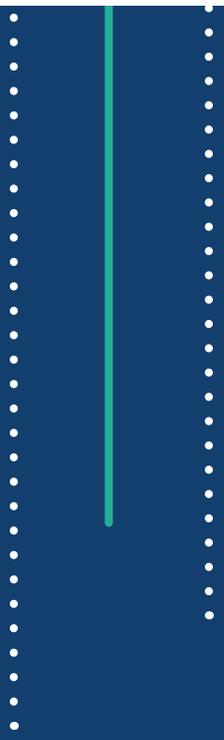
APPENDIX 1 - RESEARCH QUESTIONS AND METHODOLOGY

Research Questions

We used the following set of questions to guide the research process:

- How does the SRH sector define what an innovation is?
  - Is there consensus in the sector?
  - What are the differences between different components of the sector?
  - What are the differences of perception between different types of organisations (international and national)?
  - What are the main categories and characteristics of an innovation in SRH according to the sector?
- What is the current status of SRH and innovation?
  - What are the current gaps in SRH programming and research according to the literature?
  - What innovation is taking place? Implemented by whom and where?
  - What is the nature of the innovation taking place?
- Innovation process
  - How was the need for innovation identified?
  - What is the level of co-production (participation of women/ adolescents/ practitioners)?
  - What is the mode of delivery of the innovation?
  - Has the effectiveness and impact of the innovation been evaluated?
- What are the priority opportunities for advancing innovation?
  - Does the innovation taking place address priority SRH gaps?
  - What is the level of appetite for innovation from the SRH sector?
  - In the current state of organisational culture amongst implementers, is innovation easy to introduce and implement?
  - Is there a need for (further) innovation funding around SRH in humanitarian crises?
  - Where are the opportunities for innovation? What are the outstanding under-addressed or underdressed SRH gaps that could benefit from innovation?

Methods

Literature review

We conducted a literature review across both peer-reviewed and grey literature which included academic journals (PubMed, Conflict and Health, The Lancet, BMJ Global Health, Google Scholar), humanitarian data repositories (ReliefWeb, IAWG, WHO Publication Database, the COVID-19 Humanitarian Platform), innovation funders (Elrha, inclusive of the HIF programme, Grand Challenges Canada, the Humanitarian Grand Challenge, USAID), the websites of key

SRH implementing organisations (UNFPA, UNICEF, IPPF, Plan International, Concern Worldwide, PSI, MSF, PATH and the IRC), and past webinars on SRH innovations from IAWG/Ipas and the University of Southern California. Search terms included "sexual and reproductive health innovation humanitarian", "maternal and newborn health innovation humanitarian" and variants on "humanitarian" including "conflict", "post-conflict", "protracted crisis" and "natural disaster". Through the literature search, we gathered data both to help shape the definition of innovation and the innovation framework and to map past and existing innovations in SRH in humanitarian settings.

Key Informant Interviews

We conducted 22 online, semi-structured, qualitative interviews with SRH practitioners from 13 organisations. We wanted to capture a diverse range of perspectives and we did this by targeting different types of organisation (NGOs, UN bodies, research institutions and innovation funders) and representatives at different levels within those organisations (global, regional and country). The work of those we spoke to spanned various types of humanitarian setting (conflict/post-conflict, environmental disaster, public health emergency and protracted crisis) across multiple regions (Sub-Saharan Africa, Asia and the Pacific, Middle East, Europe and North America). We tailored the interview to each participant, gathering data on how innovation is defined and what are its key features, collecting examples of specific innovations, and discussing the enablers and barriers to innovating specific to humanitarian settings. The interviews were conducted over Zoom, audio-recorded with consent and transcribed. Notes were taken to ensure all data was fully captured.

Online survey

As part of the innovation mapping process, we developed an online survey, including both quantitative and qualitative questions, to gather specific examples of SRH innovations across a diverse range of humanitarian settings. The survey was available in English, French and Spanish to increase accessibility to a wide number of stakeholders. The survey was distributed widely across international SRH networks, including IAWG, PHAP, IPPF member associations, GCHS, LSHTM's Health in Humanitarian Crises and MARCH Centres, ICVA, IBP network, MSF and through professional contacts of both Elrha and the Steering Committee.
Innovation spotlights

From the examples of innovation gathered through the literature search, interviews and survey, we chose 3 examples which best fit with our definition and key features of innovation to develop into innovation spotlights. The aim of the spotlights was to delve deeper into the innovation process and understand more about what triggered the innovation, what needs were identified, what the expected outcomes were, who was involved in designing and implementing the innovation, and whether any evaluation had been conducted to document the results. To elicit this information, we conducted in-depth interviews with those responsible for designing, implementing or supporting the chosen innovations.

Webinars

We hosted two international webinars during the course of the research. The intended audience for both webinars were SRH practitioners, funders and those interested in SRH innovation in humanitarian settings. The purpose of the first webinar, titled Do we need more innovation in sexual and reproductive health in humanitarian crises? was to raise awareness of the role and potential of innovation in the humanitarian SRH sector, share emerging insights from our research, build an engaged audience around the research, and identify any potential innovations from the audience. The webinar included a panel discussion intended to highlight different points of view on the need for more innovation in humanitarian SRH.

The second webinar, titled Mapping innovations in humanitarian SRH, provided an opportunity to share some of our findings and examples of SRH innovations in humanitarian settings with diverse stakeholders and promote the publication and dissemination of the report. Feedback received from the first webinar highlighted the interest the audience had in hearing more about specific examples of innovation and aligned with findings from the interviews related to the desire to find better ways to share innovative practices.

Data analysis

Data gathered through the methods described above were analysed in two distinct ways. Firstly, a thematic analysis of data on definitions of innovations, key features and characteristics, and enablers and barriers was conducted and used to develop an innovation framework. Secondly, the examples of innovations gathered through interviews, the online survey and the literature review were added to a database. We then used the innovation framework to develop a set of inclusion/exclusion criteria against which these examples could be analysed. Once this analysis was complete, we were left with a list of 26 innovations (Appendix 3).
Ethical considerations

Throughout the research process, ethical risk to participants was minimised as we did not ask about any personal experiences; rather we focused on programmatic innovations, modalities of delivery etc. When interviewing external stakeholders, we asked for their consent in advance and clearly explained how their feedback would be used in the context of the research. Stakeholders were free to withdraw from the research at any time up until the data was anonymised. All personal, identifiable data was removed from online survey submissions and interview notes before the data was analysed. Only implementing organisation and location details are included in the list of innovations.

Limitations of the approach

In order to provide as comprehensive a mapping as possible, we focused on breadth of data and aimed to collect examples of innovations from as many key stakeholders as possible within the timeframe of the research. For this reason, we were not able to explore each innovation in depth. Further research could be conducted to better understand the triggers for innovating and explore the development of the innovations themselves.

The sampling procedure used to identify participants for interview had some limitations. We began with targeting SRH practitioners from key organisations who provide or fund SRH services in humanitarian settings. We then used snowball sampling to identify contacts of these practitioners to ensure we included diverse and representative voices and examples from a range of countries and settings. However, it was more difficult to make contact with implementation level practitioners given the short timeframe, availability of emergency response personnel, particularly during COVID-19 response, and the large, multinational structure of many of the organisations we interviewed. To overcome this limitation, the online survey was distributed widely across international networks, including IAWG, PHAP and IPPF, to reach practitioners globally at all levels.

Finally, the understanding of or importance placed on innovation by different stakeholders will have impacted on how people related to the research. For example, those who are more engaged and enthusiastic about the innovation process are more likely to have responded to the survey or invitation to interview. This may mean some innovative practices have not been fully captured if practitioners don't necessarily consider themselves or their work as fitting within the "innovation" sphere.

APPENDIX 2 - PROJECT STEERING COMMITTEE

Name	Title	Organisation	Country
Jayne Crow	DRM Programme Specialist - Innovation	Plan International UK	UK
Carla Lopez	Design Innovation Lead for Health	IRC Airbel Impact Lab	US
Arnold Kabahaula Barongo	Program Learning Lead	PSI	Tanzania
Chi-Chi Undie	Senior Associate, Reproductive Health Program	Population Council	Kenya
Lale Say	Unit Head, SRH Integration in Health Systems	WHO	Switzerland
Meghan Gallagher	Senior Director, Monitoring, Evaluation, Research and Learning, Dpt of Global Health	Save the Children	US

# APPENDIX 3 - SRH INNOVATIONS IN HUMANITARIAN SETTINGS[9]

To read more about SRH innovation examples in humanitarian settings, click on the button below to download Appendix 3.

APPENDIX 4 - SRH INNOVATIONS IN DEVELOPMENT SETTINGS[10]

For Appendix 4: To read more about SRH innovation examples in development settings, click on the button below to download Appendix 4.

9. All descriptions of interventions in the table are based on information available to the researchers at the time of writing.
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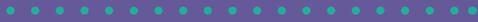
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