Improving mental health in crisisaffected countries with a brief psychological intervention

Mental health problems are commonly experienced by people living in crisis-affected countries, but few interventions are available to support such people and, for those that are, effectiveness data is limited.

The study 'Effectiveness and cost-effectiveness of simplified psychological support in conflict-affected Pakistan', led by the World Health Organization (WHO) between 2014 and 2016, sought to understand if an evidence-based psychological intervention called Problem Management Plus (PM+) could be an effective and cost-effective solution to support people in need of psychological support in times of crisis. The study found PM+ to improve mental health outcomes for people living in Pakistan and demonstrated likely cost-effectiveness. Informed by this evidence, PM+ has been published by the WHO and is cited in the 2018 Sphere Handbook. There is evidence that it is widely used by international non-governmental organisation programmes around the world.

Title: Effectiveness and Cost-Effectiveness of Simplified Psychological Support in Conflict-Affected Pakistan

Location: Pakistan

Study type: Mixed-methods with randomised controlled trial

IMPACTS

- Significant academic impact with further trials and scale-up of PM+ ongoing, including EU Horizon-funded STRENGTHs project
- Development of a 'train-the-trainer' model has facilitated uptake by humanitarian organisations
- PM+ manual released by the WHO as a public good

RESEARCH IMPACT LEARNING

- Integration of research within a wider strategic policy agenda
- Focus on practitioner use creating capacity-building tools and materials

BACKGROUND

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People affected by humanitarian crises are at considerable risk of developing common mental health problems including depression, anxiety, post-traumatic stress disorder (PTSD) and non-pathological psychological distress. Non-specific counselling programmes are sometimes provided, but generally without effectiveness and safety data. They also often target only a single outcome, for example post-traumatic stress, and require extensive training for delivery.

Peshawar, Pakistan, is severely affected by long-term conflict, with residents experiencing daily violence and mental health problems. Stakeholder consultations conducted in 2013 identified vast mental health needs among people in the Khyber Pakhtunkhwa province of Pakistan. A scalable psychological intervention with proven effectiveness and cost-effectiveness that can be delivered by lay health workers and targets a range of outcomes was proposed as a solution to this need. The trial in Pakistan was part of a wider effort by WHO to develop mental health interventions, policies and standards to respond to high needs in low-resource and humanitarian settings.



THE STUDY



The study's objective was to improve the mental health and functioning of people in humanitarian settings using an innovative, simplified psychological intervention named Problem Management Plus (PM+). This mixed-method study was conducted as a randomised controlled trial (RCT) – a design sufficient to provide the evidence required for adoption as official WHO guidance – alongside qualitative research and cost-effectiveness analysis. The purpose was to understand the feasibility and acceptability of the intervention in Peshawar.

Enrolled from three primary care centres in Peshawar district, 346 adults with high levels of both psychological distress (according to the 12-item General Health Questionnaire) and functional impairment (ie, difficulty completing daily tasks such as dressing; and the WHO Disability Assessment Schedule 2.0) were randomised to receive either PM+ or 'enhanced usual care' as a control.

PM+ is a brief, evidence-based programme delivered by lay health workers, involving five sessions of problem solving, behavioural activation, strengthening social support, and stress management strategies. It is transdiagnostic (ie, geared to a number of conditions) and designed for people in low-income communities affected by adversity. The primary outcomes were anxiety and depression symptoms three months after the intervention, as measured with the Hospital Anxiety and Depression Scale. Secondary outcomes included measures of post-traumatic stress and outcomes defined by local participants themselves.

A key element of the research was to understand if PM+ could be delivered by health workers who did not have prior training in mental health. The study also evaluated PM+ cost-effectiveness. A qualitative assessment via key informant interviews to learn about local population priority concerns, and conducting outreach and engagement with primary healthcare providers, aimed to increase effectiveness and uptake of the intervention and the RCT.

FINDINGS

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The study found PM+ to be an effective intervention at improving the mental health and functioning of people with high levels of both psychological distress and functional impairment in humanitarian settings. It met its primary outcome, with significantly lower anxiety and depression scores at three months compared with those in the control group receiving enhanced usual care. The study also had positive findings for secondary outcome measures, with significant improvements in scores for post-traumatic stress and functional impairment.

The intervention was successfully delivered by people with minimal training, and a costeffectiveness analysis revealed that there is at least a 90% probability of this intervention being a cost-effective use of resources.

COMMUNICATIONS AND ENGAGEMENT



Localisation of PM+ was imperative for the success of the study and the intervention, and as such local use and country ownership was encouraged by producing openaccess materials for local translation and adaptation. The PM+ manual has now been published in 18 languages on the WHO website, including English, Urdu, Kiswahili, Arabic, Chinese, Japanese and Spanish.

Pre-existing relationships with key global actors in humanitarian policymaking, such as the Inter-Agency Standing Committee Reference Group on Mental Health and Psychosocial Support (MHPSS) in Emergency Settings, were crucial to the engagement activities of the study team. Study results were disseminated via webinar presentations and websites such as the Mental Health & Psychosocial Support Network.

A national workshop was held in Pakistan, attended by national policymakers and health providers as well as international actors. This forum facilitated a national policy conversation about mental health, and local partner organisations were able to garner vital national news media attention on the need for mental health provision in Pakistan and the work of local actors around PM+.

The study findings were published in the peer-reviewed, high-impact *Journal of the American Medical Association (JAMA)*. A study protocol paper was published in *BMC Psychiatry*¹, and the cost-effectiveness results in *British Journal of Psychiatry*. The study team continues to communicate through highly regarded academic channels to ensure recognition of the RCT and its results, including via a keynote presentation at the International Society of Traumatic Stress Studies conference in 2016.

The Principal Investigator of the study was closely involved in the development of Sphere Standard on mental health, enabling the socialisation of study results in the development of this key humanitarian resource.

UPTAKE AND IMPACT



The study improved mental health outcomes for people living in crisis-affected Pakistan and made an important contribution to the humanitarian health evidence base. It also demonstrated the feasibility of delivering PM+ by lay health workers with minimal training and cost-effectiveness in this setting. In Pakistan, the local research partners have continued to promote and evidence PM+, benefitting outpatients of the Rawalpindi psychiatric hospital in the Punjab and groups of women in the Swat District, among others.

The study results, alongside other research and engagement efforts led by WHO, have led to a wide recognition of PM+ as a credible and evidence-based intervention, particularly among the academic community and professionals working in MHPSS policy and practice in the humanitarian sector. The study itself is a highly regarded and influential study with 243 citations, and it has stimulated many similar research trials in different populations on this intervention, as well as further adaptation of PM+ as a group-based intervention.

Based in part on the study results, a project funded by Elrha's Humanitarian Innovation Fund supported the development of a 'train-the-trainer' model encouraging the capacity development of local providers in the intervention. At least 34 master PM+ trainers have gone on to train and supervise at least 305 PM+ providers worldwide.

The PM+ intervention has been released by the WHO as a public good in a PM+ manual, and is part of WHO's Mental Health Gap Action Programme (mhGap), which may lead to inclusion in national health programming by WHO-member states. There is evidence of PM+ being used in humanitarian responses in 14 countries including Yemen, Ukraine, Türkiye, Syria, Bangladesh and Ethiopia. The 2018 Sphere Standards on Mental Health (2.5) also references the WHO PM+ manual.

There is evidence of improved capacities, knowledge and understanding of staff at leading humanitarian agencies, resulting in integration of PM+ into existing programmes around the world. Moreover, PM+ is now a desirable qualification for a MHPSS lead working for humanitarian agencies in crisis settings. International humanitarian organisations that include it in formal frameworks include World Vision, International Medical Corps and UNHCR.

"In Kenya, we use PM+ for a range of urban clients, including but not limited to refugees" – Mental health lead in the East Africa Region, World Vision

PM+ is also used in high-income countries; for example, Partners in Health is funded by an insurance company to make it available in the US.

Further funding has been secured for multiple future trials focused on scaling up PM+ in various countries. These include using PM+ with Syrian refugees in an eight-country study in Europe and the Middle East, funded by the EU Horizon 2020 programme.

RESEARCH IMPACT LEARNING

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INTEGRATION OF RESEARCH WITHIN A WIDER STRATEGIC POLICY AGENDA

To conduct a full RCT and cost-effectiveness analysis in a humanitarian setting was a considerable accomplishment. This study was embedded in a wider policy agenda and based on prior research and stakeholder engagement, demonstrating the multi-layered and long-term nature of delivering research impact and the importance of responding to stakeholder demand and external needs. Global impacts, such as influence on the Sphere Standards, was enabled by the positioning and relationships of key team members in relevant global dialogue, while in Pakistan the partners were already closely engaged with local health providers and government.

FOCUS ON PRACTITIONER USE

There was a clear vision for the research to be translated into use and a focus on the target end users throughout. Open-access publication of the tool and resources and training activities led by humanitarian organisations (funded separately) built practitioner capacity in use of PM+ and likely contributed significantly to impacts.

PARTNERS

World Health Organisation; Lady Reading Hospital; Human Development Research Foundation; Rawalpindi Medical University; University of New South Wales; Vrije Universiteit

ABOUT ELRHA

Elrha is a global organisation that finds solutions to complex humanitarian problems through research and innovation. This study was funded by Elrha's Research for Health in Humanitarian Crises (R2HC) Programme which aims to improve health outcomes by strengthening the evidence base for public health interventions in humanitarian crises.

R2HC is funded by the UK Foreign Commonwealth and Development Office (FCDO), Wellcome, and the Department of Health and Social Care (DHSC) through the National Institute of Health Research (NIHR).

R2HC captures detailed case studies through a process that triangulates and validates evidence on uptake and impact. The case study methodology and full version of this summary case study including references are available on request.

