



Executive Summary

Research Priorities for Non-Communicable Diseases in Humanitarian Crises:

Focus on Cardio-Metabolic Syndrome



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ABOUT ELRHA

We are Elrha, a global organisation 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 people face 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 of 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. It is our globally recognised programme leading on the development and testing of innovation in the humanitarian system. Established in 2011, the HIF was the first of its kind: an independent, grant-making programme open to the entire humanitarian community.

The views expressed in this paper are those of interviewees and the authors and are not necessarily those of Elrha.

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FOREWORD

In the rapidly evolving landscape of humanitarian emergencies, with acute and protracted crises leading to severe health consequences for hundreds of millions of people, the need for evidence-based solutions is more pressing than ever.

Non-communicable diseases (NCDs) pose a significant threat to the health and well-being of populations affected by humanitarian crises. NCDs cause 74% of global mortality, and in countries experiencing crises, NCDs can make up an even higher proportion of mortality: 92% in Ukraine and 75% in the Syrian Arab Republic. From cardiovascular diseases to diabetes, these conditions exacerbate existing vulnerabilities and increase the burden on already strained healthcare systems. Despite their prevalence, however, NCDs have historically received limited attention in humanitarian response efforts.

The World Health Organization, United Nations Office of the High Commissioner for Refugees (UNHCR), several non-governmental organisations, academic institutions and civil society have been working together with governments to strengthen NCD prevention and care in humanitarian crises. Elrha's 2021 Second Humanitarian Health Evidence Review report in 2021 identified a dearth of evidence on quality NCD interventions for humanitarian crises and resulted in the commissioning of this research priority setting. Cardio-metabolic syndrome is a cluster of NCD conditions that occur together, increasing the risk of mortality in settings where services are unavailable or compromised.

This work, led by a research team from the International Rescue Committee and the American University of Beirut, was guided by a Steering Committee comprising a group of NCD experts from across the world. A robust methodology was used to identify the top research priorities; the resulting report marks a significant milestone in our collective efforts to contribute to solutions to these health challenges in crisis settings.

We thank all contributors and stakeholders for their unwavering commitment to advancing the field of humanitarian health research, and urge researchers, practitioners, policymakers and donors to respond to the priorities identified by investing in research to improve the lives of people living with NCDs in crisis settings.

Together, let us strive to ensure that evidence-based knowledge and solutions guide our efforts to deliver effective, ethical, and equitable healthcare to those affected by humanitarian crises.

Anne Harmer

Head of Research for Health in Humanitarian Crises (R2HC),
Elrha

Michael Woodman

Senior Public Health Officer, UNHCR, and
Chair of the Inter-agency Working Group
on NCDs in Humanitarian Settings

EXECUTIVE SUMMARY

Background

Non-communicable diseases (NCDs) pose a significant burden for public health, and are the leading cause of morbidity and mortality worldwide. In humanitarian settings, NCDs present a unique challenge. The burden of NCDs in such settings is particularly high, and their management is often deprioritised due to limited resources and competing priorities. The ability to respond to chronic disease in both acute and long-term crisis settings is not well established, with access to care inadequate and frequently disrupted.

Cardiovascular diseases, in particular, including cardio-metabolic syndrome (CMS), account for over 20% of the global burden of disability. CMS refers to a cluster of three or more conditions that occur together, increasing the risk of NCDs, notably heart disease, stroke and type 2 diabetes. These conditions include high blood pressure, high blood sugar levels, large waist circumference, low levels of high-density lipoprotein cholesterol and high levels of triglycerides in the blood. In humanitarian settings, deaths due to CMS are expected to continue to rise, and may eventually exceed those due to crises or emergencies, accidental deaths, and war and conflict.

This justifies a global call to action to address the rise of CMS in humanitarian settings to prevent further unnecessary deaths and comorbidities.

Goals and objectives

The objective of this research priority setting (RPS) exercise is to help steer the consensus-based research agenda on CMS and NCDs in humanitarian settings for the next decade. This exercise prioritised CMS to allow for a narrower research focus, while still serving the NCD agenda by including questions applicable to NCD service provision more broadly. Findings from this exercise can be extrapolated to other NCDs, particularly those with similar risk factors and management approaches to CMS.

This exercise also aims to identify gaps and generate findings on CMS that will help guide prioritisation of future research efforts on NCDs, including a more in-depth understanding of context-specific needs regarding the management of NCDs in both acute and long-term humanitarian crises.

Overview of methodology

An adapted approach of the Child Health and Nutrition Research Initiative (CHNRI)¹ was followed for this RPS, using an eight-step process (Table 1).

Overview of the NCD-CMS in humanitarian settings research methodology

Step	Description
1. Selection of process managers	Process managers included members of the American University of Beirut and the International Rescue Committee.
2. Selection of the most relevant criteria for the topic of interest	With input from the Steering Committee and Technical Subcommittee (TSC), the four agreed criteria by which to score the priority research questions (PRQs) included impact, effectiveness, feasibility and deliverability.
3. Specification of context in space, impact of interest and context in time	<p>The process managers agreed on the following scope of research:</p> <ul style="list-style-type: none"> • Target populations – all countries and communities affected by or at risk of humanitarian crises (conflict, displacement, complex emergencies, acute/protracted emergencies) • Geographic scope – global, regional, country and local levels • Time scale – 2024 to 2034 • Outcomes of interest – any outcome of interest.
4. Sourcing of priority research questions by deploying a survey guided by evidence maps	An online survey guided by evidence maps was deployed to source PRQs between April and June 2023.
5. Consolidation of PRQs into one overall list	The 182 survey respondents generated a list of 694 PRQs. Following the review process, a final list of 43 PRQs was generated and each question was assigned to a research theme/sub-theme.
6. Scoring of PRQs according to pre-selected criteria	An online survey was deployed for six weeks between October and November 2023 to score the final list of PRQs against four pre-selected criteria.
7. Calculation of scores and ranking of PRQs	75 respondents took part in the survey. For each PRQ, the average score and average agreement score were calculated.
8. Feedback and revisions	A validation meeting was held with the Steering Committee and TSC, and their feedback was incorporated into the final revisions.

Research priorities

Top ten PRQs

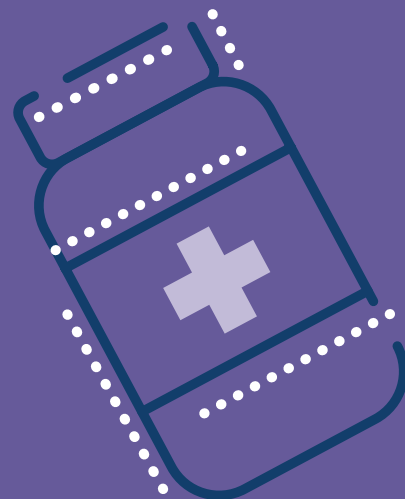
Overall rank	Question	Average score	Average expert agreement (%)
1	Q24. What are the most effective community health worker-driven interventions for cardio-metabolic syndrome management, monitoring and prevention in humanitarian settings, and what work modalities/training of community health workers are needed for this?	92.88	81.67
2	Q13. At primary care level, what are the most effective/cost-effective interventions that can be effectively implemented to provide quality prevention and management, and improve treatment outcomes for cardio-metabolic syndrome in humanitarian settings?	90.87	81
3	Q12. What are the most effective/cost-effective interventions at the individual and population levels that provide quality diagnosis and management for cardio-metabolic syndrome in humanitarian and low-resource settings? How can they be adapted to meet the needs of varied populations?	89.11	74.00
4	Q33. What self-care interventions are effective among people at risk or living with cardio-metabolic syndrome in humanitarian settings? How do they work, for whom and under what conditions?	88.97	76.00
5	Q3. What are the knowledge, attitudes and practices (KAP) regarding cardio-metabolic syndrome, its risk factors and care-seeking practices in [specific humanitarian context] from the perspective of service providers as well as recipients (eg, refugees, displaced persons and host communities)?	88.92	79.33
6	Q10. What are effective mental health and psychosocial support approaches, and the impact of access to psychosocial support on the management of cardio-metabolic syndrome and treatment outcomes in humanitarian settings?	88.20	73.33

7	Q15. What is the (cost-)effectiveness of adopting an integrated, primary care-centric approach to providing cardio-metabolic syndrome care in humanitarian settings?	88.15	76.33
8	Q22. What are effective models of task shifting for cardio-metabolic syndrome prevention and care for different levels of healthcare providers (at health facility and community levels), communities and families in humanitarian settings?	87.42	73.33
9	Q11. What are the most feasible, effective/cost-effective interventions at the individual and population levels to prevent cardio-metabolic syndrome and its risk factors in humanitarian and low-resource settings? How can they be adapted to meet the needs of varied populations?	87.40	75.00
10	Q18. What interventions are effective at preventing or mitigating disruptions/ensuring continuity of care in cardio-metabolic syndrome care in humanitarian settings, how do they work, for whom and in what emergencies?	87.10	75.00

The top ten questions from the second survey focused on outcomes and processes of care. These higher-ranking questions could be explained by the fact that most survey respondents were healthcare professionals, making this an important thematic area for them to investigate further to obtain more detailed answers and identify solutions. The top-ranking questions also reflect a critical need for a minimum initial service package for NCDs in crisis situations. These findings indicate a leaning towards implementation research over descriptive research, which was the focus of previous research.

Recommendations

The findings from this RPS exercise identify the research priorities to build an adequate evidence base on NCD care and prevention, specific to CMS, in humanitarian settings. It is also of the utmost importance to use patient-centred approaches, including the voices and perspectives of those living with NCDs to help determine and centre their preferences and needs during implementation of NCD research.



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