




SPECIAL COMMUNICATION

Oral Health Care in Humanitarian Crises: Developing Research and Guidelines—IADR GOHIRN Workshop at 2025 IADR/PER General Session & Exhibition

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Abstract: Introduction: More than 123 million people are currently forcibly displaced due to conflict, climate change, and political and economic instability. Despite the considerable burden of oral diseases among displaced communities, oral health remains one of the most underresearched and underaddressed areas in humanitarian response.

Objectives: To summarise key insights from the 2025 IADR/PER General Session & Exhibition symposium organised by the Global Oral Health Inequalities Research Network (GOHIRN), which focused on advancing oral health research and guidelines in humanitarian crises.

Methods: The 90-min symposium and associated workshop brought

together 20 to 30 participants, including researchers, clinicians, and global health stakeholders. Following presentations, participants worked in 3 breakout groups to discuss oral health research needs and guideline development, aligned with the World Health Organization's (WHO's) Global Research Agenda on Health, Migration and Displacement. Proposed research principles were mapped to the WHO's 3 core research themes: 1) generating knowledge to support inclusive universal health coverage and primary health care; 2) strengthening the inclusion of migrants, refugees, and displaced populations in health emergency preparedness and response; and 3) promoting multisectoral research on the social and structural determinants of health among displaced groups.

Results: Discussions across the WHO's agenda themes highlighted the need for improved oral health research for understudied displaced populations and for stronger collaborations to translate evidence into policy and practice. Key priorities included embedding oral health research within primary health care and routine surveillance systems; developing evidence-based safety guidelines for clinicians and patients; delivering care in resource-constrained settings; ensuring that research is ethical, culturally responsive, and centred on community benefit; and promoting intersectoral research that accounts for local contexts, dietary practices, and culturally informed understandings of oral health.

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Conclusion: *These insights highlight the pressing need to elevate oral health within humanitarian agendas and establish research frameworks capable of advancing health equity for displaced populations.*

Knowledge transfer statement: *This communication presents insights from a global meeting on research priorities and guidelines for oral health in humanitarian settings. By aligning oral health needs with the World Health Organization's Global Research Agenda on Health, Migration and Displacement, it provides practical guidance for integrating oral health research into primary care, emergency preparedness, and multisectoral public health strategies. It also highlights evidence-based approaches to safety and infection control in crisis contexts, supporting ethical, culturally appropriate, and context-relevant research.*

Keywords: global health, dental research, displaced persons, access to care, safety, ethics

Introduction

Humanitarian crises now affect >1 billion people worldwide through conflict, forced migration, and climate-related displacement. Among the 123 million individuals who are forcibly displaced, children, who make up just 29% of the global population, represent 40% of all displaced persons. An estimated 43 million forcibly displaced people are refugees, with 73% residing in low- and middle-income countries where health systems are already overstretched (UN Refugee Agency 2025). These trends strain fragile health systems and create significant gaps in health care access.

Despite a high burden of oral disease among displaced populations, including caries, periodontal disease, and trauma, oral health remains largely excluded from emergency health strategies and research agendas (FDI World Dental Federation 2024). In response to this gap, the Global Oral Health Inequalities Research Network (GOHIRN) convened

a 90-min symposium and associated workshop at the 2025 IADR/PER General Session & Exhibition to explore principles that should guide an oral health research agenda aligned with the World Health Organization's (WHO's) Global Research Agenda on Health, Migration and Displacement (WHO 2023). The following sections summarise the symposium and workshop discussions as aligned to the 3 core WHO research themes. This also includes the oral health principles recommended during the symposium.

WHO Core Research Themes and Recommended Oral Health Principles

Core Theme 1

Generate evidence on inclusive universal health coverage and primary health care for migrants, refugees, and other displaced populations

The WHO research agenda highlights the importance of generating evidence related to designing health financing models for these displaced populations and interventions that are culturally and linguistically inclusive. Symposium participants discussed examples from the Rohingya refugee camps in Bangladesh, where high oral disease prevalence, limited literacy, scarce hygiene resources, and harmful oral health behaviours remain widespread (Zaheer et al 2025). Undoubtedly, delivering effective oral health behaviour messages can be challenged by literacy or language barriers. While school-based supervised toothbrushing programmes have been implemented in the camps, further research is required to identify effective delivery models and ensure that these interventions are culturally responsive and equitable.

There was emphasis on the reality that in many crisis settings where dental systems have collapsed, oral health is deprioritised in favour of life-threatening conditions. Yet untreated caries, malnutrition-related oral conditions, and oral infections can severely undermine overall health. Evidence is needed to underlie the

construction of much-needed guidelines for infection prevention and control in the care setting, as in crisis settings there may be shortages of clean water, sanitation equipment, and power. In addition, research is essential on how to support the integration of oral health into primary health care with the understanding that this would not compromise other essential services.

Recommendation

Research should examine the barriers, facilitators, and system-level impacts of integrating oral health into primary health care and universal health coverage frameworks in humanitarian settings, with attention to guidelines for safe care provision, infection control, understanding of cultural diversity, and intervention acceptability.

Core Theme 2

Improve knowledge generation on the inclusion of migrants, refugees, and other displaced populations in preparedness and response to (health) emergencies

In several places, crisis erupts in cycles, with civilians displaced for unpredictable lengths of time, with momentary opportunities to rebuild or return before the situation gets bad again. For example, Sudan currently faces one of the world's most severe humanitarian emergencies, with 12 million people internally displaced. Attacks on health and education facilities, infrastructure collapse, and severe workforce shortages have intensified preexisting health challenges (Mahgoub et al 2024). Similarly, in Gaza, the destruction of health facilities rendered routine oral health care inaccessible. Symposium discussions underscored the absence of a defined "basic package" of oral health care for emergencies, despite clear need. Research is required to determine what minimal oral health services, supplies, and competencies should be included in emergency preparedness planning. Engaging displaced populations in participatory research is essential for designing responsive, safe, and sustainable emergency oral health models.

Recommendation

Strengthen data collection during and after crises to assess how oral health services can be incorporated into emergency health responses, and measure their impact on functional health outcomes.

Core Theme 3

Promote multisectoral research on the social and structural determinants of health among displaced groups

Oral health cannot be effectively addressed without considering the broader social determinants that shape health in crisis settings. Overcrowding, poor nutrition, high sugar intake, limited access to clean water, tobacco use, and inadequate health education all exacerbate oral health risks. In the Rohingya camps, for example, poor dietary quality and lack of fluoride are major contributors to high caries prevalence (Zaheer et al 2025). The discussions fell on ensuring that there is research on how the social determinants within humanitarian crisis exacerbate oral health and the need for production of evidence-based guidelines for clinicians to use when delivering oral health services in resource-deprived settings.

Recommendation

Research that explores cross-sector collaboration among oral health teams, water/sanitation, and maternal and child health teams, as well as education modalities to address the upstream social determinants of health.

Cross-cutting Principles: Ethics, Integration, and Context

The symposium emphasised several overarching principles essential to oral health research in humanitarian settings. Ethical research must include appropriate supervision for dental students to prevent unlicensed care, alongside training for all research staff to ensure sensitivity to cultural norms and community expectations. Terminology such as “refugee,” “migrant,” and “displaced person” varies across contexts and carries policy implications that

researchers must consider. Integration of oral health within maternal and child health services, primary health care, and insurance systems should be evidence driven to ensure feasibility and long-term sustainability. Preventive approaches were identified as particularly cost-effective and should be prioritised in health financing research. Infection prevention and control were also identified as a key part of the ethical delivery of services in any setting and should not be neglected in situations of humanitarian crises

Conclusion

Oral health must no longer remain a neglected component of a humanitarian health response. As global displacement continues to rise, oral health researchers have a vital role in ensuring that the universal right to health includes the right to oral health. Aligning research and policy development with the WHO’s global research agenda provides a strategic pathway for addressing oral health inequities among displaced populations. Investment in context-sensitive, safety-related, ethical, and inclusive research will strengthen health system resilience and promote the dignity, well-being, and overall health of displaced individuals worldwide.

Author Contributions

K. Wanyonyi-Kay, L. Cohen, contributed to conception and design, data analysis, drafted and critically revised the manuscript; K. Zaheer, H. Lee, contributed to conception and design, data analysis, critically revised the manuscript; E. Cuny, M. Lee, D. Weisfuse, contributed to conception and design, critically revised the manuscript. All authors approved the final version of the manuscript and agreed to be accountable for all aspects of the work.

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