

## Health Emergency and Disaster Risk Management (Health-EDRM)

### Background

One of the three strategic priorities under the WHO's 13th General Programme of Work for 2019-23 is to ensure that one billion more people will be better protected from health emergencies. This priority aims to build and sustain resilient national, regional and global capacities, and to ensure that populations affected by acute and protracted emergencies have rapid access to essential life-saving health services. The WKC has contributed to the global movement to enhance scientific evidence to improve Health-EDRM, as represented by the WHO Thematic Platform for Health-EDRM Research Network (TPRN). The specifics of such needs have been highlighted in the Sendai Framework on Disaster Risk Reduction 2015-2030 (Sendai Framework), the resulting document of the 3rd UN World Conference on Disaster Risk Reduction. The WKC is uniquely placed to continuously engage with experts in Japan who have extensive experience in prevention, preparedness, response and recovery from severe disasters. Based on the research gap analysis and recommendations from an expert meeting in Kobe in 2018, and the lessons and experience from Japan, WKC has selected several research areas to focus on during 2018-2026.

### Key research areas

1. To address gaps and information needs in the research architecture to enable standardization and ethical issues.
2. To inform about the most appropriate format and key content for health data collection and management and enable greater standardization and comparative analysis of health impact across disaster prevention, preparedness, response and recovery.
3. To carry out research that supports evidence-based policy development enabling effective disaster response, with focus on a holistic approach to the health needs of survivors through adaptable health systems.
4. To study the specific health needs of vulnerable sub-populations, including older adults.

### Progress report 2018-19

#### *Results from research completed in 2018-19*

In October 2018, the WKC convened the **Kobe Expert Meeting on Scientific Evidence in Health-EDRM** in cooperation with the Asia Pacific Conference on Disaster Medicine (APCDM). The meeting brought together leading experts from all regions of WHO, TPRN, World Association for Disaster and Emergency Medicine (WADEM) and other partners. The purpose of the meeting was to identify concrete research questions based on the priorities established and articulated in published reviews of research needs conducted by the coordinators of the WHO TPRN. The meeting was attended by 32 experts from 12 countries, who identified research questions in five major areas: health data management, mental health and psychosocial support, health needs of sub-populations and health literacy, health workforce development, and research methods and ethics. The results of the meeting were published in a special issue of the International Journal of Environmental Research and Public Health in 2019 (see publications 1 to 4). Based on the findings of this expert meeting, WKC published a call for proposals on Health-EDRM research in 2019.

Following the successful Kobe Expert Meeting in 2018, WKC was appointed as the secretariat of TPRN with the agreement of HQ and all Regional Offices. **The 1<sup>st</sup> TPRN Core Group Meeting** with the focal points of HQ and Regional Offices was held in Awaji, Hyogo on 17-18 October 2019. During the Core Group Meeting, the plan and process for setting the **WHO Research Agenda on Health-EDRM**, including the expansion of scope of TPRN activities, was discussed. The results of the meeting will be summarized into a peer-reviewed journal paper in 2020.

### Research ongoing (2018-2021) and expected results

In the Kobe Expert Meeting 2018, issues were raised about the gaps in the Health-EDRM research methodology and impact evaluation. Subsequently, WKC joined as core editor in the preparation of the **WHO Guidance on Research Methods for Health-EDRM (2018-2020)** with a multi-disciplinary team of authors of researchers, government officials and WHO officers representing all regions of WHO. This guidance aims to provide practical advice about how

to plan, conduct and report a wide variety of studies across different settings. Case studies of direct relevance to Health-EDRM will provide real-life examples of research to illustrate the methods and their impact. The guidance will be published in 2020. For the effective dissemination and utilization of the guidance, webinars for practical usage of the guidance will be prepared by the authors of each chapter.

Based on the results of the Kobe Expert Meeting 2018, WKC designed and published a **Call for proposals in 2019 for Health-EDRM research** to address the identified research gaps and needs in four research areas: health data management, mental health and psychosocial support, health needs of sub-populations and health literacy, and health workforce development.

An ongoing project since 2018 is the **population-based survey to identify the risk and health needs of older adults after disasters** in collaboration with **University of Hyogo and Kumamoto University**. The survey covered the whole population of Mashiki-town, one of the most severely affected areas of the Kumamoto Earthquake in 2016. The results of the survey will be summarized into a project report in 2019 and a peer-reviewed journal paper in 2020. This research is intended to improve the management of care for older populations.

### **Proposed research program: 2020-21**

As noted, WKC published a call for proposals in 2019 for Health-EDRM research in the four major research areas identified from the Kobe Expert meeting in 2018:

- health data management before, during and after emergencies and disasters
- mental health and psychosocial support before, during and after emergencies and disasters
- addressing health needs of sub-populations and strengthening health literacy
- health workforce development for Health-EDRM

Some 31 applications were received under this global call from Australia, Belgium, Hong Kong, Italy, Japan, Netherlands, Philippines, Republic of Korea, Sweden, UK, USA were received. In September 2019, all proposals underwent an initial screening for completeness of applications, and three to five proposals are undergoing a second technical review by WKC staff, WHO staff in HQ and regional offices, and members of the Scientific Working Group. It is anticipated that at least four proposals will be selected, one for each area of the four major research areas, and that research in these four areas will be undertaken during 2019-21.

Along with the implementation of those research programs, WKC will facilitate a discussion on **setting WHO Research Agenda on Health-EDRM in collaboration** with TPRN and other internal and external experts. The **establishment and operational plan of TPRN** was announced and introduced in several key domestic and international conference on disaster risk management and Health-EDRM. As of November 2019, xx participants from xx countries are involved in TPRN and many of them contributed to the chapter writing and peer-review of the **WHO Guidance on Research Methods for Health-EDRM**. Further collaboration for research agenda setting and possible future research projects will be discussed in the periodical communication with the participants.

### **Publications**

#### **WHO/WKC project briefs**

**Terms of Reference of TPRN:** <https://www.who.int/hac/techguidance/preparedness/WHO-Thematic-Platform-Health-EDRM-Research-Network-2018.pdf?ua=1>

**Operation plan of TPRN:** [https://extranet.who.int/kobe\\_centre/sites/default/files/TPRN\\_OperationPlan.pdf](https://extranet.who.int/kobe_centre/sites/default/files/TPRN_OperationPlan.pdf)

## Call for proposals issued

**Health-EDRM research** in four areas (health data management, mental health and psychosocial support, health needs of sub-populations and health literacy, health workforce development). Call opened from 18 July to 30 August 2019. Selection was conducted in September 2019. Four proposals selected for external review.

## Journal articles

1. Kayano R et al. WHO Thematic Platform for Health Emergency and Disaster Risk Management Research Network (TPRN): Report of the Kobe Expert Meeting Int J Environ Res Public Health. 2019 Apr 6;16(7). pii: E1232. doi: 10.3390/ijerph16071232.
2. Kubo T et al. Health Data Collection Before, During and After Emergencies and Disasters-The Result of the Kobe Expert Meeting. Int J Environ Res Public Health. 2019 Mar 12;16(5). pii: E893. doi: 10.3390/ijerph16050893.
3. Aung MN, Murray V, Kayano R. Research Methods and Ethics in Health Emergency and Disaster Risk Management: The Result of the Kobe Expert Meeting. Int J Environ Res Public Health. 2019 Mar 3;16(5). pii: E770. doi: 10.3390/ijerph16050770.
4. Génèreux et al. Psychosocial Management Before, During, and After Emergencies and Disasters-Results from the Kobe Expert Meeting. Int J Environ Res Public Health. 2019 Apr 12;16(8). pii: E1309. doi: 10.3390/ijerph16081309.

## Other activities

November 2018, Dr Ryoma Kayano had a **presentation on TPRN and the results of Kobe Expert Meeting** at a special session on research at the **WHO Technical Workshop for Concepts & Guidance for the Implementation of Health-EDRM by Countries, Geneva, Switzerland**. Through this workshop, organized by WHO HQ, WKC were nominated as the secretariat of the TPRN with the agreement of HQ and Regional Offices.

March 2019, Dr Ryoma Kayano had a **keynote speech on TPRN establishment and operation plan at the 24<sup>th</sup> Annual Conference of Japanese Society for Disaster Medicine, Tottori, Japan**. The conference convened over 2,100 Japanese researchers and stakeholders of Health-EDRM. Through the speech WKC successfully involved the key Japanese researchers of Health-EDRM and some are involved in the development of the Guidance.

May 2019, Dr Ryoma Kayano had a **plenary speech and co-organized a workshop on TPRN operation plan and the development of the Guidance at the WADEM Congress 2019, Brisbane, Australia (5-9 May)**. In the same month, he also provided speeches on the same theme at **International Conference on Silk-road Disaster Risk Reduction, Beijing, China (10-12 May)** and **Global Platform for Disaster Risk Reduction, Geneva, Switzerland (13-17 May)**. Through the speech and workshop, over 50 international leading experts offered their contribution to the TPRN.

Dr Ryoma Kayano also has provided keynote speeches at several Japanese local academic conference on disaster risk reduction including **Kyoto University Memorial Symposium on Multi-Disciplinary Research Collaboration on Disaster Risk Reduction, June 2019, Kyoto, Japan**, **Konan Women's University Global Health Seminar on Disaster Medicine, July 2019, Kobe, Japan**, and **the 25<sup>th</sup> year memorial symposium of Great Hanshin Awaji Earthquake by Hyogo Disaster Reduction Alliance, August 2019, Kobe, Japan**.