Promoting Useful and Usable Scientific Evidence in Health Emergencies and Disaster Risk Management: The WHO Health EDRM Knowledge Hub

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Introduction: In order to promote useful and usable scientific evidence for health emergency and disaster risk management (Health EDRM), the World Health Organization (WHO) Health EDRM Knowledge Hub has been established as part of the WHO Thematic Platform for Health EDRM research network (Health EDRM RN). The Knowledge Hub aims to extend scientific knowledge; strengthen evidence-based practice in the management of health risks in emergencies and disasters; create and develop a competent network in the Health EDRM community; and integrate research, policy and practice.
Method: To begin with, the Knowledge Hub has five interconnected research themes: (1) health data management; (2) psychosocial support; (3) health needs of sub-populations; (4) health workforce development; and (5) research methods. Systematic literature reviews and expert consultations have assessed current research under each theme and identified potential knowledge gaps. The work of the Knowledge Hub is advised by members of the Health EDRM RN and staff in WHO regional offices.
Results: The WHO Health EDRM Knowledge Hub will be a platform for providing and exchanging up-to-date evidence. This will include information on validated methods for managing health data and identifying health needs in specific subpopulations. The Knowledge Hub will raise awareness of psychosocial support, health workforce development and research before, during and after disasters. It is targeted to policy-makers, researchers, practitioners and the broader community with the aim of accelerating evidence-informed policy and programs. This will support implementation of the Sendai Framework for Disaster Risk Reduction 2015–2030, the WHO Health EDRM Framework, and other related global, regional and national agendas.
Conclusion: This paper introduces this new initiative and describes its objectives, design, and implementation. Additionally, it provides an overview of the Knowledge Hub and invites session participants to provide insights into their current needs and to make recommendations for improvement.

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Disaster Management Simulation–A Novel Virtual Exercise

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Introduction: Disaster management and emergency preparedness relies on the collaboration, communication, and expertise of a multidisciplinary team. Skills in preparation, communication, and management of disasters are core competencies of an emergency physician. To learn the principles of disaster management, simulations are critical as mass casualty/rapid surge events seldom occur. The COVID-19 pandemic resulted in the cancellation of in-person events. In response to these restrictions, the University of Toronto, EM Program developed a successful virtual interprofessional mass casualty simulation.
Method: The novel online simulation event was piloted in 2021 and ran for three-hours. The exercise focused on developing soft skills (e.g., communication, team-work, and debriefing) and hard skills (e.g., triage, casualty distribution, and activation of plans). Groups were composed of members of each post-graduate year to facilitate near-peer learning. A total of six groups were formed: Adult, Children, Community Hospitals, EMS, Government, and Media. Each Team used multiple communication tools (i.e., Whatsapp groups, Zoom breakout rooms, Shared Google Documents) to swiftly pivot and manage a mass casualty event. Post-exercise debriefing and anonymous evaluations were gathered.
Results: A total of 28-residents (nine PGY1, ten PGY2, and eight PGY3 learners) and 11-staff observers participated (25-respondents). Nineteen participants rated the simulation exercise as excellent and six as "very good". Twenty participants rated the workshop as "very useful" and five as "useful". Positive feedback centered around content applicability, exercise creativity, level of engagement, and learning value. Constructive feedback included the need for more pre-exercise orientation time, increasing disaster management time, and inviting allied-health staff.
Conclusion: There is a clear need for EM residents to learn and develop skills related to disaster management and emergency preparedness. This exercise showed that disaster management and emergency preparedness competencies can be learned in a virtual format. This virtual format has encouraged its continuation and further inspired the curation of a four-year program.

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Integration of Simulation-Based Exercises and Practical Skills into a Public Health Emergency Management Curriculum

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Introduction: As public health emergency management (PHEM) is a growing field, so is the development of its workforce. Ensuring workforce readiness from graduate-level education and courses can be challenging given the limitations of the traditional classroom environment. This presentation highlights a novel curriculum created and taught by first responders consisting of simulation and application of practical skills developed within a public health graduate certificate program.
Method: The semester-long course reviews foundations of PHEM and students progress through a sequence of