frequency and scope of these events. Considerations include: identifying key staff, their roles, strategies to support continuity of care, delivery mode of education, and resource allocation.

Method: Participants experienced in disasters and major emergencies or preparation at three tertiary referral teaching hospitals were purposively selected during 2016 and 2019. An interpretive paradigm and case study design enabled the exploration of perspectives concerning effective and preferred methods for preparedness. Fifty-five allied health professionals, medical practitioners, and nurses participated in semi-structured interviews; and support staff participated in focus groups. Results: Key findings: 1. Recognition that allied health professionals and support staff are essential and must be included in disaster or major emergency preparation and plans. 2. Factors that increase the likelihood of staff deciding to be absent from work include: perception of danger, insufficient understanding of responsibilities, and hospital preparation is perceived inadequate. Staff understanding their role has a positive influence for attendance and coping during disasters. 3. Preferred and most effective method of disaster preparedness is practical learning, combined with other preparation methods. Online learning as the major mode was unpopular. 4. Challenges of inadequate resources limits managers' ability to facilitate staff preparation and care delivery during disasters. Resources affect method, duration and multidisciplinary inclusion in disaster preparation.

**Conclusion:** This research found disaster preparedness in hospitals is critical. Site and occupation specific differences need to be addressed. To mitigate impacts of disasters or major emergencies, preparation must include identification of required resources. Disaster preparedness and management must be inclusive of multidisciplinary staff, including allied health and support staff. Facilitation of role understanding to promote continuity of care during disasters or major emergencies is imperative to promote staff participation and effectiveness in response to disasters.

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## Use of the U.S. National Poison Data System (NPDS) to Detect and Describe Potentially Harmful, Non-Traditional Behaviors Taken by Individuals to Prevent, Treat, or Cure COVID-19

Amy Schnall DrPH<sup>1</sup>, Arianna Hanchey MPH<sup>1</sup>, Angela Peralta MPH<sup>1</sup>, Art Chang MD<sup>1</sup>, America's Poison Centers Toxicology Team<sup>2</sup>

1. Centers for Disease Control and Prevention, Atlanta, USA

2. America's Poison Centers, Alexandria, USA

**Introduction:** On January 19, 2020, Washington State reported the first confirmed case of COVID-19. Two years later, the Centers for Disease Control and Prevention (CDC) reported over 90 million cases across every U.S. state and territory causing more than 1 million deaths, with numbers continuing to grow. As part of the overall pandemic response, CDC, in coordination with America's Poison Centers, conducted enhanced surveillance of National Poison Data System (NPDS) data to detect potentially harmful, non-

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traditional behaviors taken to prevent, treat, or cure COVID-19 to provide situational awareness and ensure CDC continues to develop effective, evidence-based health communication messages and materials.

**Method:** Data from the fifty-five U.S. poison centers (PCs) are uploaded in near real-time to NPDS. CDC monitored several categories including cleaners and disinfectants, medications/ vitamins, and behaviors such as suicide and drug use. We characterized exposures by daily call volume, age group, management site, route of exposure, and medical outcome compared to previous years. We also conducted follow-up detailed review for certain anomalies, spikes, or extreme adverse events.

**Results:** We reported PC data to several task forces within the CDC Emergency Operations Center. The daily number of exposures increased sharply beginning in March 2020 for exposures to cleaners and disinfectants. For example, bleach exposure calls saw a 62.1% increase compared to 2019. Several medications saw spikes in calls in coordination with media coverage of certain treatments (e.g., hydroxychloroquine) throughout the pandemic.

**Conclusion:** This data helped ensure a coordinated public health response to COVID-19 and maximized the unique role of PCs in addressing public and medical provider concerns and questions. Results led to several actions including notifications to state health departments, targeted messaging, and tailored response efforts. PCs are a valuable resource for providing guidance and advice about exposures to hazardous substances and can help reduce the burden on the healthcare system.

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## Evaluating the Effect of Brief Disaster Education on Emergency Department Staff: Can Short, Low-cost Education Improve Disaster Readiness of Non-DMAT Healthcare Personnel?

Sungbae Moon MD<sup>1</sup>, Jung Ho Kim MD<sup>2</sup>

- 1. Kyungpook National University Hospital, Daegu, Korea, Republic of
- 2. Yeungnam University Medical Center, Daegu, Korea, Republic of

**Introduction:** Some incidents require early deployment of emergency department personnel not designated as disaster medical assistance team (DMAT). Although not as trained as DMAT members, they should be aware of basic disaster response concepts and knowledge. Educating disaster readiness to every healthcare staff in emergency departments would be ideal but it is very costly in both time and expense. To overcome this problem, we tried to evaluate the effectiveness of teaching basic concept and knowledge to non-designated personnel in a short-session and measure the effect.

**Method:** This study is a before-and-after comparison study. From July 2020 to July 2022, a two-hour education was given to volunteers among doctors, nurses, paramedics and administrative staff working in emergency departments across four hospitals in Korea. Educational sessions consisted of basic disaster concept, pre-deployment DMAT preparations, initial actions required on incident site, key elements of incident response (command, control, safety, communication), and triage. Attendees were given a pretest before the session and another test after the session. Chi-square test and Wilcoxon rank test were used to compare the results.

**Results:** Total of 105 volunteers participated in the study. Participants were mostly nurses (62.9%) followed by paramedics (23.8%). Overall knowledge level reported to be increased, including knowledge regarding DMAT deployment (29.5% to 93.3%, p<0.001), DMAT personnel (26.7% to 94.3%, p<0.001), DMAT-designated equipment (23.8% to 60.0%, p<0.001), initial response (27.6% to 69.5%, p<0.001) and patient transport priority (74.3% to 94.3%, p<0.001). Questions testing triage and rate of participants answering every question showed improvement with post-test median score of 67% and rate of 1.0% to post-test median score of 100% and rate of 35.2%, respectively (both p<0.001).

**Conclusion:** Educating non-DMAT personnel in emergency departments with a short session showed significant improvement in basic knowledge of disaster response. It may help institutions with limited resources.

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## Remote Teaching in a Rwandan Emergency Medicine Residency: A Viable Option with Limited In-person Staff During a Pandemic

Andrew Beck MD, MS<sup>1</sup>, Maria Isabel Diaz ScM<sup>1</sup>, Enyonam Odoom MPH<sup>1</sup>, Claudien Niyigirimbabazi MD<sup>2</sup>, Oriane Longerstaey MD<sup>1</sup>, Vincent Ndebwanimana MD<sup>2</sup>, Doris Uwamahoro MD<sup>2</sup>, Naz Karim MD, MS<sup>1</sup> 1. Brown University, Providence, USA

2. University Teaching Hospital of Kigali (CHUK), Kigali, Rwanda

**Introduction:** Low/middle-income countries (LMIC) in Africa face unique, systemic challenges in medical education. Africa faces a shortage of medical schools; only one school serves 24 countries. 11 countries have no medical school. Residency programs are few. The effect of this shortage is far-reaching. Africa has 3.5% of the world's health workforce and 1.7% of the world's physicians, yet 27% of the global disease burden. COVID-19 created further resource constraints, especially in emergency medicine (EM). Non-clinical physician functions such as student and resident education suffered. In Rwanda, we implemented a pre-recorded, remote teaching model to substitute in-person instruction. This study evaluates whether remote teaching is received positively by EM learners and whether it is a viable alternative during times of limited in-person availability.

**Method:** 28 lectures were recorded by American EM faculty. The recordings were presented to Rwandan EM residents within their standard didactic curriculum. Lecturers were available in real time via Zoom. Topics were chosen by Rwandan faculty based on curricular needs. Program evaluation followed the Kirkpatrick framework. Attendees completed a post-lecture Likert-scale survey assessing the first Kirkpatrick level related to satisfaction, lecture and learning method quality, and suitability. Qualitative and free-response data was also collected.

**Results:** Responses were analyzed with descriptive statistics using means and standard deviations. The mean response range

across questions was 3.6-4.3 (1 = worst, 5 = best); the standard deviation range was 0.4-1.6, indicating an overall positive result. Qualitative feedback, which reached saturation, did not indicate significant dissatisfaction with the quality or suitability. Points for improvement included lecturer accents and rate of speech. **Conclusion:** When in-person lecturers are unavailable, pre-recorded and remote instructional methods may be a suitable substitute. Future directions may include piloting the project with a multinational cohort or in LMICs with greater technological or resource limitations, and assessing higher Kirkpatrick framework objectives.

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## The WHO Thematic Platform for Health Emergency and Disaster Risk Management Research Network (Health EDRM RN)

Ryoma Kayano MD, PhD<sup>1</sup>, Makiko MacDermot MSc<sup>1</sup>, Qudsia Huda MD<sup>2</sup>, Emily Chan MD<sup>3</sup>, Virginia Murray MD<sup>4</sup>, Jonathan Abrahams<sup>5</sup>

- 1. Centre for Health Development, World Health Organization, Kobe, Japan
- Disaster Risk Reduction and Resilience, WHO Health Emergency Programme, World Health Organization, Geneva, Switzerland
- The Chinese University of Hong Kong, Hong Kong SAR, China
- 4. UK Health Security Agency, London, United Kingdom
- 5. Monash University, Melbourne, Australia

**Introduction:** WHO Thematic Platform for Health Emergency and Disaster Risk Management Research Network (Health EDRM RN) is a global expert network, launched in 2018, aiming to strengthen the scientific evidence for managing health risks associated with all types of emergencies and disasters, and to foster global collaboration among academia, government officials and other stakeholders. The Health EDRM RN's activities are in line with WHO Health EDRM Framework, which support Sendai Framework for Disaster Risk Reduction 2015-2030.

**Method:** Health EDRM RN's strategic direction is discussed and advised by its Core Group that consists of focal points of WHO HQ responsible unit, all six Regional Offices, WHO Center for Health Development (Secretariat), RN co-chairs, and key external stakeholders. Based on the strategic direction, the Secretariat facilitates global, regional, and local collaborative activities with the RN participants and partners. As of 2022, over 250 global experts participate in the network.

**Results:** Following the results of the Core Group Meeting in 2019, 2020 and 2021, multiple activities and results were generated including the identification of five Health EDRM key research areas. WHO Guidance on Research Methods for Health EDRM developed in collaboration with over 150 global experts, initiation of the project to establish WHO Health EDRM Knowledge Hub for developing WHO Health EDRM Research Agenda and aligning with UNDRR research agenda on thematic areas including developing a special supplement on mid-term review of Sendai Framework implementation in health. The 2022 Core Group Meeting, held on October 27, 2022, agreed to promote knowledge dissemination

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