describing the use of UNDRR/ISC HIPs to manage risk and implement the Sendai framework for disaster risk reduction.

Development of the Matrix for Regional Collaboration on Disaster Health Management in the ASEAN Region

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Introduction: The ASEAN Leaders' Declaration on Disaster Health Management (ALD on DHM) was adopted at the 31st Summit in Manila in 2017. The Plan of Action (POA) to implement the ALD on DHM was adopted by the ASEAN Health Ministers Meeting in 2019, with Regional Collaboration Committee on Disaster Health Management (RCCDHM) established as a primary implementing mechanism under the purview of ASEAN Health Cluster two and Senior Officials Meeting on Health Development (SOMHD) to operationalize the implementation of the POA with its priority areas and targets to be realized by 2025. The first RCCDHM Meeting was organized in-person in Bangkok in 2020. The RCCDHM is composed of two representatives from each ASEAN member state (AMS), one representative from the ASEAN Secretariat and one representative from AHA Centre, and the secretariat role for the RCCDHM is carried out by the Ministry of Public Health, Thailand. The RCCDHM Meeting decided to develop the Matrix of Detailed Activities (MDA) addressing the five priority areas of the POA-ALD on DHM.

Method: The RCCDHM Meeting organized a core group consisting of the Philippines and Thailand to develop the MDA which identifies information on activities, expected outputs, indicators, lead country, source of support, and the timeline for achieving objectives of the POA. During the COVID-19 pandemic, online communication was applied to discuss and coordinate among the AMS.

Results: The core group developed the draft MDA in consultation with the ASEAN Secretariat/Health Division. After a series of discussions, the RCCDHM endorsed the MDA which confirms necessary activities and commitment of AMS.

Conclusion: The review and endorsement process for the MDA will be elevated to the higher level meetings in the ASEAN Health sector for final approval. The RCCDHM also confirmed to strengthen collaboration with other ASEAN initiatives, non-health ASEAN sectors, UN, or other international partners, and the ARCH Project.

Heatwaves Risk Perception and Knowledge-Empirical Evidence from Pakistan

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Introduction: Heatwaves are the leading weather-related causes of deaths globally. Since the mid 20th century, the frequency and intensity of heatwaves has increased with recent reports projecting a substantial warming in temperature extremes by the end of the 21st century.

Method: In this cross-sectional study, we attempted to assess public perception and knowledge on heatwaves. Data was collected across Pakistan among a sample of people aged 18 years and above using an online survey questionnaire. Health Belief Model (HBM) constructs were used to assess risk perception using a total of 14 statements while knowledge was measured using 12 statements. The Unadjusted Odd Ratio (UOR) and Adjusted Odd Ratio (AOR) of 95% Confidence Intervals (CI) were employed through binary logistic regression. A total of twelve variables were included in the model (11 categorical and 1 continuous).

Results: Out of the 686 participants, the majority of the people (57.73) showed high heatwaves risk perception and a high level of heatwave knowledge (59.91). The results of the multivariate regression model (AOR) showed that participants within the Secondary and/or higher Secondary (Grade 9th to Grade 12th) were less likely (OR=0.304) perceiving heatwaves risk compared to the reference group (Basic/Elementary Level i.e., (Grade 1st to Grade 8th)). As the number of participants who lives with others and who heard about heatwaves increases, the participants are more likely to perceive high heatwaves risk. For instance, participants who lives with others and have heard about heatwaves perceived heatwaves risk 1.982 and 1.816 times higher respectively than those who live alone and those who have not heard about heatwaves before.

Conclusion: HBM can be useful in designing interventions aimed at increasing people's adaptive behaviors during heat waves. This study provides useful insights to the policymakers across Pakistan in understanding the public's perception that can lead to informed decision-making.

The Role of Self-help Women's Groups in Disaster Risk Reduction and Community Resilience in Nepal

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Introduction: The differential impact and needs of women during disasters are highlighted in contemporary research, there

is limited understanding of the distinctive contribution they make and the ways they cope. Women are the key drivers of livelihood, therefore, the economic losses resulting from natural hazards may have massive impacts on their mental health. This study examines how the self-help women's groups in rural Nepalese communities provide economic, social, socio-political, and public-health support to build safer, sustainable, and resilient communities.

Method: In-depth open-ended interviews were conducted between January 2021–April 2021 with grassroots women leaders(n=8) representing their (women's/mother's) group inquiring about their activities related to risk reduction and perspectives on how they cope during natural hazards. The findings were analyzed and discussed using two analytical frameworks namely, the Sustainable Livelihood Approach (SLA) and Bronfenbrenner's Socio-Ecological Model (SEM) as scaffolds. Data analysis followed the thematic analysis technique.

Results: Two major themes emerged from the in-depth interviews: 1) Women are doing their part and 2) Help-seeking behavior as a barrier and facilitator. The traditional female household roles such as cooking, feeding, and caring during pre-disaster states are extended to rescuing, protecting, laborious cleaning, and providing physical and emotional support during disasters. The pre-and post-disaster care responsibility and help-seeking behavior have implications for health, safety, well-being and sustainability. The findings also suggest the inevitability of self-care for women during and post-disasters.

Conclusion: The care roles of women involve both livelihood and health benefits for the family and the entire community. To mitigate the physical and mental health burden for women amplified during natural hazards, self-care should be a critical component of advocacy in disaster awareness campaigns and help-seeking behavior should be promoted as a strength rather than insufficiency.

Systematically Identifying and Evaluating Strategies for Strengthening Community Resilience

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Introduction: Vulnerable populations were the most impacted by the COVID-19 pandemic. This included those with underlying health conditions, self-employed, low-income, people with limited access to health care, and the elderly. To capture these lessons and identify resilience actions, the Health Emergency and Disaster Risk Management (Health EDRM) Framework was used to guide the application of the Public Health System Resilience Scorecard (Scorecard).

Method: This study was conducted in Australia, Bangladesh, Japan, Slovenia, Turkey, and the United States. Participants included emergency professionals, doctors, nurses, environmental health specialists, researchers, and government officials. The Scorecard was used to rank the level of preparedness from 0-5 (5 the highest) for the public health system resilience indicators. Following the individual workshops, recommendations were collated and interpreted to develop consolidated priority actions.

Results: The priority actions related to surge capacity, mental health, ecosystems, societal needs, and high-risk populations. To address surge capacity issues, determining whether existing disaster structures have the capacity to provide support for hospitals during patient surges. This could include services that enable telehealth and primary health care to support hospitals during a crisis. Mental health services at the local government level should be evaluated and awareness of ecosystem risks in urban and rural areas needs to increase. Strategies for achieving reciprocal trust are required to enable uptake of public health information, and the extent at which pre-existing chronic health issues are likely to exacerbate needs to be understood and addressed.

Conclusion: This study revealed several areas for strengthening public health system resilience. Priority actions relate to addressing needs relating to surge capacity, mental health, ecosystems, societal needs, and high-risk populations. This serves as a framework for transforming public health systems to become more adaptive, flexible, and focused on enabling societies to function at the highest possible level when responding to a disaster or pandemics.

A Descriptive Analysis of the Health Care Aspects of Industrial Disasters Around the World

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Introduction: Industrial disasters can have a myriad of repercussions ranging from acute deaths, injuries, and long-term adverse health impacts on nearby populations to political fallout and environmental damage. This is a descriptive epidemiological analysis of industrial disasters occurring between 1995 and 2021 which may provide useful insight for health care systems and disaster medicine specialists to better prevent and mitigate the effects of future industrial disasters.

Method: Data was collected using a retrospective database search of the Emergency Events Database (EM-DATS) for all industrial disasters occurring between January 1, 1995, and December 31, 2021.

Results: 1,054 industrial disasters were recorded from 1995 to 2021. The majority of these disasters occurred in Asia (720, 68.3%), with 131 (12.4%) in Africa, 107 (10.2%) in Europe,