

Abstracts of Oral Presentations-WADEM Congress on Disaster and Emergency Medicine 2019

NON COMMUNICABLE DISEASES

Application of National and Sub-National Indicators to Rank Needs of People with Life-threatening Conditions and Chronic Diseases Before, During, and After a Disaster

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Introduction: Disasters can damage the essential public health infrastructure and social protection systems required for vulnerable populations. This contributes to indirect mortality and morbidity as high as 70–90%, primarily due to an exacerbation of life-threatening conditions and chronic diseases. Despite this, the traditional focus of public health systems has been on communicable diseases. To address this challenge, disaster and health planners require access to repeatable and measurable methods to rank and prioritize the needs of people with life-threatening and chronic diseases before, during, and after a disaster.

Aim: Propose a repeatable and measurable method for ranking and prioritizing the needs of people with life-threatening and chronic diseases before, during, and after a disaster.

Methods: The research began with identifying the risk disasters pose to people with life-threatening and chronic diseases. The data gathered was then used to develop indicators and explore the use of DisasterAWARE™ (All-hazard Warnings, Analysis, and Risk Evaluation) to rank and prioritize the needs before, during, and after a disaster.

Results: This research found people at greatest risk are those with underlying cardiovascular and respiratory diseases, unstable diabetes, renal diseases, and those undergoing cancer treatment. A sustainable method to help address this problem is to expand the use of DisasterAWARE™ (All-hazard Warnings, Analysis, and Risk Evaluation) to rank and prioritize needs at national and sub-national levels.

Discussion: DisasterAWARE™ has been successfully applied to the assessment and prioritization of disaster risk and humanitarian assistance needs in Southeast Asia (ASEAN, Viet Nam), Central America (Guatemala, El Salvador, Honduras, Nicaragua), South America (Peru), and the Caribbean (Jamaica, Dominican Republic). Using the indicators developed through this research, this proven methodology can be seamlessly and easily translated to rank and prioritize the needs of people with

life-threatening and chronic diseases before, during, and after a disaster.

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Determining Key Influences on Patient Ability to Successfully Manage Noncommunicable Disease After Natural Disaster

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Introduction: Natural disasters often damage the public health infrastructure required to maintain the wellbeing of people with noncommunicable diseases. This increases the risk of an acute exacerbation or complications, potentially leading to a worse long-term prognosis or even death. Disaster-related exacerbations of noncommunicable diseases will continue, if not increase, due to an increasing disease prevalence, sustained rise in the frequency and intensity of disasters, and rapid unsustainable urbanization in disaster-prone areas. However, the traditional focus of public health and disaster systems remains on communicable diseases, despite a low risk. There is now an urgent need to expand the public health response to include noncommunicable diseases.

Aim: To explore the key influences on patient ability to successfully manage their noncommunicable disease after a natural disaster.

Methods: A survey of people with noncommunicable diseases in Queensland, Australia, collected data on demographics, disease/condition, disaster experience, and primary concern post-disaster. Descriptive statistics and chi-square tests with Bonferroni-adjustment were used to analyze data.

Results: There were 118 responses to the survey. Key influences on the ability to self-manage post-disaster were access to medication, medical services, water, treatment and care, power, and