

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

## VULNERABLE GROUPS

### Disaster Planning for the Urban Homeless Population in the United States

Dr. Stephen Morris, Dr. Emily Bartlett

Department of Emergency Medicine, University of Washington, Seattle, United States

**Introduction:** Homeless individuals may be dependent on social services for nutrition, shelter, and protection. These services are susceptible to disruption in disasters. Individuals are often frequent utilizers of emergency health care services, and an increase in emergency medical services utilization may be predictable. Disaster planners should anticipate and plan for the needs of these special populations.<sup>1</sup>

**Methods:** A review of disaster planning in US cities with high rates of homelessness was conducted. Utilizing homelessness census data, the five cities with the largest homeless population were chosen for analysis. Publicly available disaster plans specifically targeting at homeless were identified. Planning for nutritional support, shelter, protection, and emergency health-care utilization was identified.

**Results:** Planning specifically addressing the needs of the homeless was variable. Planning items surrounding nutrition and shelter were identified, but those around protection and use of emergency services were more limited.

**Discussion:** Recent disasters in the United States have demonstrated the increased vulnerability of populations with high utilization of emergency services during a disaster.<sup>2</sup> Homelessness is common throughout the United States, and appear to be underrepresented at the city disaster planning level.<sup>3</sup> Resources to assist planners are available, but increased adoption is indicated.

### References

1. Disaster Response for Homeless Individuals and Families: A Trauma-Informed Approach, HHS, ASPR. <https://www.phe.gov/Preparedness/planning/abc/Documents/homeless-trauma-informed.pdf>.
2. L. Dent. Progress in Emergency Preparedness for Dialysis Care 10 Years After Hurricane Katrina. <https://ajkdblog.org/>.
3. Disaster Preparedness to Promote Community Resilience. DVA. <https://www.va.gov/HOMELESS/nchav/education/VEMEC-Toolkit.asp>.

*Prehosp. Disaster Med.* 2019;34(Suppl. 1):s93

doi:10.1017/S1049023X19001924

### Discovering Best Practice for Establishing Evacuation Centers for Vulnerable Populations: Findings from an Australian Pilot Study

Dr. Mayumi Kako<sup>1</sup>, Dr. Malinda Steenkamp<sup>1</sup>,

Dr. Benjamin Ryan<sup>2</sup>, Dr. Paul Arbon<sup>1</sup>, Mr. Yosuke Takada<sup>3</sup>

1. Flinders University, Adelaide, Australia

2. Daniel K. Inouye Asia Pacific Center for Security Studies, Honolulu, United States

3. Okayama University, Okayama, Japan

**Introduction:** Potentially vulnerable population groups in disasters include the elderly and frail, people who are isolated, and those with chronic diseases, including mental health conditions or mobility issues. The 2011 Queensland flood disaster affected central and southeast Queensland, resulting in 2.5 million people being adversely affected. Seventy-two local government areas disaster were activated under the Natural Disaster Relief and Recovery Arrangements, which was more than 99 percent of Queensland. The issues regarding the role and responsibility across governments relating to planning, setup, and management of evacuation centers will be discussed.

**Aim:** This paper will report the preliminary findings of a pilot study undertaken with local government officials and humanitarian agencies in Australia concerning their involvement in planning for, setting up, and managing evacuation centers for vulnerable populations in Australia during the Queensland floods in 2011. The objective is to illuminate the challenges officials faced, and the resolutions and lessons learned in the preparation of evacuation centers through this event.

**Methods:** The study involved interviews with local government and relevant agencies' officials who have been involved in establishing evacuation centers for vulnerable populations during the 2011 floods. Six officials were recruited from local government areas affected by the disaster in Queensland, Australia. Semi-structured phone interviews were audio-recorded and thematic analysis was conducted using NVivo software.

**Results:** Three core themes emerged: 1) understanding of the importance of preparation, 2) challenging evacuation center environments, and 3) awareness of good governance principles.

**Discussion:** This pilot study demonstrated that communication with stakeholders during the preparation period prior to a disaster is essential to best practice for evacuation center management. Understanding and being aware of good governance is

also an important element to establish evacuation centers effectively.

*Prehosp. Disaster Med.* 2019;34(Suppl. 1):s93–s94

doi:10.1017/S1049023X19001936

### Hunger in Latin America: What Can We Do?

Dr. Silvana Dal Ponte<sup>1</sup>, Mrs. Daniel Menezes<sup>2</sup>

1. Hospital De Clínicas De Porto Alegre-brazil, Porto Alegre, Brazil
2. DMZ Sport Food Restaurant, Porto Alegre, Brazil

**Introduction:** Hunger is a global problem and has increased in recent years. In Latin America, hunger continues in high numbers. Although the level of hunger is relatively low compared to other regions, this increase in Latin America is mainly explained by the economic slowdown in South America. Also, climate changes are already weakening the production of the main crops in tropical and temperate regions.

**Aim:** Report the numbers of hunger in Latin America.

**Methods:** A cross-sectional study with reports of the World Health Organization's hunger figures, September 2018.

**Results:** The number of hungry people in the world has increased for the third consecutive year and affects 821 million people, according to a report released by UN agencies. This corresponds to one in nine people in the world. In Brazil, the figures indicate that more than 5.2 million people spent a day or more without consuming food by 2017, which corresponds to 2.5% of the population. In Latin America and the Caribbean, hunger has also increased and affects some 39 million people.

**Discussion:** Hunger is a catastrophic problem in Latin America. Involving professionals in food and nutrition to try to reduce these numbers appears to be a good strategy because just as the doctor treats the disease, the involvement of other specialists to address the cause of the problem can bring long-term benefits. A social project for this purpose that mobilizes chefs and nutritionists is in progress in Brazil.

*Prehosp. Disaster Med.* 2019;34(Suppl. 1):s94

doi:10.1017/S1049023X19001948

### Measuring the Health Impact of Natural Disasters – The Attribution Challenge Facing the Medical Community

Dr. Gerard A Finnigan

School of Medicine, Deakin University, Highton, Australia

**Introduction:** Published reports on health impacts from natural disasters causing injuries, poisonings, infectious disease, chronic illness, and NCDs continue to grow exponentially. Simultaneously, calls for the improvement in scientific rigor to improve causal links, strength of association, and efficacy of interventions are increasing. At the heart of this challenge is demonstrating mortality and morbidity risk across a time continuum, where the health effect is not detected for weeks, months, or years after the disaster event. In some circumstances, the presence and acuity of illness are not apparent until after an insidious or cumulative point has been reached. Notwithstanding medical observations or disaster-attributed morality classification matrices being available for 20 years, natural disaster mortality continues to be measured narrowly,

on those confirmed dead (acute physical trauma, drowning, poisoning, or missing). There has been little effort to expand mortality assessment beyond this historical lens. For example, it fails to consider suicide in drought and was not redefined when the Indonesian fires caused the highest mortality in 2015. Tens of thousands of lives were lost from smoke exposure.

**Aim:** This study sought to test the progress of two decades of published medical and scientific literature on natural disaster mortality reporting.

**Methods:** A retrospective analysis of natural disaster impact reports for the past ten years was performed on three of the world's largest disaster databases, including CRED, Sigma, and ADRC.

**Discussion:** WADEM members must commence a strategic process to expand the recognition of health impacts from natural disasters. Global and domestic advocacy is required for building evidence through improved systematic collection of data and especially reporting patient continuum of care as a minimum standard. Without this leadership, disaster health impacts will continue to be underestimated and emergency health program responses and financial resources will fall short in protecting those most at risk.

*Prehosp. Disaster Med.* 2019;34(Suppl. 1):s94

doi:10.1017/S1049023X1900195X

### Risk of Retrogression in Social Rights and Reduction of Brazilian Public Policies

A/Prof. Maria Isabel Barros Bellini<sup>1</sup>,

Sr. Rodolfo de Bellini e Soares<sup>2</sup>

1. Pontificia Universidade Católica, Porto Alegre, Brazil
2. Escola De Saude Pública, Porto Alegre, Brasil

**Introduction:** Brazil has 200 million descendants of African, Portuguese, Indigenous, German, Italian, and other peoples who have built their identities. The Federal Constitution was rewritten in 1988 to include a Social Protection System. Between 2000 and 2016, the federal government was governed by the Workers' Party. This party invested in the creation of inclusive public policies and affirmative actions built through collective processes of citizenship that guaranteed better living conditions for the population. In one decade, it went from being underdeveloped to developing. In 2016, the elected president of the Workers' Party was withdrawn from power through impeachment. In the next election, right-wing conservatives excluded speech, attacked minorities (e.g. LGBT population), and defended the traditional family.

**Aim:** To understand the retreat of Brazilian public policies in a country that set public social policies, compensatory policies, and affirmative actions guaranteeing citizenship of men and women.

**Methods:** Qualitative research with analysis and reflection on the regression of universalist public policies and affirmative policies with the creation of quotas.

**Results:** The creation of affirmative actions was guaranteed. Vacancies in public tenders for the black population led to the establishment of 50% quotas for blacks in universities, and the creation of a universal health system, or universal expanded