

## Reduction of the risks of natural disasters poses a challenge for public health

Among the numerous environmental impacts that affect the lives of millions of people worldwide, especially in the major urban centers, “natural” disasters occur ever more frequently and intensely. They severely impact certain population groups and more vulnerable geographic areas, both in the poorest or even in the richest countries, as was demonstrated after Hurricane Katrina passed through New Orleans (USA) in 2005.

Over the past 40 years more than 3.3 million deaths by disasters have been recorded worldwide, the majority in poor countries, which affect over 90% of the population and deaths. The earthquake in Haiti in 2010 is one of the most dramatic examples in recent years. If these events impact the health of these populations more severely, it is important to bear in mind that some population groups are more vulnerable than others, such as women and children, who are 14 times more likely to die in a disaster.

In Brazil, several recent examples deserve special mention. Floods in the States of Santa Catarina in 2008 and Pernambuco and Alagoas in 2010 left tens of thousands without homes or shelters and more than 100 deaths. Landslides, such as those that occurred in the mountain ranges in the State of Rio de Janeiro in 2011, left tens of thousands without homes or shelters and resulted in about a thousand deaths. Events like cyclone Catarina that hit the northern coast of Rio Grande do Sul and southern Santa Catarina in 2004 left thousands homeless. Between 2011 and 2013 the Brazilian semi-arid region experienced one of the longest droughts in 50 years. Droughts and dry spells are responsible for almost 60% of the disasters recorded in the country and more than half of the affected population between 1991 and 2010.

Reduction of the risks of disaster is considered one of the Essential Public Health Functions. In disasters, both the population and the health services required for response and the rehabilitation of health are threatened. The Pan American Health Organization (PAHO) estimates that in 18 countries in the Americas, approximately 73% of the population and 67% of health clinics and hospitals are in risk zones.

Despite the growing importance of the topic, we found that there is still little scientific literature on disasters in the country, especially with regard to its repercussions on the health of the population and the ability of the health sector to participate at all levels. A survey conducted in the SciELO database identified that of the 27 articles related to natural disasters, nine were published between 2001 and 2011, with 18 in a mere two years (2012 and 2013). These data reveal the importance that the topic has acquired in recent years, especially after the landslides in the mountain ranges in 2011. A number of government initiatives and others by society to cope with disasters were launched, including the creation of a UN Office for Disaster Risk Reduction in Rio de Janeiro in 2013.

With this special edition we hope to contribute to a better understanding of these events at the interface with health. There are 13 articles, five of which have focused on the impacts of disasters on health. A further three address the organization of the health sector to prepare for and respond to mass disasters and events. Four address disasters and future risks as well as the limitations of public policies for the subject in Brazil, with social critical theory being the benchmark. A final paper analyzes the VHL Disaster database.

By bringing reflections on the topic, we trust that this publication will contribute to strengthening the ‘propose and act’ capacity of the health sector, in partnership with other sectors in the prevention of disasters – through action on the social and environmental determinants – as in the actions of preparedness, response, rehabilitation, recovery and post-disaster reconstruction.

Happy reading!

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*Guest Editors*