USING CITIZEN'S SUBJECTIVE EXPERIENCES OF HISTORIC DISASTERS FOR RISK COMMUNICATION – A COMPARATIVE STUDY



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Introduction

Successful risk communication on natural disasters requires that the information recipients understand which impact such disasters can have on their lives. They have to be convinced that they can be personally affected, so that they are more inclined to follow the disaster management agencies' recommendations for disaster preparedness and mitigation.

Objectives

The goal of this study was to collect and record experiences from eyewitnesses and survivors of historic natural disasters, in order to make these experiences available as open educational resources on a digital platform. These resources can then be used by multipliers (school teachers, extracurricular learning places, and volunteer organizations) in risk communication activities.

Methodology

We conducted and recorded semi-structured interviews with 65 survivors from five countries (Argentina, Chile, Dominican Republic, Germany, and Poland). Disasters like storm surges, floods, heavy snow, hurricanes, earthquakes, tsunamis, landslides, and volcano eruptions were covered, as well as the whole disaster management cycle. The interviews focused on the impact of disasters on citizens' lives, but were also questioned about the quality of risk communication and disaster management provided by the authorities. In the following, some examples of interview excerpts are provided:



"It was the middle of the night without electricity. I had the water over my waist, trying to calm my little nephews down who were crying and scared in the dark. Then I realized that my beloved dog Frida disappeared. I called her all night long. I looked for her several days, but I never saw her again. Frida was my support and friend when I got divorced and I still miss her." -Valeria, 42 years, witness of La Plata's flooding in 2013 (ARG)



"It rained torrentially without stopping during more than eight hours. The following day I found all my college books in the water, all wet and destroyed. They were dirty with muddy water and oil of the refinery. They were very expensive. They were so important to me. I spent month saving money to buy them. I could not recover them or gain them back." -Gisela, 38 years, witness of La Plata's flooding 2013 (ARG)



"I was trying to hold on to the bed, but it was impossible, everything was moving. I regained consciousness and my husband pulled me out of the house. We all fled to the hills when the sea entered our homes. [...] All our neighbors were running away. My house was not destroyed by the earthquake. It was destroyed by the tsunami. We didn't recover anything. My health was affected, I have headaches today and I have a hard time recovering." - Juana Fierro, 58 years, witness of the earthquake and tsunami 2010 (CL)

Results

The interviews highlighted challenges experienced by citizens, such as practical problems with basic supplies and services, economic loss, adverse effects on health (physical and emotional), or social unrest and discohesion. Coping and mitigation strategies were evaluated as well. The interviewees provided their experiences in a personalized way, so that their testimonies can support personalization and internalization during risk communication activities.

Conclusion



"In Papenburg it was already late in the evening when we arrived and heard that the dike was broken there. In addition, this gap was about 70 to 80 meter large, the water flowed at rapid speed into the hinterland, and even houses were destroyed." - "A couple at the age of at least 70-80 years sat on the chair, but this chair stood on the table, because everything was already under water. You had to get these people into the boats and bring them back to land." Harald Matys, 78 years, witness of the storm surge 1962 (GER)



"Our neighbors did not want to take us with them because they wanted to take their TV to safety. It was put on top of the car or on the backseat, so that it arrived well somewhere. Then my sister and I went down to Cuxhaven. That was about 5 kilometers. However, we had to pass meadows and fields and there were these powerlines. Some of them were already hanging through because of the wind." -Maren Matys, 75 years, witness of the storm surge 1962 (GER)

Our study showed that disaster survivors are willing to share their experiences, and to participate in risk communication projects. Their input allows risk communicators to make the impacts of disasters more tangible, and to discuss them in the local context. We are currently developing the digital platform to provide the survivors' insights for download. On this platform, we will also present recommendations for improved disaster preparedness and resilience, based on nature-based solutions for landscaping, construction, and gardening.

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