Community Engagement and Crowdsourcing for Effective Disaster Response and Rescue Operations During the Earthquake in Syria

Geneva Health Forum conference

MHD Bahaa Aldin Alhaffar – Easter Joury - Anneli Eriksson

Introduction:

Following the devastating earthquake that hit Syria and Turkey in February 2023 which resulted in massive destruction and causality, this research established community engagement and crowdsourcing method to collect vital data to enhance search and rescue efforts for the initial response to the earthquake in Syria.

It describes how mass gathering of data was used to support emergency response and rescue operations to manage the aftermath of the earthquake.

The aim of this research:

To describe the methodology which was used to collect data through crowd sourcing and to organize the initial emergency response and rescue operations.

Methodology:

The research went through three key stages collecting data from the community using social media (Facebook) and from people in the affected areas through google form.

This data helped to verify and map the affected areas within 72 hours, enabling coordinated search and rescue efforts.

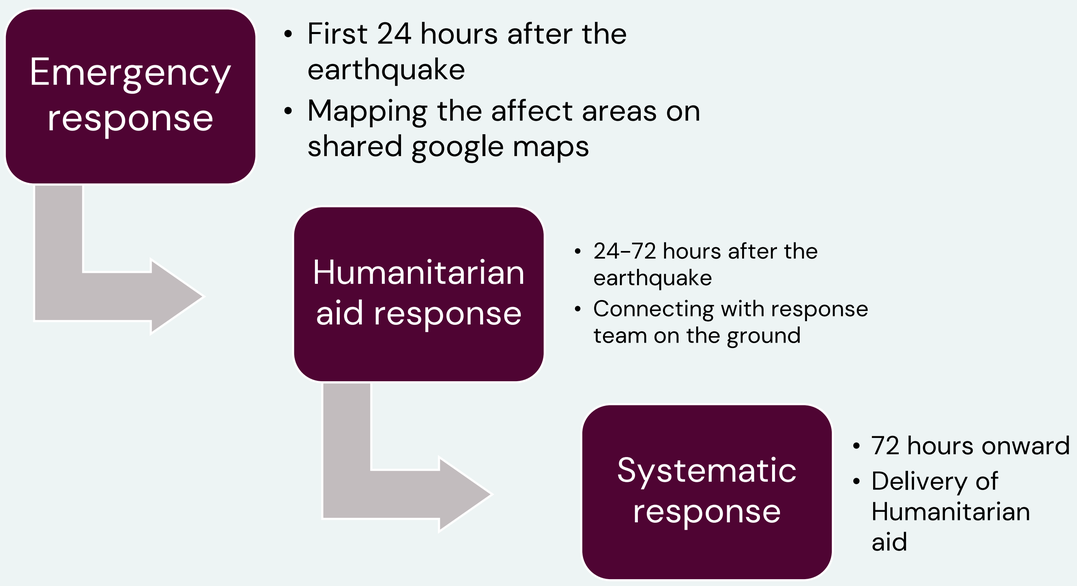

Figure 1 – Stages of the response during the research

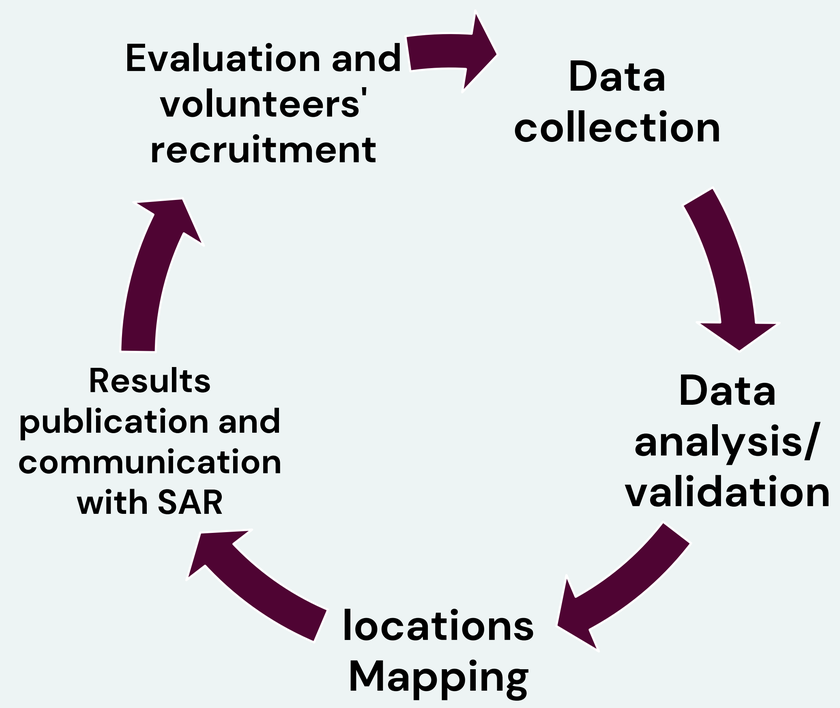

Figure 2 - Data collection cycle.

Results:

Example of the maps generated

Figure 3 - Mapping the affected location in Aleepo City based on collected data.

Figure 4 - Mapping the affected areas after the EQ in different locations

Conclusion:

Community engagement and crowdsourcing are effective tools to collect data to manage and organize the search and rescue operations in the aftermath of a mass causality event.

This research describes a systematic method that can be used to utilize community engagement in disaster response.

Bahaa Alhaffar
Researcher - KI

Easter Joury
Professor - QMUL

Anneli Eriksson
Research Specialist - KI

Sweden, Stockholm
Karolinska Inistitute
Department of Global Public Health.

Email: Bahaa.alhaffar@ki.se
Phone: 0046 760 751 848

Karolinska Institutet