

Seeking Information after the 2010 Haiti Earthquake:
A Case Study in Mass-fatality Management

by

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ABSTRACT

Purpose

The research investigated the information-seeking in mass-fatality management (MFM) by the people directly affected by the Haiti 2010 earthquake, which killed an estimated 316,000 people according to the government of Haiti (Brown & Delva, 2011), offered many lessons in MFM. The research defined MFM in seeking information and in recovery, preservation, identification and disposition of human remains. Information seeking is defined as “a conscious effort to acquire information in response to a need or gap in your knowledge” (Case, 2012, p. 5). “Information can save lives” asserts the International Federation of Red Cross and Red Crescent Societies (2005, p. 9). Improved information seeking in MFM may alleviate suffering and accelerate community response, recovery, and resilience.

Originality

The research is original and innovative because it is transdisciplinary at the intersection of information-seeking and MFM (Figure 1). I could not locate a single peer-reviewed paper on information seeking in MFM. One of the theoretical significance of the research is that it appears to be first literature on information-seeking in MFM.

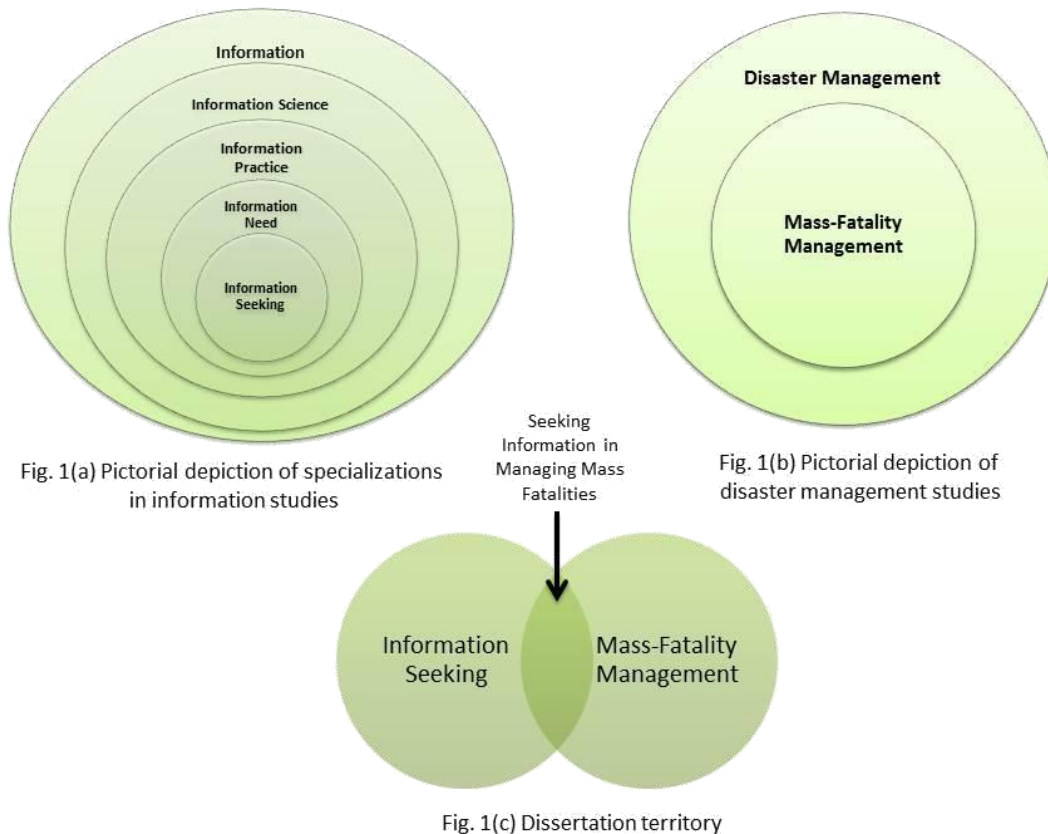


Figure 1. Information seeking and mass-fatality management.

New Model in Information Flow in Mass-fatality Management

Another theoretical significance of the research is that it sought to illumine information-seeking practices, as discussed in the works of J. David Johnson and others (Johnson, 1997; Johnson, Donohue, Atkin, & Johnson, 1995) by developing a new model of information flow in MFM (Figure 2). The model parsimoniously depicts information flow systems. The context of the model is a catastrophe and the situation involves mass fatalities. The context and the situation make it an abnormal situation. The abnormal situation constitutes external factors. The internal factors are the antecedents. “The Antecedents provide the underlying imperatives to seek information” asserts Johnson et al. (1995).

Antecedents consist of background and personal relevance. Belief is an agent’s confidence to make a difference in the situation. Urgency and importance of the conditions make them salient. The agents are the victims, responders, and administrators who are seeking information. In information seeking the agents’ feelings, thoughts, personal network, and media play a role. MFM is difficult without information seeking. This requires action and articulation that may result in a new normal.

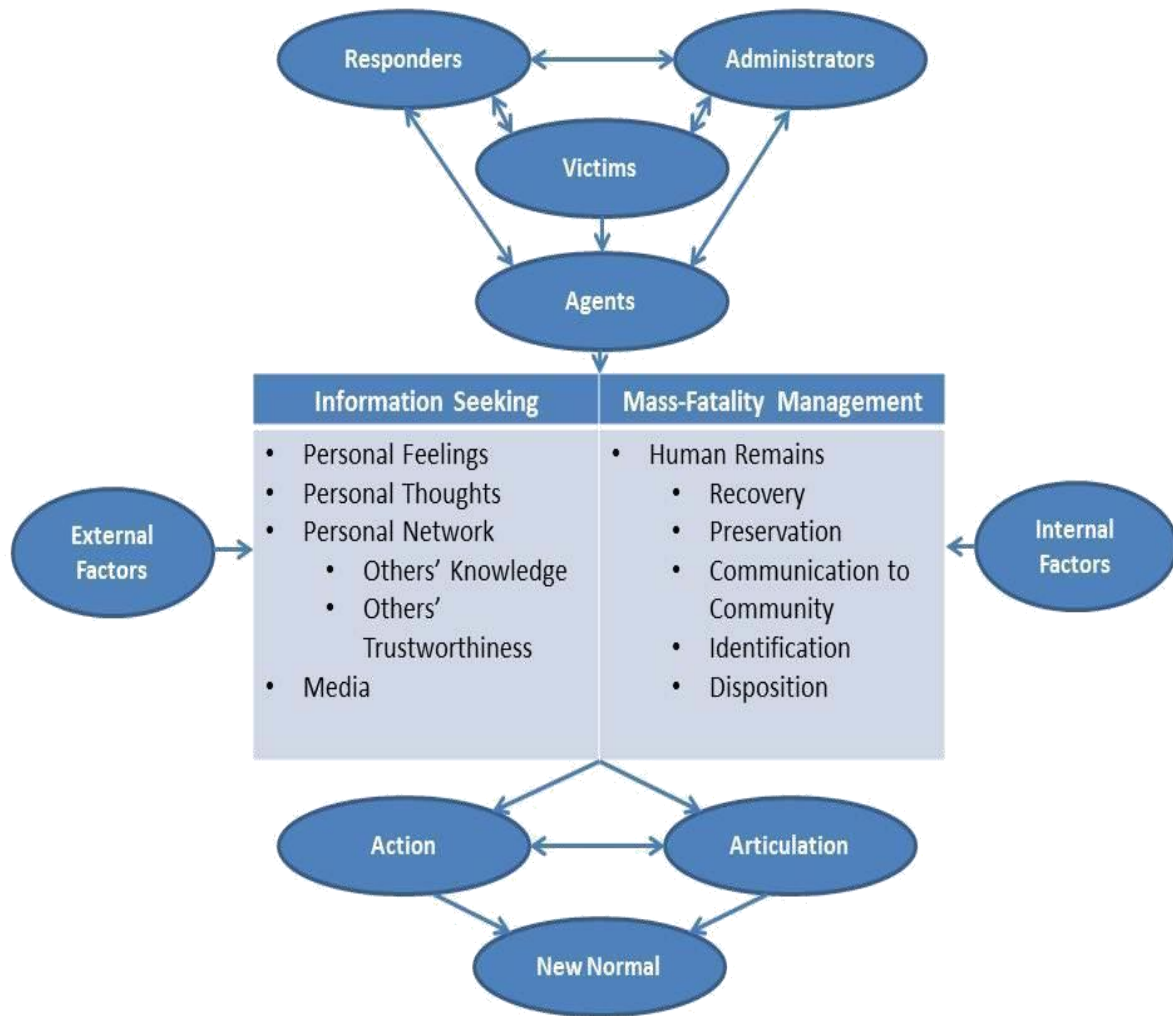


Figure 2. Model of information flow in mass-fatality management.

Based on the study this theoretical model appears to indicate connection between seeking information in managing mass fatalities to guide agents in alleviating suffering.

Model in the Process of Finding and Disposition of human Remains

Gupta (2009) also recorded a model regarding decision tree in the process of finding and disposing of human remains by authorities (Figure 3). The disposition of human remains poses serious problems for the authorities. The human remains may be found or missing. The human remains may be intact body or fragments. The human remains may be positively identified and may not be identified. If the human remains are positively identified and there are claimant family members, the human remains may be given to them. However, if there are no claimants or human remains are not identified, the authorities have to decide how long to preserve the remains and what type of religious rituals, if any, to be performed at the time of disposition.

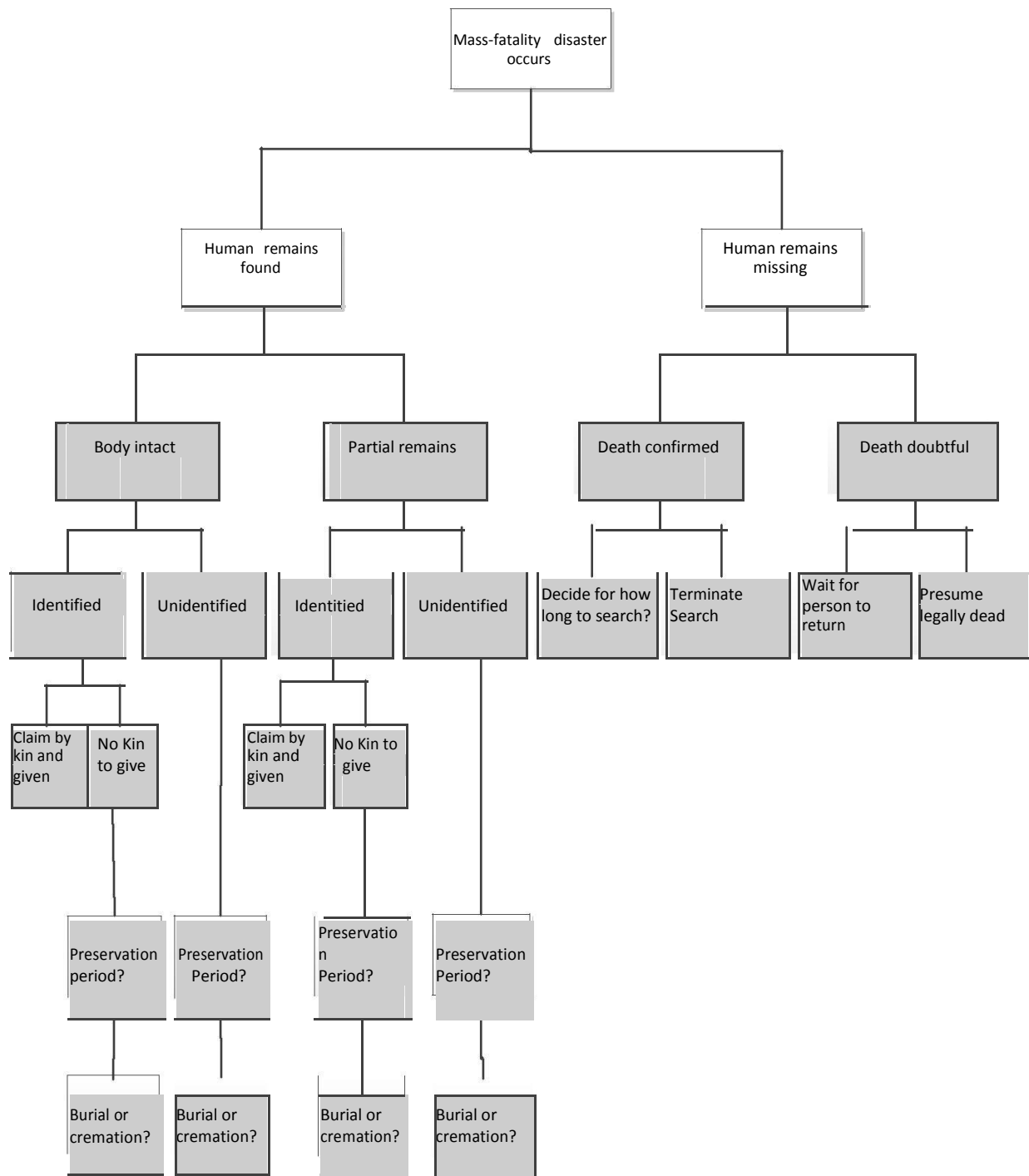


Figure 3. Decision tree in the process of finding and disposing of human remains by authorities.

Methodology

Case study is the most appropriate method for in-depth inquiry (Creswell, 2009) and for “understanding behaviour and reasons for that behaviour” (Salkind, 2012, p. 11). Stallings (2007) writes, “The prototypical method of disaster research has been the field study” (p. 56).

Quick response research is a prominent method for field research after a disaster and I used that.

There is an appropriate time for doing quick response research. If the researcher approached too early, the responders will be busy in response. If one goes too late, people may have moved and forget the details of the actual happenings. I conducted field research in two phases during seventh and 20th week after the earthquake, which is just the right time.

I made data by observations during field visits to Haiti, 28 in-depth partially-structured open-ended face-to-face interviews with non-random purposively selected knowledgeable diverse persons, participating in UN cluster meetings, official documents collected during the field visits, media reports, and Internet search.

Field observations and interviews were the main method of research. The interviewees included five family members of deceased, a morgue administrator, seven physicians or surgeons, three police officials, and two UN officials. Setting of interviews affects interviewee to share his or her experiences. Setting of interviews was naturalistic where the interviewees lived or worked or preferred to be interviewed. Interview venues included the Titanyen mass-burial site, hospitals/dispensaries, UN Stabilization Mission in Haiti premises, the US Embassy premises, a makeshift camp, and outside a house where a body was there at the time of interview. Seven of the interviewees spoke in Creole and an interpreter helped me in conducting interview with them.

Field observations, reflective notes, and interviews were verbatim transcribed, translated (where necessary), coded and analysed using MAXQDA computer assisted data analysis software. Translations at the time of interview by the interpreter in Haiti were confirmed after return from Haiti by the people of Haiti origin. Coded material was analysed to find categories and themes. Categories and themes were tested for reliability and validity by another scholar with a PhD degree.

Findings

Findings revealed massive destruction of buildings, including the National Place (official residence of the president of Haiti) and 27 of 28 government buildings in Port-au-Prince (Sims, 2013). Central National Equipment (CNE), the public works department of the Haitian government was ordered to dispose of human remains. It used bulldozers and backhoes to create a long, deep trenches in Titanyen. After dumping the human remains with debris in the trenches, CNE earthmoving equipment would cover the trenches with the debris. CNE made no effort to identify human remains before mass burial. I observed human remains commingled with debris lying in Titanyen.

An interviewee, whose mother died in the earthquake described the poignant scene:

We were driving our car through here. . . . This side of the street people were lined up and sleeping on the street . . . and this side and how pathetic, three here [bodies], two here . . . with the kids and whatever and sleeping on the other side and in the middle the dogs are going through the dead bodies. . . The dogs are roaming the streets everywhere and over there . . . and I remember just thinking, I am never going to forget this scene.

Another interviewee described, “The truck was full of dead bodies, I could see them, I mean it was like that I could see body, top of body, body on top of body.”

The efforts to retrieve, store, identify, and dispose of bodies was seemingly slow or non-existent, except for human remains of aliens. After some time the human remains started decomposing and stink become unbearable for the people and at that time, people were just putting gasoline on human remains and burning in situ.

Information need of affected people was to know the whereabouts of their family members, living or dead, motivated them to seek information. People sought information by going to the places the person last known to have been, market places, hospitals, contacting people in their network, or thorough media. The data analysis revealed that the MFM was severely inadequate. One interviewee, a senior UN official, stated, “There was no fatality management.” Despite that Haitians generally reconciled with the MFM.

Conclusions and Managerial Implications

Nations around the world can learn from the experience in Haiti and prepare for mass-fatality incidents. The research gives recommendations for healthcare managers in the areas of (a) training, (b) international cooperation for effective response to MFM, (c) development of plans for human remains recovery, preservation, identification, and disposition, (d) use of newer technologies in MFM, and (e) development of MFM policy.

The most significant original and innovative idea for the healthcare managers from the research is to start a discussion on use of unidentified human remains of natural disasters for transplant to benefit the humanity. Cheney (2006) and Carney (2010) documented a thriving international illegal trade in cadavers. Investigations reveal that cadavers were illegally sold for about \$10,000.

I only raised the issues for debate; I do not have a position for or against. The question whether this will be socially, culturally, legally, ethically acceptable, is the direction for

future research. May be somebody could start an experiment. In raising this question, I am following the advice of Kelman (2005):

At minimum . . . questions should be asked and debated. Researchers should understand what is and is not acceptable by thinking ahead to set appropriate limits in their field of operations. During a disaster and during research, it is too late. (p. 154)

The expected outcome of this research is to raise the awareness of the people on this important social topic, and alleviate the suffering of family members and the community after sudden mass-fatality disasters strike in future. Another social significance of the study is that it may help in changing policies to make earthquake resilient structures and to improve MFM. In addition, it reaffirmed Donald Case and Thomas Wilson's theoretical proposition – that need guides any seeking of information – in the case of Haiti. Finally, it produced recommendations regarding future directions in MFM for healthcare managers, emergency managers, and information scientists, including possible use of unidentified body parts in organ transplants.

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