### Title:

Perceptions of Health After the 2010 Haiti Earthquake

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## **Abstract Summary:**

This study explored the meaning of the 2010 Haiti earthquake on the health of the Haitian people. The findings illuminate how the disruption of a disaster impacts the health of those who have experienced it. Recovery of health requires a holistic, cultural response grounded in the experience of the phenomenon.

# **Learning Activity:**

LEARNING OBJECTIVES	EXPANDED CONTENT OUTLINE
The learner will be able to describe the meaning of the 2010 earthquake experience on the immediate and long-term health of the local Haitian individuals.	a. Engaging a community partner b. Studying the country history c. Gap in literature d. Developing cultural humility
The learner will be able to describe the complexity of conducting research in a global community.	a. Engaging community partner b. Obtaining university and community IRB approval c. Protection of human subjects d. Enrolling participants
The learner will be able to describe the development of holistic approach to care for individuals who have experienced disaster.	a. Methodological approach b. Protocol development c. Data Collection d. Analysis e. Findings

#### **Abstract Text:**

## **Background and Significance**

Natural disasters have been a part of human experience since the beginning of time, altering human life; causing profound suffering; and creating disruption to the health of individuals, families and communities worldwide (Veenema, 2012). Over the past 40 years, natural disasters have become increasingly prevalent, complex, and catastrophic. The last decade of the 20th century has seen the greatest increase in natural disasters attributing to an estimated 1.35 million deaths

(Centre for Research on the Epidemiology of Disasters (CRED, 2016). The United Nations (U.N.) and other aid agencies have characterized the 2010 earthquake in Haiti as the largest urban disaster in modern history (International Federation of Red Cross and Red Crescent Societies (IFRC), 2014). Modern disasters and global risks require conceptual approaches to recognize the interconnectedness of the individual, community/environmental, and political/economic forces to understand the impact of disaster. The disruption of the human health experience is inherent in the nature of disasters and nurses are uniquely qualified to address the needs that arise from this disruption in human health. However, little is known about the disciplinary knowledge of nursing in disasters (Deeny, Davies, Gillespie & Spencer, 2007; Veenema, et al., 2016;). The complex disruption in the physical, psychological, and social aspects of a person's health wrought by disaster may be illuminated by using the knowledge embedded in the experience to better understand the context of persons (Knack, Chen, Williams, & Jensen-Campbell, 2006).

The recent earthquakes in Chile and Japan measured higher on the Richter scale then the 7.0 magnitude earthquake that hit Haiti in 2010; yet the earthquake in Haiti had a far worse impact with an estimated 316,000 deaths and over 3.9 million people affected (Everest, 2011). The earthquake's disproportionate effect compared with countries like Japan or Chile is a direct result of Haiti's s underlying structural, social and physical vulnerability. Haiti is one of the poorest countries in the world with nearly 80% of Haitians living below the poverty line, has one of the worst income inequalities in the western hemisphere with a population of 10.2 million and an illiteracy rate of 45% (IFRC, 2014). Three years after the earthquake, some 315,000 people still lived in 496 camps Port-au-Prince; half of the rubble remained uncleared; cholera had claimed thousands of lives and continues to pose a major public health threat; few Haitians have access to basic services; and much of the workforce is unemployed or underemployed (International

Monetary Fund [IMF], 2014). Increasingly there is a call to acknowledge the multiple factors that influence disaster including toxic exposure, global warming, poverty, and other political, social and economic forces; placing the individual within a larger global framework to understand the root causes of human suffering and inequality to provide effective recovery after disaster. The knowledge gained from this study informs nursing practice, education, and research and advances the disciplinary knowledge of nursing in disaster especially relating to vulnerable populations.

### **Purpose of this Poster Presentation**

The purpose of this study is to describe the meaning of the 2010 Haiti earthquake on the immediate and long-term health of the Haitian people.

#### Research Plan

**Study Design**: A descriptive qualitative study design was used to conduct interviews and focus groups in Haiti, in June 2015. IRB permission was obtained from Florida Atlantic University and the Episcopal Church in Haiti.

### **Informed Consent Process:**

Waiver of a written signature was obtained for the participants in this study and permission was obtained for a verbal consent. For individuals who are pre-literate, permission was obtained to audio and document an affirmative consent. A witness signature and date was obtained in lieu of an audio consent for those not wishing to be audio taped which provided documentation of affirmative consent.

## **Study Population:**

A convenience sample of six individuals who had experienced the 2010 Haiti earthquake volunteered to participate in the study. The participants were identified by friendly informers of the Ste. Marie Madeleine community.

### **Data Collection**

A verbal informed consent was used. A copy was made available to the participant(s); an audiotape was used to document an affirmative consent. For participants who did not want to be audiotaped, a witness signed and dated the verbal consent verifying affirmative consent. Individual interviews and focus groups lasting up to one hour were conducted in a location convenient for the participant.

Broad open-ended questions guided the interviews and focus groups to facilitate discussion of participant(s) general experience living through the 2010 Haiti earthquake and the implications of the earthquake on the health of the Haitian community and the participants themselves. Research questions included:

- 1. Can you tell me about your experience of the 2010 Haiti earthquake?
- 2. What would you like nurses and health care workers to know about your experience with the 2010 Haiti earthquake?

Basic demographic information was collected from the participants including age, gender, marital status, educational level, work status; years lived in Haiti, number of family members.

# **Findings: The Main Themes:**

Main Theme: A. Piecing it Together. Coming to know it was an earth quake by experiencing the sights, sounds, movements, exact moments in time brought an initial understanding that what was happening was a reality. Participant: "Dust, oh my, oh my, the country was white with all the dust because when the houses fell down, it blew everywhere. I didn't see any houses and I just started screaming, that's when I found out the whole area went down."

Main Theme B. Feeling Broken-Overwhelming human need in the wake of the the earthquake- The feeling that there was so much need at all levels and there was so little any human could do and the feelings of grief and powerlessness generated a feelings of 'feeling broken'; because they felt powerless to put back together this fractured reality of their world. Participant: "you are living in the midst of all your parishioners and you are observing on a daily basis the daily life, the daily situation sometimes you feel yourself with no power, like you would like to do so in this situation to have them get out of some bad situations you know and this is, this is not very easy to leave"

Main Theme C. Experiencing all-encompassing Loses-Profound loss, a loss which encompasses every aspect of one's life including loss of livelihood (loss of jobs); loss of education (no schools, universities or teachers left); no churches; no water; nor housing; no sense of security (sleeping in tents); and loss of whole families (loss of human life). This all-encompassing and profound loss permeated each and every aspects of life and generated a sense of despair and hopelessness. Participant: "Some of them didn't have, they didn't lose houses but they lost a loved one, they lost their mom, they lost their dad or a husband a wife and some of them didn't lose human life but they lost all that they have for a living, their factory, their business you know and it was many different levels that it affects people you know"

Main Theme D. Living with a Changed State of Being. -This theme is presented in the fundamental change in the state of being of persons. Whether manifested in previously unknown health conditions, finding a way to survive, or realizing how fragile life can be. Instinctually the Haitian people found within themselves a way to move through the experience through helping others or faith. Yet each and every person, whether from Haiti or not, was changed by the 2010 Haiti earthquake. Participant: "Sometimes you can find more people in the street mad. Mad – crazy. You find more people in the street ask you something because some people – the people they help the people and the family die and they afraid they don't have any people to help them anymore, they just go in the street to ask the people, so many, so many."

The Overarching Meaning: Living Through the Most Unforgettable Day was interpreted from the four main themes and 13 subthemes. The participants in this study shared: "That night, that afternoon was the worst day of my life;" "I can say that generally 2010 is a very unforgettable day in my whole life;" and another participant stated, "You see something that you never want to face in your life." The 2010 Haiti earthquake will never be forgotten by those who lived through it, not only the day itself, but also everything that day brought with it. The true impact of the earthquake on Haiti and around the world can be glimpsed in the images and stories told by the participants. The unforgettable nature of such an event leaves an indelible mark on the culture, the environment and the people. Yet, through it all, there is this glimmer of hope that can be found in the words of the participants. An essence of the Haitian people, as stated by one participant, "This is terrible, this was a terrible time for the Haitian people and yet through God, hope was found to continue to move through the overwhelming losses and to continue with life."