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EXPERIENCES OF PHYSICAL THERAPISTS WHO PARTICIPATE IN DISASTER RELIEF WORK IN HAITI

by
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March 30, 2012

Research Advisor: Associate Professor Susan Klappa, PT, PhD

Abstract

Purpose/Hypothesis: Opportunities are now available for physical therapists to move onto the global scene as they become involved in disaster relief work in Haiti. There has been a great deal written in the literature on the experiences and roles of health care providers who participate in disaster relief work. There has been less written about the role of physical therapists who engage in international disaster relief work. Not everyone may understand the challenges faced when participating in disaster relief work in Haiti. The purpose of the study is to describe the experience of physical therapists who have engaged in disaster relief work in Haiti.

Materials/Methods: Descriptive phenomenological methods were used to analyze interviews of 11 physical therapists on their experiences of engaging in disaster relief work in Haiti after the earthquake of 2010. Data were collected from two interviews with each participant in order to create the general structure of the experience of not-knowing. The interview transcripts were analyzed using the descriptive approach described by Giorgi (1975, 1997) and Dahlberg, Drew, and Nyström (2002). Descriptive phenomenology was used to describe the experience of participating in disaster relief physical therapy work in Haiti.

Results: The essence of the experience of physical therapists engaged in international physical therapy disaster relief work was signified by five constituents

that included (a) dealing with emotions: uncertainty and fear (b) facing challenges; (c) education as the key to sustainability; (d) lessons learned (e) being able to articulate the meaning of social responsibility.

Conclusions: The structure of participating in disaster relief work as a physical therapist was described as a shocking but rewarding experience which challenges participants to reevaluate their lives and practice of physical therapy. The ability to participate in this type of work seems to enhance the practice of physical therapy back home. By better understanding the physical therapists’ experience we can better anticipate the kinds of support needed for those who engage in international disaster physical therapy work. We may also better understand the challenge of returning home for those who serve abroad.

The undersigned certify that they have read, and recommended approval of the research project entitled…

EXPERIENCES OF PHYSICAL THERAPISTS WHO PARTICIPATE IN DISASTER RELIEF WORK IN HAITI

submitted by
Erin Faanes
Andrea Guggenbuehl
Ellen Johnston
Katie Larsen
Crystal Stien

in partial fulfillment of the requirements for the Doctor of Physical Therapy Program

Primary Advisor *Susan Klappa* Date *4/26/12*

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Chapter I: Introduction

Disasters confront the world causing great devastation and the need for rebuilding communities, structures, and human life. Whether natural or man-made, disasters can take the form of earthquakes, floods, forest fires, diseases, hurricanes, and terrorist attacks to name a few. Disasters are often very devastating, affecting many people in a large way.

The disaster that struck Haiti on January 12, 2010 was in the form of a devastating earthquake, an earthquake with the magnitude of 7.0 on the Richter Scale.[1] The earthquake in Haiti was different than the average disaster communities have confronted in the past because of the massive destruction to both infrastructure and human life. The Caribbean region had not seen such destruction in over 200 years.[1] An earthquake of such magnitude had the capability to do extreme damage and even kill many people; and that is exactly what it did. The earthquake of 2010 left nearly 300,000 injured and 230,000 dead. The earthquake damaged so many buildings and housing that there are still nearly 1.3 million homeless in the city of Port Au Prince alone.[1]

Relief work is an important part of returning communities and people back to a normal life. After a disaster of such magnitude as experienced by Haiti, it is important for people of all applicable professions and trades throughout the world to come together to assist in the rebuilding process. Immediate response to disasters is focused on rescuing individuals from immediate danger, stabilization of the survivors' physical and emotional status, recovery of the dead, and restoration of essential services such as water and

power.[2] The aim of long-term recovery is to connect the community to resources that can help get them back to their normal lives.[3] Rebuilding infrastructure, returning the weak and/or injured back to health, providing food and clean water, and consoling those who have lost family, friends, and belongings are just a few examples of work volunteers and the community can do to help those affected by the disaster.

Health care providers often play an important role in rebuilding individual lives and communities during relief work. Physicians were in Haiti dispensing medication, treating the injured, performing surgeries, and caring for the ill.[4, 5] Nurses assisted with medication administration, wound care, treating patients with illness and injury, and medical procedures.[6, 7] Many healthcare professionals helped in any way they felt comfortable. Each health care professional had to work within their scope of practice, but often times at the edge of their scope of practice.

Another healthcare profession that came to the scene after the devastation occurred in Haiti was physical therapy. Physical therapists went to Haiti to help the injured gain medical stability, strength, and functional independence. Haiti has allowed the world to see who physical therapists are and what they have to offer not only in a disaster relief setting, but also in the natural settings of their home land. There were many physical therapists who offered their services during the devastation, but their work remains unknown in the literature.

There has been a great deal written in the literature on the experiences and roles of health care providers who participate in disaster relief work in general. There has been

less written about the role of physical therapists who engage in disaster relief work. The purpose of the study is to describe the experience of physical therapists who have engaged in disaster relief work in Haiti.

Chapter II: Review of Related Literature

The earthquake in Haiti on January 12, 2010 rattled the world. In the following days, weeks, and months, the world witnessed the devastation, chaos, and turmoil that followed in the aftermath of the killer earthquake. Healthcare professionals from around the world arrived in Haiti to provide much needed medical care. The role of physical therapists in disaster relief settings can be justified by their training in areas such as musculoskeletal and orthopedic injuries, respiratory complaints, and burns, but research has not yet shown physical therapists to have a defined, clearly understood role in disaster relief work.[8] This section presents a review of current literature regarding experiences of physical therapists and other healthcare providers who provided relief work in Haiti after the 2010 earthquake. The literature discussed provides a summary of the three main phases of disasters, the role of healthcare providers in disaster relief work, details on the profession and scope of practice of physical therapist, and where there are gaps in the literature regarding the role of physical therapists who are involved in disaster relief work in Haiti. In seeking answers to our research question, we hoped to gain a better understanding the lived experiences of the physical therapist professionals who engaged in disaster relief work in Haiti.

Definition of Disaster and Phases of Relief Work

The Center for Research on the Epidemiology of Disasters defines a disaster "as events or situations that overwhelm local capacity, and thus, require external assistance from national or international bodies."[8 (p. 117)] There are four main categories of disasters:

1) natural disasters, 2) environmental emergencies, 3) pandemic emergencies, and 4) complex emergencies.[9] Natural disasters include floods, hurricanes, earthquakes and volcanic eruptions. Environmental emergencies are man-made and usually caused by technological or industrial accidents. For example, forest fires usually fall into this category because they were triggered by human activity. Pandemic emergencies are caused by the outbreak of a contagious disease. Lastly, a complex emergency "involves a break-down of authority, looting, and attacks on strategic installations"[9 (p. 186)] thus, adding to the complexity of returning social order to a community.

Prevention, preparedness, relief, and recovery are the four main phases of disaster management.[9] After disaster strikes, it is vital to have a coordinated response effort between local and governmental agencies. The post-disaster response must be organized prior to a disaster in the prevention and preparedness stage processes. Most disasters cannot be prevented, but the destructive effects can be minimized through mitigation by reducing or eliminating the risks that are often associated with disasters.[10] This process involves setting up an evacuation plan, environmental planning, and design standards.[9] Preparedness is defined as "ensuring the readiness of society to forecast, take precautionary measures and respond to an impending disaster."[10 (p. 183)] The focus of disaster preparedness is on creating a plan to minimize the loss of life and damage a disaster may bring to a given community.[9]

The lack of a thorough prevention and preparedness plan in Haiti was evident after the massive earthquake that hit on January 12th, 2010 in Port au Prince. Many of the buildings in Haiti were not built according to design standards which resulted in massive

devastation. Some major challenges the people of Haiti faced included a lack of supplies because volunteers were unaware of the severity of the disaster, issues with safety and security, and struggles with communication between groups providing relief work.[11] In hindsight, these challenges could have been addressed through an improved process of prevention and preparedness. All professions and organizations whether local or international that can contribute essential resources for communities affected by a disaster should be involved in the process of risk management through prevention and preparedness. The World Confederation of Physical Therapy has developed a position statement on the role of physical therapists in disaster relief work by developing a website that defines the roles and responsibilities of PT's in the disaster setting.[9]

The relief and recovery phases of disaster management can be further broken down into five phases of disaster relief. Please see Table 1 for more information on these phases. These phases are the pre-disaster phase, the heroic phase, the honeymoon phase, the disillusionment phase, and the recovery and reconstruction phase. Pre-disaster includes the warning or threat of a disaster. Depending on the type of disaster, there may be weeks of prior knowledge of its impending devastation such as in the case of a hurricane or there may be no notice at all such as in the case of a bomb explosion or earthquake.[12] The people of Haiti had no warning of the earthquake that devastated their homes, led to the death of many friends and family, and truly changed their lives.

The heroic phase begins at the time of impact and continues with search and rescue. During this time, people protect and save others, even strangers, from the devastation.[12] This phase is controlled by governments, large agencies such as the

International Red Cross, United Nations Children's Fund (UNICEF), and the United Nations.[13] Authors Patterson and George suggest, "The goal is to minimize further loss of life and establish initial emergency medicine/food/shelter for the affected population."[13 (p. 184)]

The honeymoon phase of disaster management typically begins around one week after the time of impact and lasts three to six months. During this phase people come together as a community to support each other and ensure their basic needs are met.[12] Continued support is offered through the provision of food, shelter, and medical attention for those in need. At this time, professional volunteers, such as medical professionals and clean water professionals, begin their work.[13] The primary goal at this time is to alleviate suffering and prevent outbreak of disease.[13]

A study by Broach et al. evaluated the number of patients being treated and the types of illness that were most common during the early honeymoon phase from days 14-18 after the earthquake.[14] In this phase, the authors reported medical professionals were typically seeing 200 to 300 patients a day, most commonly for respiratory infections, gastrointestinal issues, and genitourinary problems.[14] Many victims of the earthquake had also sustained injuries resulting in head trauma, amputations, spinal cord injuries, and wounds which greatly increased the need for rehabilitative services during this time. As therapists began volunteering, Haitians began to understand what rehab services could do for them. Eventually the caseload included not only victims of the earthquake, but also those with persistent chronic pain syndromes.[15, 16]

The disillusionment phase of disaster management lasts from the end of the honeymoon phase to one to two years following the disaster.[9] During this phase, fewer resources are available to the disaster zone, including the number of volunteers from relief organizations and the amount of donations available.[12] This situation challenges the members of the community to pursue the relief effort without as much aid as was previously offered or available. Communities must begin to think about sustainable solutions to their problems. To move toward a sustainable solution the remaining volunteers switch their focus from providing the healthcare themselves to educating the local people on how to continue with the relief efforts.

The recovery and reconstruction phase lasts for several years following a disaster. Patterson and George suggest, "The goal is to move from disaster relief to community development."[13 (p. 184)] At this point, people focus less on their personal needs and focus on what they can do to rebuild their communities. The responsibility of managing the new institutions established during the disaster response period is left solely to the local people and communities.[12]

The effort to train local healthcare workers and rehabilitation aides is an important component to achieving sustainability in Haiti. This effort, however, has encountered many barriers. People from the local community who have begun rehabilitation aide training programs have stated that the training is not comprehensive enough, in terms of clinical experience. It is also difficult to find jobs after graduating because the country has no money to pay rehabilitation workers and there is a lack of recognition behind the credentialing received in the training programs.[17] These challenges are also complicated

by the lack of rehab facilities, equipment, experienced primary care teams, rehab professionals, and community accessibility for those with disabilities.[18, 19] These complications are providing barriers slowing the progression from the disillusionment phase into the recovery phase in Haiti.

Health Professionals and Disaster Relief Work

Many different skilled volunteers went to Haiti immediately after the earthquake occurred in 2010 to offer their services to Haitians who were injured during the disaster. When members of the team, including many different disciplines in health care such as doctors, nurses, surgeons, physical therapists, and mental health professionals first arrived in Haiti, many were overwhelmed with what they initially saw and experienced.

Stokowski described the experiences of nurses from a team sent to Haiti by an organization called Forward in Health.[7, 20] The team was composed of seven nurses, five physicians, one emergency medical technician, and one lawyer who traveled to Haiti immediately after the earthquake. This group of health care professionals entered the remains of the disaster area in Port Au Prince only to realize the level of sub-standard care and their frustration began to build. The teams were treating patients and discharging them with no plans for continued or follow-up care.[7] The teams from Forward in Health that arrived were responsible to find an area to serve where their expertise was needed. Individuals were using their knowledge and previous experiences to treat patients the best they could given their lack of experience in disaster situations. Many of the services provided by health care teams were not as well defined as the professionals were accustomed to in their practices back home. Response to the disaster

in Haiti required health care providers to think creatively and implement care that varied from the typical treatment style they were accustomed to in their practices back home.

Some groups came with a system that was already in progress and others received training after they arrived. Babcock described the experiences of a team of health care workers from Chicago who came to Haiti with a different perspective than most teams.[20] This team was made up of 475 medical volunteers from six different medical institutions. What set them apart from other teams was that they had previous communications training on how to efficiently respond in such disasters. Volunteers were recruited from within institutions and through email communications. Some challenges, however, did arise with funding and finding appropriate individuals to staff the institutions while volunteers were in Haiti.[20]

Not all individuals who offered their volunteer services felt as though the process ran smoothly.[21] Docrat described some of the frustrations with the organizations providing volunteers for work that may have led to unnecessary mistakes. The author pointed out that in reflecting back on the experience in Haiti, it was important for volunteers to keep in mind the crucial components and greater purpose when treating patients. Not all volunteers took the same approach which resulted in a negative effect with regard to the care that was provided during disaster relief work. Author Docrat suggested that the negative care provided was a result of the lack of preparedness the volunteers received prior to participating in disaster relief work.

Many health care workers and organizations have reflected on their experiences in Haiti.[4, 7, 22, 11, 23] These reflections include not only the feelings of how the process went

but also how their volunteers felt after spending time working in Haiti. According to Bendix, physicians who offered their services in Haiti described their desire to help as part of human nature that turned out to be a rewarding, gratifying, and seen as a God-given gift.[4] Additionally, Camacho-McAdoo described a nurse's feelings surrounding her time in Haiti. The nurse described her experience of health care in Haiti as being very different than what she was accustomed to in her practice back home. She attributed this difference to being situated within a different country and to being required to work at the edge of her scope of practice. The same nurse reported that these experiences would change her triage practices forever because she now realized that great care does not have to come from technology.[22] Recently, there have been several articles in the scholarly literature which describe the lived experiences of physicians, nurses, and other emergency response members. There is a lack of literature which describes the experiences of physical therapists who have volunteered during disaster relief work in general. There appears to be even less written about the experiences of physical therapists who have volunteered after the earthquake in Haiti.

Gaps in the Literature

With the growing numbers of physical therapists involved in disaster relief work since the recent earthquake in Haiti, it is important to conduct research on the experiences of those who participate in this kind of work. Nixon suggests that information gained from this work will better inform our response to the next disaster.[24] With physical therapy being a newer profession to engage in disaster relief work, there is little known about this topics and the experiences of PTs who participate in this work. Another issue

surrounding the lack of research conducted in regard to the earthquake in Haiti was the fact that this earthquake occurred relatively recently. Not enough time has passed for a large amount of research to be conducted on this topic. After an extensive review of the literature, there was little found on the involvement of physical therapists in post-earthquake Haiti. Editorials about physical therapists' experience in Haiti have been written,[2,4,7,11,12,15,16,21,23,24] but research that describes these experiences and pulls those descriptions together in a systematic manner to find common themes has yet to be found in the literature.

As early as the 1950's the value of physical therapy in disaster relief has been noted. A position paper by the American Physical Therapy Association in 1958 stated that physical therapists had the appropriate education and skills needed to be qualified as a member of an emergency medical team.[25] Throughout our review of the literature, other than this pivotal document, there has been written about the experience of physical therapists who engage in disaster relief work in Haiti. There are numerous scholarly articles about the experiences of other medical professionals but not for the profession of physical therapy. The purpose of this study is to fill the gap in the literature by conducting a phenomenological inquiry into the experiences of physical therapists who responded to the Haitian earthquake disaster of 2010. Interviews of subjects provide a glimpse into what the experience was like and hopefully, provide a deeper understanding of this experience. Our physical therapy profession will benefit from lessons learned from those who have participated in disaster relief work in Haiti.

Summary

Many physical therapists have played roles in the disaster relief work in Haiti. The limited statistics provided by organizations are helpful in understanding the numbers of physical therapists who have volunteered in Haiti, but little is written about the actual experiences. The purpose of this study is to gain a deeper understanding of the experience of physical therapists who take part in relief work in Haiti. The following chapter will describe how we accomplished the goal of answering our research question.

Chapter III: Methods

In this chapter we describe our research methods and procedures. A definition of phenomenological research is provided and its relevance to our research question is explained. Methodological rigor including validity, reliability, relevance, and credibility are also discussed regarding their importance in this study. All of these themes are important in qualitative research.

In this phenomenological study we are trying to better understand the lived experience of physical therapist who volunteered in Haiti after the earthquake of 2010. Our research question is: What is the lived experience of physical therapists who have volunteered for disaster relief work in Haiti after the earthquake of 2010? We are looking to learn about the feelings and emotions that were experienced and how these feelings and emotions may have affected the experience of physical therapists participating in disaster relief work in Haiti. Our purpose is to describe the common lived experience of physical therapists serving in Haiti.

Historical Context of Phenomenology

Phenomenology was first established during the 1800s, during a time when the main approach to scientific research was dominated by positivism. Positivists study observable evidence, such as changes in stride length, blood pressure, and joint angles in order to discover a single, objective reality.[26] While positivism may be ideal for testing hypotheses involving quantitative data it does not provide an ideal structure for studying human behaviors. In essence, positivism fails to capture the richness of the human

experience.[26] As a result of the limits of positivism, Edmund Husserl formed a new approach to research known as phenomenology.

What is Phenomenology?

Phenomenological research seeks to describe human experiences. It seeks to reveal the structures that give human experiences meaning. Phenomenology does not seek to discover one truth but allows the descriptions of a person's experience to reveal many truths.[27] Merleau-Ponty (1945/1962) as cited in the dissertation by Klappa[28] described phenomenology as the following:

> Phenomenology is the study of essences; and according to it, all problems amount to finding the definitions of essences: the essence of perception, or the essence of consciousness, for example. But phenomenology is also a philosophy which puts essences back into existence, and does not expect to arrive at an understanding of man and the world from any starting point other than that of their 'facticity'. It is a transcendental philosophy . . . a philosophy which the world is 'already there' before reflection begins . . . It also offers an account of space, time, and the world as we 'live' them. It tries to give a direct description of our experience as it is without taking account of its psychological origin and the causal explanations which the scientist, the historian or the sociologist may be able to provide.[29]

As Merleau-Ponte describes, a phenomenological approach to research adds a dimension of richness and uses the body to interpret the experience.[29]

The phenomenological approach presents a framework in which the researcher can discover the most expansive, deep description of the participant's experience. This approach to research is appropriate when studying human experiences, because questioning how a person experiences the world reveals what is most important to being human. [30] Phenomenology focuses on describing basic human experiences from the perspective of the humans being studied.[26, 29, 30, 31] Before humans analyze and abstract ideas about knowledge, events are received as experiences. Phenomenology seeks to uncover the raw event as it is experienced before any influences or biases distort the basic experience, or phenomena. [29-31] In this manner, phenomenology is a "return to the things themselves."[30 (p. 39)] Phenomenology focuses on describing the pure thoughts of a person before they are tainted by the ideas of preconceived notions, cultural influences, and experiences of others that alter the perception of the experience. Phenomenology is not a description of what kind of people the subjects are, what the subjects interpreted from the experience, or what others think of the experience. Instead, phenomenology is most importantly a description of an experience itself unattached from all influences.[29-31]

In this respect, it is important for the researcher to understand the power of the mind on influencing one's perception of an experience. Researchers must be careful to bracket their own experiences. Just as reading a spoiler for a television show would influence a person's experience watching the show from the beginning, the researcher's past experience can easily influence the subject's perception of the experience. The

bracketing process allows the researcher to construct a description solely reflective of the subject's experience, and avoid influence by the perspective of the researcher.[32]

Structure of Phenomenological Research

All phenomenological research shares a common structure. First, phenomenological research is either descriptive or hermeneutic in nature. Whereas descriptive phenomenology focuses on pure description of an individual's experience,[31] hermeneutic phenomenology interprets the descriptions from beyond the research project by using sources such as novels, poems, music, and self-reflection.[27] A phenomenological researcher begins with a question about a phenomenon, and then selects subjects who have had the experience. Data is then collected in the form of an interview, which is typically an open-ended conservation. This process presents the subject with opportunity to reflect in detail on the experience, while avoiding the subject's own interpretations or explanations of the experience.[27] The researcher then analyzes the transcriptions of the interviews and synthesizes the themes from all of the interviews into a single, general description of the experiences.

Phenomenological Terms

Phenomenology is the study of a phenomenon as experienced from first-person point of view.[33] We would like to review some phenomenological terms to help the reader better understand our research process. In order to understand the research process of phenomenology we will discuss the following terms: natural attitude, intentionality, lifeworld, lived space, lived body, lived time, lived human relation, reduction,

phenomenological epoche, bracketing, intersubjectivity, imaginative variation, essence (or essential structure), and embodied knowing.

Natural attitude. Natural attitude is where all science and research has its origins according to Dahlberg.[31] It is the attitude in which we normally stand, the way we go about our life, prior to all questioning of what we are doing or thinking. Simply stated, natural attitude is what we do without thinking. Without analyzing what is around us, activities are taken for granted and the things that are closest to us become the most hidden.[31] Some phenomenologists consider the natural attitude to be the state of non-reflection or the default position and some others consider it a pre-reflective state.[34]

Intentionality. Intentionality refers to "a general patterning of human experience which suggests that human life can only be understood as always and already in some context." [35 (p. 15)] It is the connection between humans and the world. It implies that we cannot separate ourselves from the world and that all thinking occurs because we are thinking about something. Intentionality is important in phenomenology because it "elevates experience of things to the forefront of knowing." [34 (p. 1190)] Once the experience is in the forefront one will be able to express the situation into words.

Lifeworld. Lifeworld is the world of a person's immediate experience. It is the present moment. Lifeworld refers to "the actual experienced world of a person corresponding to that person's intentional awareness."[36(p. 4)] According to Husserl, the lifeworld gives rise to certain structures and styles that need to be studied.[33] The goal of lifeworld research is to expand our understanding of human experience through

description and illumination of the lived world.[31] The lifeworld consists of four fundamental themes: lived space or spatiality, lived body or corporality, lived time or temporality, and lived human relation or relationality.

Lived space, lived body, lived time, and lived human relation. Lived space, lived body, lived time, and lived human relation are phenomenological existentials which explain all relational situations. *Lived space* is the spatiality of the experience both physical and psychological. It can be a concrete explanation or a virtual explanation. *Lived body* describes a person's bodily reactions to an experience or how the person experiences the lifeworld through bodily perceptions. *Lived time* is the sense of time in the moment. *Lived human relation* is the physical interactions with people. Through these terms we start to understand the lifeworld of the participant. According to Heidegger, how we experience these features of lifeworld is how we experience life.[28] When one spends time in a foreign land, how we experience these aspects normally becomes modified by the culture and customs in which one is currently situated.[28] How we normally experience lived space, lived body, lived time, and lived human relation may become confusing in this new setting.[28]

Phenomenological epoche, Reduction, Bracketing. When starting any research study, researchers bring their bias to the area of research interest. In order to account and set this bias aside, certain steps are taken in a phenomenological study. The researcher wants to be able to see the experience of the participants with new eyes. *Phenomenologial epoche* is the term that describes what a researcher does to rid

themselves of these biases. It is the theoretical moment where all judgments are suspended. *Reduction* is the process accomplishing this feat. *Bracketing* is a more specific description of how to set aside the biases. Often, it is thought of primarily as process that is done in the beginning and end stages of phenomenological research. However, bracketing is dynamic and should be done throughout the entire research process, not just during the data collection and analysis phases.[37, 35] It refers to a certain attentiveness that needs to occur to come to an understanding of the unique meaning and significance of an experience.[33] Bracketing has been described as "an intellectual activity in which one tries to put aside theories, knowledge, and assumptions about a phenomenon." [35 (p. 33)]

Imaginative variation. Imaginative variation helps to derive themes in the participants' interviews. It describes the aspects of a phenomenon that make it what it is; without these aspects it would not be the same phenomenon.[38] Husserl described imaginative variation as taking "aspects of our original intuition and substitute parts in a manner which allows the essence to come into view and anything merely contingent to drop away." [39 (p. 154)] By this substitution, one can see if the phenomenon would be the same without this theme or if it is a central aspect to the phenomenon. If the alteration changes the phenomenon, the theme is considered essential. If it does not change the phenomenon, the theme is considered incidental to the description of the experience.

Essence. Essence or essential structure makes the object what it is and if that changes, then it is another object.[31] Essence does not describe what the phenomenon is,

but instead describes the relations we maintain with the world.[33] The researcher may have different contextual factors or agendas influencing the descriptions. As a result, meaning cannot just be the interpretation of the researcher; instead it must be a co-creation between the researcher and the researched.[40] The structure of the phenomenon is reached by manufacturing the meaning units in a way so that the phenomenon's inner structure, or essence, is illuminated.[31]

Our Research Road Map

A phenomenological research design approach was taken to find the lived experience of physical therapists who volunteered in Haiti. The physical therapists involved in this study were found through a variety of recruitment resources. Recruitment posters were posted through email, an internet posting on the APTA Global Health Special Interest Group Listserv, and through professional contacts of the research advisor. Please see Appendix A. Volunteers were asked to participate in the study if they had an opportunity to participate in disaster relief work in Haiti. Inclusion criteria for participation in this study were that participants were licensed to practice in their home countries. They had to have volunteered as a disaster relief working in the capacity of a physical therapist in Haiti after the earthquake. They could be male or female. Those who responded to recruitment advertisements were then contacted via email to confirm that they met the inclusion criteria and to schedule an interview. All physical therapist who volunteered in Haiti that responded were included as to eliminate selection bias.

Once the participant was contacted, a time for their interview was determined. Interviews were conducted over the phone, with the use of Skype which is an online video and audio chat medium, or in person if the participant was able. The interview was conducted by the research advisor with a semi-structured format leaving opportunity for individual deviation of conversation to occur. Please see Appendix B for the consent form and Appendix C for the Interview Guide. Some or all of the research group members were also present during the interviews. As recommended by Thomas and Pollio, the interviews took place in a quiet, private area so that each participant's privacy was protected.[35]

Each individual was asked to develop a pseudo name to protect their identity. The interviewer asked each participant if they understood what would be happening in this research project as stated in the informed consent and if they had any other questions before the interview began. It was also explained to the participants that they were able to withdraw from the study at any point if they chose to do so without any repercussions. The researcher then began to ask the participant to recall their experience of serving as a physical therapist in Haiti and to describe that experience.

The process of interviewing is unpredictable and has the potential to provoke strong emotions. Although informed consent was obtained from each participant prior to the interview, there was no way to prepare participants ahead of time for possible discomfort they may experience in the interview process when recalling unpleasant moments. As researchers, we have no way of knowing how the interview will affect the participant psychologically. Therefore, ethically, it was our moral obligation to identify

and redirect the interview when the participant was experiencing emotions that may cause them undue pain and suffering.[41] Rosenblatt described the process of processual consent which allowed the researchers to redirect the line of questioning if the participant became too emotional during the interview process.[42]

Each member of the research team participated in bracketing interview with the purpose of attempting to identify and minimize individual biases during the interview process. As researchers we were thus provided a process in which we attempted to set aside our previous ideas with regard to theories or previous comments in the media with regard to this phenomenon. Bracketing interviews are those in which researchers are interviewed by other members of the research team to determine what assumptions they have about the proposed research topic.[35] According to Thomas and Pollio, the purpose of these interviews is to make each researcher aware of their understanding of the phenomenon and to sensitize them to any ideas or theories that they may impose on the participants of the study.[36]

Each member of the team interviewed another member asking them about what they knew about the natural disaster in Haiti and what they thought that the research might find. These interviews were audio recorded and transcribed by the interviewer. Bracketing interviews also provided the researchers an opportunity to experience what it is like to be a participant during an interview in a phenomenological research study.[35]

Data Analysis

Each interview was assigned to a member of the research group to transcribe. Each transcription was shared with each member of the group to allow them to read

through the interview. Each assigned interview was read through four times to begin to understand the flow and content of the interviews. Key words and phrases that explain the experience were highlighted.[42] Notes were also made in the margins about what seemed to be the main themes. These themes were then used to create the phenomenological descriptions for each individual experience. The themes and the phenomenological descriptions for each participant were sent to the respective participant and were the basis of our second interview. This process was our vertical analysis and was a form of member checking the data. The next step in our data analysis was to develop a common overall phenomenological description across all participants' interviews regarding the lived experience of PTs volunteering in Haiti after the earthquake of 2010 was generated. This process was our horizontal analysis. Please see Figure 1 for our research process.

Methodological Rigor in Phenomenological Research

Methodology in quantitative studies emphasizes the importance of operational definitions and objectivity which de-emphasizes the importance of human experience.[32] The opposite is true for qualitative or phenomenological studies where capturing the essence of the human experience is the goal. Objectivity is a vital component when establishing methodological rigor of both quantitative and qualitative research studies. However, it is accomplished in two very different ways depending on the type of study one is conducting. The focus of objectivity in quantitative analysis is on the elimination of extraneous variables that may confound the variable in question. This process inevitably leads to the elimination of all unique individual characteristics of the

participants. On the other hand, the focus of objectivity in phenomenological studies is on "keeping the fidelity to the phenomenon" and "listening to what the phenomenon speaks of itself." [32(p. 52)] Numerous steps are taken to ensure the validity, credibility, and reliability of the essence under scrutiny is maintained in phenomenological research.

Validity is "whether or not the findings can be trusted and used as the basis for actions and policy decisions." [27(p. 56)] In quantitative research, this concept involves proving the efficacy of a measurement tool by asking; does this instrument measure what it is intending to measure?[27] The measurement tool in phenomenological research is the transcription and description of the interviews. The process of describing the interviews and identifying major themes (reduction) involves some level of interpretation on behalf of the researcher. Therefore, validity concerns the accuracy of the researcher's interpretation of the interview. Validity was established through three resonance rounds. The first resonance round was conducted with the participant. The second resonance round was conducted with other physical therapists who had the experience of participating in disaster relief work in Haiti but who were not a part of this study. The third and final resonance round was conducted with healthcare workers other than physical therapists who volunteered in Haiti who were also not a part of this study. Please see Table 2 for the number and type of participants in the third resonance round.

Polkinghorne states, "If findings lack credibility, trustworthiness, or legitimacy, they are not valid." [27(p. 2003b)] Therefore, the resonance rounds also helped to determine credibility, trustworthiness, and legitimacy. In addition to the resonance rounds, a shared knowledge of the physical therapy profession between the researchers and the

participants contributed to the accuracy of the descriptions and interpretations of the interviews. This shared experience, along with the development of rapport during the interviews and bracketing interviews to control our own biases helped lay the groundwork for the validity of our research.[28]

Reliability is the degree to which replication of a study will produce the same results. Quantitative studies accomplish reliability through controlling all extraneous variables such as the unique characteristics of each individual so the test-retest results are the same every time the experiment is conducted. This situation is impossible in phenomenological studies as "no two interviews will ever be the same." [35 (p. 39)] Therefore, the process of reaching saturation is important in phenomenological research in order to ensure all overarching themes are accounted for prior to beginning the process of reduction. Saturation becomes evident when there are no longer any new themes being described during the participant interviews. At this point, conducting any further interviews is not necessary in obtaining the essence of the experience. If the point of saturation is met during replication of the study, the same themes should become apparent, and no new themes should emerge. If this is true, the study is deemed reliable.

Although important, the validity and reliability of a study mean nothing if it is not relevant, valued, and useful to its readers. Our study on the experience of physical therapists volunteering in Haiti may help others who have volunteered to identify with and understand their own experience better. It may encourage those interested in volunteering to take the next steps towards making it happen. Our study may also inform organizations which provide physical therapists and other health care workers for disaster

relief situations ideas on how to better prepare their volunteers. Finally, it will help friends and family members of those that have volunteered better understand what their loved ones may have experienced during their time in Haiti.

Summary

This section described phenomenology and its appropriateness for this research study. We have provided a definition of phenomenology, its historical context, and the common terms used in this research design. We also described the road map for a phenomenological study including the recruitment and screening of participants and the processes of bracketing, conducting interviews, and analyzing the results. Finally, we explained the methodological rigor involved in determining the validity, credibility, and reliability of phenomenological research and how it is different than quantitative research. The next chapter will describe the common experience of Physical Therapists volunteering in Haiti. The major themes or constituents will be presented and described using examples from the interviews that were conducted. The general structure of the experience will then be described.

Chapter IV: Results

Engaging in a dialogue with others offers an opportunity to access and better understand another's lived experience. It also helps us understand our common human experience and connections. In this study, an invitation to speak about a personally relevant matter put us in touch with people who were able to concretely describe their experiences of participating in relief work in Haiti after the earthquake of 2010. Eleven PTs participated and were interviewed twice for this study. Our participants included ten women and one man. Participants in this study were from the United States, Canada, Africa, and the United Kingdom representing a wide variety in life-world backgrounds linked together by the common experience of volunteering to participate in disaster relief work in Haiti after the 2010 earthquake. Our universal description of the experience of participating in disaster relief work in Haiti is described below. We have also shared this universal description with PTs who did not participate in the study and with other health care professionals who were engaged in relief work in Haiti to determine if our universal description resonated with their experiences.

The Common Description

The description of physical therapists' experience of providing relief work in Haiti revealed common elements which included periods of emotional responses, facing challenges in a wider scope of professional PT practice, educating others as a key to success, discovering a deeper meaning of social responsibility through lessons learned, and difficulties returning home. Metaphorically, the experience can be compared to a white-water-rafting ride as the participants engage in their work in Haiti.

A white-water-rafting ride is exciting, thrilling, scary, and can be dangerous if certain guidelines are not followed. Understanding these guidelines of securing a relief site is not always easy or transparent. This part of the experience is a bit like entering the raft. Participants thought they knew what they were getting into, but could not anticipate every surprise curve, twist, or turn they encountered. Despite having a plan, one may encounter turbulence, rocks, or rapids. Fortunately, there are helpful tools such as paddles, helmets, and life jackets keeping one safe. There are many surprises along the way. One may even be thrown overboard. Then, one must not panic but let the experience take over. Like the river rapids, no two rivers or experiences are exactly the same. While there are similar aspects, the experience changes depending on the people in the raft, the weather, or the river itself.

Just as the white-water-rafting ride is done, the participants are surprised by the challenges of getting off of the raft as they return to their everyday lives back home. Once the participants return, they realize home has changed as has their point of view and the world around them. Gazing at the river with a new set of lenses, the river no longer seems the same. A sense of tension is felt as others are unaware of the changes that occurred in the participants' absence. One's personal and professional identities are questioned and redefined. At times participants felt isolated upon their return because this new viewpoint allowed them to reexamine their purpose as a professional. Acting as an educator of others in Haiti provided a new purpose and was a way of building sustainability. Compared to work back home, the need in Haiti for services seemed to take on a more urgent meaning and importance for our participants. In Haiti, the

participants were able to experience a wider scope of practice compared to back home, creating a sense of frustration. Although there was difficulty returning to their role as a PT, all participants were able to articulate a deeper understanding and meaning of social responsibility.

Finally in an effort to unveil the general structure of physical therapists' experiences in Haiti, all five constituents and supporting textual excerpts from interviews will be presented in this chapter.

The Five Constituents

Five constituents emerged from our data including: emotions, challenges, education is the key to success, lessons learned, and difficulty coming home. The constituents represent the most prevalent themes from the participants' experiences.

Emotions

Just like the emotional journey encountered on a white-water-rafting ride, the experience of volunteering in Haiti included periods of fear and uncertainty, times of shock, and feelings of a sense of accomplishment or gratification. One participant summed up the common emotions experienced while volunteering in Haiti:

> It was altogether very sad and amazing, emotionally overwhelming, but great. I'm so glad I did it. It's one of the best things I've done in my short life. (Tina, PT, USA)

Fear and uncertainty are common emotions experienced by riders of white-water-rafts and volunteers in Haiti, as participants of both experiences will approach unfamiliar settings and new obstacles that must be overcome. Safety was a concern for many of the volunteers in Haiti and often resulted in a sense of fear. Jane, a PT from the USA, stated:

> Someone was abducted a few miles if not blocks from where we were. You know, they had the prisons break loose and thousands of criminals were free. So, yeah, I mean, I got to sleep behind a guarded wall, but these people are in tents, so it was very distressing and uneasy. (Jane, PT, USA)

Another participant, Jayne, stated, "Fear is always present not knowing the political situation down there."

Uncertainty and feelings of unpreparedness were also common emotions experienced amongst the volunteers with whom we spoke. Often, the volunteers were uncertain about what to expect when they arrived in Haiti. Emma described this feeling by saying:

> I remember when the plane was about to land and I looked out the window and I saw the devastation and destruction of what the earthquake had done. I sort of got the feeling over me like, can I really do this? Can I really be here and help? This is now too real for me. And so, there was this moment of, wait a minute, do I need to get on a plane and go back, but, once the plane landed and we got out, I was like, this is going to be a great adventure and I'm going to help a lot of people. (Emma, PT, USA)

White-water-rafting riders may recall periods of shock as they encounter unexpected turbulence that might even throw them overboard. Likewise, volunteers in Haiti reported feelings of shock as they described the environment around them and the difficult situations they encountered. One common experience between numerous volunteers was the shock associated with the stark contrast between the beautiful landscape and the utter devastation left in the wake of the earthquake. Gabby described this moment:

> The thing that struck me as we got close to Port-au-Prince . . . there was tents, for miles and miles on the side of the road. Pictures cannot put into words those tent cities and what people were living

> in. It doesn't matter how many Time magazines you look at . . . I was amazed [at] . . . their lack of housing. (Gabby, PT, USA)

Mercy Me echoed the emotion of viewing the enormous devastation in Haiti as she described the sights, sounds, and smells that contributed to her experience by saying:

> You are going by these two or three story buildings that have just pancaked, and you know there are bodies still in there, so the air has this stench to it in some places more than others. So there was that, but in the midst of that you had people who were trying to sell their goods right outside this building that has collapsed. It was sort of like well, life still goes on. (Mercy Me, PT, USA)

Gabby's and Mercy Me's descriptions of the devastation left by the earthquake was contrasted with many other descriptions of beautiful sunrises and sunsets, stunning mountain ranges, and the scenic rolling hills of the countryside. As Margaret stated:

> I would wake up at 5 o'clock because it was . . . the coolest part of the day. Sometimes, I went for a run . . . around the complex and looked at the beauty of things . . . and I would catch the sunrise which was absolutely amazing. It was a really good start to the day. (Margaret, PT, Scotland and South Africa)

The volunteers in Haiti also described many specific and unique experiences that were shocking to them. Among these experiences, a lack of resources was often the cause. For Margaret the lack of resources was apparent by the number of people that passed away as a result of the cholera outbreak. She stated, "It's just awful seeing people die from this perfectly treatable disease." One reason this occurred is due to the limited number of healthcare facilities in Haiti, and the inability of patients to travel to a clinic in time to be effectively treated. Gabby described a similar moment of shock after hearing how one of her patients lost their leg from an infected dog bite. She said:

> This fella came . . . in. He had a below the knee amputation. He wanted a leg. I asked him how long ago he lost his leg. This fella

> lost his lower leg from an infected dog bite over ten years ago. Something that is routinely taken care of in the United States and would be rare for someone to actually lose a limb from. (Gabby, PT, USA)

With the large availability of expertise and resources in the United Sates this patient probably would not have lost his leg, however, the lack of resources and expertise resulted in an amputation instead.

Lastly, white-water-rafting riders and volunteers in Haiti would report a sense of accomplishment and gratification for the work they did as they look back and remember the journey and the obstacles they had to overcome. Many of the volunteers in Haiti received gratification from the Haitian people. Vanessa explained her regard for the Haitian people by saying,

> I'd have to say one of the best things about working there was the people. And I think that's what makes me come back. And not so much just the staff members that I loved, but the patients, the families, and the Haitian staff members. I felt like despite everything that has happened to them, they are very strong, brilliant people, and they just want to get going with their life, but they are also so appreciative of the care that they get and so willing to help others. (Vanessa, PT, Canada)

Gratification also came in the form of specific moments that touched the hearts of our participants. For one participant, this memorable moment occurred after many long hours of coaching a group of amputees in soccer. She stated:

> There was definitely moments [that stood out as amazing]. Sitting at the national stadium, watching the players play, in these beautiful uniforms, on this professional field, hearing almost a full crowd of Haitians cheering on these disabled people, I had goose bumps the whole game. I couldn't even stand up at times. I was just so blown away. It was probably one of the most beautiful things I've ever seen in my life. The energy in there was just so positive. The guys were just so proud. It didn't matter how the

> score of the game went or anything like that. It was just . . . it was just an absolutely beautiful thing. (Meslene, PT, USA)

After a white-water rafting ride or an emotionally exhausting day of volunteering in Haiti, participants of either must debrief. White-water-rafting riders may do at the end their journey as they discuss the shared experience of the ride with the other people in their raft. Similarly, at the end of the day our participants described how they would exchange their stories as a means of debriefing. Debriefing with their peers emerged as an important coping mechanism for our participants to avoid burn-out. Jayne explained the importance of this coping mechanism:

> It was an intense environment, so to debrief usually you would have to chat with friends. And you would chat about what you saw. And so it was important to get that off your chest because you would see things you had never seen before, the things you would be worried about . . . stuff that was just bizarre and, you would just talk. And you would let them listen to something and they would share something back from some of the stuff that they saw. And it was just a way to let off some steam. (Jayne, PT, USA)

Other methods of debriefing that were mentioned include playing games, praying, meditation, reading, relaxing in the pool, or going to the UN for some familiar food.

All of our participants described situations or experiences during their time volunteering in disaster relief work in Haiti that brought about fear, uncertainty, shock, and gratification. During the interviews, it became apparent a common description of disaster relief work in Haiti must contain these specific emotions as they were necessary for describing the essence of this experience.

Challenges

Physical therapists encountered many challenges while volunteering in Haiti including lack of funding, language barriers, cultural differences, coping with the reality of the devastation in Haiti, and adjusting to practicing at the edges of a physical therapist's scope of practice. The challenges experienced by physical therapists began before they arrived in Haiti. Several participants described having difficulty finding an organization to travel with, funding the trip, and getting time off from work. Meslene described her difficulties:

> You know, I can't miss two weeks of work because I don't want to go for just a week, I want to go for two to three weeks. I can't miss all that time from work as well as give you all this money up front, I mean that's just not . . . that's not, I'm not able to do that. (Meslene, PT, USA)

The language barrier and cultural differences presented a challenge when working with patients. Several therapists relied on translators who were often available on a daily basis. Even with the valuable assistance from a translator, understanding specific information proved to be challenging. Gabby described her experience:

> The main barrier that I experienced was language. I mean, these people all have the same issues that we see here: weakness, gait abnormalities, balance disturbances . . . they had all of that. I had a . . . I needed an interpreter by my side to treat . . . to really do my job. Their issues were really no different than what we see here in terms of physical impairments . . . But, it was a little frustrating because I didn't know what they were saying, and I wasn't sure if they were explaining it right . . . because sometimes the patients would do something completely different than what I said. (Gabby, PT, USA)

Language barriers challenged communication with patients and also with fellow physical therapists. Physical therapists came from around the world to provide physical therapy in Haiti, and documented in different languages. Jayne described her challenges understanding documentation in a foreign language:

> But it was hard too, as far as documenting, ‘cause you get their sheets and it’s in French, it’s in Spanish. I think some of the PTs had a hard time because they were like ‘we need to be documenting like we do in the United States, we have standards and there is nothing here.’ The dossier is not in English, and they won’t understand anyways. (Jayne, PT, USA)

The language barrier affected the ability to perform a chart review before seeing a patient as well as understanding documentation to give details needed for following treatments. Physical therapists also reported an overall lack of documentation. As a result, physical therapists thought quickly, determined the needs of the patient, and provided the best treatment with what information was available.

Another challenge experienced by physical therapists was the reality of the devastation in Haiti. Physical therapists had difficulty finding words to describe the destruction in Haiti, and some even said pictures could not describe the destruction. Gabby described her experience stating, “It was completely unlike anything I expected . . . the conditions were almost unbelievable to me.” Sometimes simple infections became life-threatening situations. For example, physical therapists fit a patient for a prosthetic leg following an amputation, because the patient had an untreated infection. An infection

that is routinely treated in the United States without complications turned into an amputation following the earthquake. Gabby described her experience:

> The lack of resources, trying to communicate with the doctors, and watching these patients who had injuries that could easily be dealt with here in the States and watching them potentially lose limbs or life . . . Even the poorest of poor here [in the US] still have more food than these people had. (Gabby, PT, USA)

Physical therapists compared the living conditions in Haiti to the living conditions in the United States. For example, John described a patient who had difficulty managing his diabetes:

> The guy had been storing his insulin in a cooler because they didn't have a refrigerator or anything on ice, and it was just like . . . who knows if he's going to be able to get ice wherever he is . . . no wonder this guy just has so much problems controlling his blood sugar. (John, PT, USA)

John and Gabby described experiences in which the living conditions in Haiti were life-threatening. Confronting the reality of the differences in healthcare between the physical therapists' native countries and Haiti was overwhelming.

Coping with the reality of the destruction in Haiti following the earthquake was an ongoing process. Participants bonded with fellow physical therapists, shared experiences, and took time to reflect. Emma describes how she coped:

> I mean personally for me it could definitely be oh very, very overwhelming. So you had to take time to take everything in and just take a step back and you're not here to necessarily to teach people or to provide the same care that you would provide in the States. But you're here to help and provide a service in any way you can, and that service from day to day was different. I think taking that time to reflect on that was very helpful for me. Taking time to talk to difference people and sort of sit there and talking

> through things and expressing my emotions so they don't get bottled up. Sometimes there would be patients that were very overwhelming . . . you needed to talk about it and reflect on it. (Emma, PT, USA)

Disaster relief work also challenged physical therapists to be effective with limited resources. Physical therapists often thought outside of the box and found ways to treat patients without depending on equipment. Jayne described her experience:

> [Gait training] was a little tricky, and sometimes we didn't have the right equipment, or we didn't have crutches or, we didn't have shoes, yeah, you know unique stuff, [laughter] but you made it work the best that you could. (Jayne, PT, USA)

The lack of resources presented the physical therapists with a challenge to do the best they could with what they had. Therapists provided treatment without high-low tables, without state of the art equipment, and sometimes even without electricity. Despite all of the challenges, patients benefited from skilled physical therapy. At times the dynamic environment challenged physical therapists to practice out of their comfort zone.

During the disaster relief work, the volunteers experienced a wide scope of physical therapy practice that posed another challenge. Often times, the work the participants in this study were doing was in a different setting which was broader than they experienced at home. Meslene shared, "Actually what I ended up doing was a lot of things . . . outside of my skills set." Generally, the volunteers' physical therapy practices at home would focus more on one or two subsets of patients but in Haiti that was not the case. One participant stated:

> There were all kinds of different patients. You know, there were amputees, wounds, orthopedic, deficiency fractures, spinal cord

> injuries, malnutrition, and . . . hydrocephalus for children and we worked with almost every kind of disorder here. (Jayne, PT, USA)

To add to the challenge of working in a different setting, the PTs also had to adapt to a different culture including the availability of patients and resources. Mercy Me stated:

> You have to use all of your skills set as a therapist and not depend on the latest piece of equipment of product that is out there. You really gotta think 'ok, I don't have any tools here so what can I do to really help these patients?' (Mercy Me, PT, USA)

The schedule of when the patients came was much different in Haiti than in the US, where there is a set schedule that patients must abide by. Meslene described the challenges with the patient schedule or lack of it. She recounted, "The patients would arrive anywhere between, about, 9 or 12 . . . there's no time order, no rules to it."

The Haitian health care system and way of life were vastly altered compared to home. Jayne described her first impressions of this altered health care system:

> It's just something you've never seen before. It's a tent filled with people lined up side by side by side. There is really no privacy. Their families are waiting beside them. And there is a clipboard for the patients. And they're going to either just naming the patients, the diagnosis, and what's going wrong with each one and you just can't remember. And they go, here's your patient. And you don't remember anything that's going on or what they said and then they just send you off to go work. You're dehydrated and you can't figure out what's going on. And you're scared. And then the second you wake up and you just start working. And then the third day, you know it's like you've been there forever. And it's a shock because it's a different way of life. (Jayne, PT, USA)

Despite the challenges experienced by the physical therapist participants in this study, many reiterated that the challenges they personally faced were minimal compared to the

challenges faced by the Haitians in their everyday lives. Gabby pointed out, "From the Haitian standpoint, we were pretty much in the lap of luxury."

Education is the Key to Success

As trained professionals, physical therapists have much knowledge about the human body that they can share with others every day. During the experience of volunteering in Haiti the participants in this study stated that they felt educating others was the key to successful rehabilitation for their patients. Educating patients, patient's families, other volunteers, and Haitian aids was all a part of our participant's experiences in Haiti. Emma described her experience with teaching the Haitian technicians:

> There was a PT that was working there who was strongly involved in doing lessons for those PT techs after hours and PT anatomy and going over a lot of different things with them . . . I had the chance to kind of play the managerial role in outpatient . . . But one of my responsibilities was to help continue that sort of training. So we came up with different ways to get these techs to learn anatomy. And so we would do dance anatomy and they would have to name the muscle that did that dance move. (Emma, PT, USA)

The volunteers found ways to utilize others to help them navigate through their rafting journey. The Haitian technicians were able to offer a map of the Haitian culture in exchange for the knowledge of the volunteering PTs about rehabilitation. This exchange of information assisted both the Haitian technicians and the PTs to provide the best rehabilitation services possible.

Not only were the volunteers teaching the Haitians about what physical therapy was, but they were also able to teach the Haitians what physical therapy could do for their

family and community members. Jayne stated that the whole concept of rehabilitation was a new idea to the Haitians as she explains:

> So a lot of the Haitian population had never seen [rehabilitation]. They figured that when you're sick you're sick and they would just lie in bed because they didn't understand the active part of the healing process . . . It took quite a while for them to learn that because we had translators who would just [help] the patients out of bed because it was too hard for the patients to do it themselves. They didn't want him to because they were sick . . . That was the belief initially. But then when they actually witnessed themselves and saw the power of rehab . . . it was amazing. (Jayne, PT, USA)

Many of the participants discussed how powerful it was when the Haitians understood what physical therapy rehabilitation could do. The Haitians wanted to learn more about how to participate in the rehabilitation techniques. The volunteers were able to share their knowledge with the Haitians. The different way of sharing their knowledge felt very rewarding for the therapists who volunteered. Not only were the volunteers able to give a week of their time to help the Haitians after their disaster, but they were able to leave a whole new concept of rehabilitation with the Haitians.

Lessons Learned

Throughout the raft ride, the PT volunteers felt they came upon many rapids they needed to navigate safely to continue on their journey. The rapids provided them with the opportunities to learn new things during their journey. The lessons that the volunteering PTs learned included the importance of physical therapy, how to practice creatively, the potential role of PT volunteers in disaster relief, and they learned something about the Haitian culture. These lessons were brought back with the volunteers when they returned home.

Many of the volunteers stated that they had a new sense of what physical therapy meant and what they could do with their physical therapy knowledge. Emma stated:

> I think for myself I learned that doing this stuff you definitely get a lot more out of it than your patients do in some way[s]. And so yeah, you're carrying them all back with you. (Emma, PT, USA)

Most of the volunteers felt they learned as much from their patients as the patients learned from them. Jayne also felt that she gained a whole new prospective on what physical therapy could do. She reflected:

> I think this is knowledge that sometimes we forget that we have. We have a lot of knowledge. And it took coming to Haiti for me to realize what was not known and that they need help to really show me how much a PT is valuable . . . how much my position as the therapist was okay . . . So it's just amazing how much knowledge we have. And I think sometimes you forget that no matter where you are practicing that we have so much knowledge to give . . . Haiti reminded me of that. (Jayne, PT, USA)

Jayne added:

> I think I chose to come because I saw a need that was urgently requesting help and I had the time . . . We thought it would be something good that we could do. And it ended up changing my life. And it really ended up impacting what I thought about therapy. (Jayne, PT, USA)

A common experience among the participants in this study was the opportunity to learn about the Haitian people and their culture during their stay in Haiti. Many were surprised how different the experience was then they had expected. Gabby stated:

> The people were amazing. They were so strong. I expected to go into a situation where they felt defeated, depressed, from such a phenomenal loss from the earthquake. And they were very upbeat, they were smiling, there was an air of survival. That was not what I had expected. And acceptance, that was another thing, they worked, they just went on with their daily life. And, a lot of their

> [work] was basic survival, getting water and getting food. I never heard anyone complain. (Gabby, PT, USA)

Disasters occur suddenly with just a moment's notice. There is little or no time to prepare for what is about to happen. Volunteers react and respond to the disasters that occur just as quickly as they happen. It is our human nature to do everything that we can to help individuals in need. Sometimes these volunteering experiences require us to travel to cultures different than our own. Working in different cultures may create new challenges for the volunteers. Margaret's description of preparing to travel to Haiti was much like preparing to ride white-water rafting ride:

> You can never be fully prepared . . . I probably should of spoken to people who had gone before just to get some tips on, you know, not just what to expect but what to bring with you . . . You have to keep an open mind. Don't judge. Don't compare things to where you're from because it's just insulting to the people that are there. They don't want to hear how things are so much better where you are or how things are so much harder where you are. You have to just go there and just take it all in and just observe before you start commenting . . . I think you also need to set yourself realistic goals. You can't go in there and change things. Even if you go there for a year you won't accomplish change. I think that's a big thing. Haiti needs to change itself. You need to just go with the flow basically. (Margaret, PT, Scotland and South Africa)

Mercy Me also reflected on the importance of preparations before traveling to a different culture:

> The other thing is to try to understand the culture that you are going into. And not to put your own expectations on people uh without trying to understand them um. And to be sensitive of uh the people that you are working with. I would try to be gentle with the patients and ask them what they want to do . . . not to be the person from the US that's trying to tell them what to do. (Mercy Me, PT, USA)

It was helpful for the volunteers to understand the Haitian culture before traveling to Haiti. Recognizing the differences between the cultures enabled the volunteers to be as successful as possible during their time spent in Haiti.

Another lesson learned that the volunteers spoke about was the definition of social responsibility. Margaret stated, "I felt like before I never . . . really knew the term social responsibility, I never really heard of it . . . I guess I think it's how I see my responsibility to society and to bring back to others a selfless act." Paola Julia defined social responsibility as, "Being [responsible] for another human being and trying to do something to make their life better if possible and support their life. That's social responsibility to me."

Mercy Me explained, "I really feel that . . . we have a responsibility, not just as therapists but as someone who has much more than [they] deserve, to help those in need whether it be in this country or not." The volunteers all agreed that social responsibility is the reason for why they decided to go to Haiti and help. Tina summed up the participants' opinions:

> We definitely all live in this world together and it is important, if not necessary, that we all take care of one another because we're only really going to survive if we're all working together and living in a healing way. I think life is unfair and unfortunately we're really lucky in the US that we're born here. I think because we were dealt cards that are a little bit better . . . it is our responsibility to help others. (Tina, PT, USA)

Difficulty Coming Home

The experience of a white water rafting ride gives a metaphoric example of how the volunteers felt when coming home. The crazy twists, turns, and surprises do not

allow one to reflect upon the experience until after they have set foot at home. Jane stated, "It was really hard to come home . . . because at times I was like, I can't lose it here, in front of these people . . . It was like . . . I will just deal with it later."

Once the volunteers returned to their homes, individual reflection occurred, but they had a hard time finding others to share their experiences and reflections. Reflecting on her experience of coming home, Margaret said, "Coming home was difficult . . . because no one knows what you have been through." It would be similar to sharing your experience of a white water rafting ride with someone that has never had that same experience and could never know what it is like to be there unless they had gone themselves. Another participant stated:

> It's hard to talk to people because not too many people have gone to Haiti and lived there and done what I've done. So, it's hard to find people to relate . . . If you want to sit down for an hour, [I can] tell you how Haiti was, but it's not like – oh, it was good – it just doesn't do it justice. (John, PT, USA)

One reflection that was common for those that volunteered in Haiti was that they felt guilty for coming back to such fortune in their home country. One participant commented:

> Coming home was horrible. I actually cried on the plane because I felt so guilty . . . for being really happy to return to my family and to get back to a shower and nice bed . . . and to know that the people I'm leaving don't have that opportunity. I felt really guilty for being so excited. (Meslene, PT, USA)

Others spoke to the fortunes of their home country and how grateful they became after their experience in Haiti. Gabby further expounded on this topic:

> We are so blessed, and just incredibly, incredibly wealthy and [we have] resources . . . even the poor. And by Haitian standards, [the

> poor in our country] are wealthy. I hope I can always remember and be grateful for what we have, when I'm starting to complain or have a bad day. Because it's nothing compared to what they have in Haiti, or what they don't have in Haiti. (Gabby, PT, USA)

Often times this new found sense of fortune turned into a lack of empathy for their patients once they returned home. The participants felt the complaints of their patients back at home were miniscule in comparison to the problems faced by that their patients in Haiti. One participant shared some issues she faced when dealing with her patients after returning back home:

> I lacked a little bit of empathy for my patients. I had a hard time when they were asking me for stuff that I didn't feel they needed. They were not happy with the equipment that they received or the therapy that they received . . . (Jayne, PT, USA)

This new way of looking at the world made it hard for those that volunteered to come home:

> It took a while to adapt to . . . Western way of life again . . . especially when you see how people live with nothing and you come back to the UK and healthcare is absolutely free and people are complaining that . . . their free healthcare isn't good enough. It's . . . difficult coming home. (Margaret, PT, Scotland and South Africa)

Meslene also felt as if it took a while to adjust once returned to her home country. "It probably took me . . . about a month and a half to feel like I had the same passion for my work as before Haiti," she stated.

Another hardship that many of our participants felt with returning home was the sadness that came with saying "goodbye" to those with whom they worked in Haiti. Margaret reflected:

> I was actually quite sad, I was sad to be leaving the Haitians that hadn't left yet because I wanted to see them complete things . . . I was sad to leave [the other volunteers that had become such good friends]. (Margaret, PT, Scotland and South Africa)

The participants created relationships and made friends while in Haiti. Many participants also described the challenges of separating from new-found professional colleagues. These friends were missed upon returning home:

> I don't separate well when I know I'm not going to see people again and they've touched my heart. It was like, one more hug, just one more hug and then I'll say goodbye to you then. The people, the wonderful friends, acquaintances, people that touched my life and maybe so much that I touched theirs . . . you know I just miss them. (Paola Julia, PT, USA)

"It changes your life forever. I don't really care who you are, what background you have, you go to Haiti, it's going to change your life," stated Emma. Although there were difficulties described when talking about coming home, the experiences each volunteer had while in Haiti was life changing and made them want to return and help again. One participant elaborated:

> I absolutely would [go back to Haiti]. I would go back because . . . the people need the help . . . to keep me grateful, and [to] just [take] the opportunity to contribute. It's a great opportunity. (Gabby, PT, USA)

The overwhelming response of the volunteers when asked to reflect upon their experience is summed up by Tina, "I hope that I can go back there again."

Conclusion

In this section we presented the universal common description of the experience for our participants. The participants went through a metaphorical white-water-raft ride that did not stop once they returned home. In some cases, getting off the ride was more

difficult than initiating the ride. During the white-water-raft ride, five common constituents of the disaster relief experience were uncovered and also presented in this section. In the next section we will discuss the implications of these findings.

Chapter V: Discussion

In this chapter we will discuss the results of this study and link the results to existing literature and resonance rounds. Finally we will integrate the physical therapy core documents with the findings of the study.

Resonance Rounds

Across the multiple resonance rounds, the common description was widely accepted as an accurate representation of the experience of working in disaster relief in Haiti. One physical therapist, KG, stated: “I really like the white water rafting ride parallel because it really seemed like that even for me, who did not participate in the immediate disaster relief.” (Personal Communication, 8-10-11) Julia Paola also related to the common description by articulating: “I love the comparison of the experience of relief work in Haiti and a white water raft trip. Accurate and insightful. Well done.” (Personal communication, 8-15-11)

Various health care professionals throughout our resonance rounds also agreed with the common description. Please see Table 2 for the members of the health care resonance rounds. “Love your study and agree whole heartedly will your perspectives. MD's [especially] surgeons are ‘captains of the ship’ and not knowing what [you are] getting into is daunting but exciting,” was expressed by EB, an orthopedic surgeon. (Personal Communication, 8-21-11) For some, the common description presented a different way of viewing their experiences. A pharmacist, LFP, reflected: “The whitewater rafting analogy never occurred to me, but it's a good one, and I thought the

description was beautifully written, and resonated with me." (Personal Communication, 8-17-11)

Specifically, participants identified most strongly with the constituents of emotions and difficulty coming home. Just as fear was discussed by many of our participants, it was also mentioned during resonance rounds to be an important emotion. KG, a physical therapist who also volunteered in Haiti, wrote:

> A theme they really got right was that you have to function even though there is definitely inherent danger all around (for us I think it was mostly the various ways you could get seriously ill) so not panicking and being diligent in following the rules of survival and self-protection are important. (KG, PT, PhD, Personal communication, 8-10-11)

Working in an environment that required participants to practice at the edge of their comfort level challenged them to remain calm in unpredictable situations. Similar to KG, participants shared uneasy feelings about the danger of getting ill, a lack of personal safety, and the uncertain political situation.

As stated above, the difficulty our participants felt upon the return to their home country resonated well with both physical therapists and other health care professionals. The overwhelming response and agreement with difficulty coming home is summarized well by KG, PT, PhD:

> In particular, I had a difficult time when I got home. I could not believe it because I was only in Haiti 17 days but so much stuff happened in 17 days that it was a life changing experience, both good and bad. I did find myself a bit isolated and confused about the experience and there was nobody in my environment here that could relate to it. (Personal Communication, 8-10-11)

Agreeing with the physical therapists, PD, a physician, elaborated on the isolation that was felt upon the return home by saying, "I think you described well the feeling of isolation one feels upon returning because you cannot really describe what you have experienced to anyone who has not been there." (Personal Communication, 8-10-11)

Although disaster relief work presented several challenges, many of the participants emphasized feeling a strong sense of gratitude and fulfillment. Health care professionals who volunteered in Haiti experienced similar emotions. A participant from our resonance round, TJ, summed up his experience of this emotion perfectly in an excerpt from his journal article by saying:

> Deep are the feelings of gratitude and fulfillment for having the opportunity to participate, in some small measure, in the care of fellow human beings in such tremendous need. Also present is the awareness of change, to some measure a transformation that could only come with such an experience. (TJ, RN, Personal Communication, 9-5-11)

The challenges felt by those who volunteered were not enough to keep them from wanting to return to help again. There was not only an overwhelming response by our participants, but other health care professionals agreed that they would return. A physician, JS, stated, "That week was one of the most intense and best weeks of my [life. I had] no idea of what I was getting into but would do it again in a heartbeat (I would hope to spare the patients the pain they were experiencing)." (Personal Communication, 8-11-11)

Literature

Limited research has been published about the experience of physical therapists participating in disaster relief work in Haiti. In fact, there is limited research describing

the role of physical therapists in any type of disaster relief setting. The published literature involving physical therapists and disaster relief work includes mostly personal reflections, not formal scholarly systematically conducted research.

The literature involving disaster relief work poses similarities and differences to our participant's experiences. Similar to the experiences of our participants, other health care professionals also worked at the edge of their scope of practice. [43-46] Other health care professionals experienced similar challenges, had limited resources, and learned important lessons from their experiences in Haiti.[7,22,47,48]

In a study looking at the prevalence of posttraumatic stress disorder (PTSD) in disaster relief workers of the World Trade Center disaster, approximately 12% of the participants had substantial symptoms of PTSD,[49] which does not show to be true for the participants of this study. Although our participants had difficulty upon returning home and dealt with feelings of isolation, guilt, and confusion, these feelings did not correlate with symptoms of PTSD. Posttraumatic stress disorder has been found to be associated with interference of social and occupational functioning, which was not an experience our participants described throughout their interviews. As researchers, we believe PTSD was not something our participants dealt with because many talked about their continued relationships with colleagues that had volunteered in Haiti. These relationships may have helped our participants better deal with the stress they felt upon their return home. A physician who volunteered in Haiti emphasized the importance of acknowledging the presence of PTSD among volunteers after returning home. He attended a trauma debriefing session and admitted having difficulty sharing his experiences.[21] Further

research in regard to the difficulties coming home and how re-entry affects their current lives should be performed in the future.

Core Documents

The core documents for the profession of physical therapy support the role of physical therapists in disaster relief work. Principle 8 of the Physical Therapy Code of Ethics states, "Physical therapists shall participate in efforts to meet the health needs of people locally, nationally, or globally."[50] After a disaster, the need for health care professionals is substantial. Principle 8 of the Code of Ethics reinforces the importance of physical therapists to offer their services to those in need, whether that be locally or across the world. The physical therapists that participated in disaster relief work in Haiti exemplified serving those in need in the international community.

The American Physical Therapy Association (APTA) Vision 2020 statement includes the responsibility of all physical therapists to "improve the quality of life for society. They will provide culturally sensitive care distinguished by trust, respect, and an appreciation for individual differences."[51] Based on this excerpt of the vision statement, the APTA suggests that all physical therapists will contribute their knowledge and expertise for the betterment of society. Disaster relief efforts of physical therapists in Haiti provided one avenue for incorporating this aspect of the vision statement into practice. One of the themes from our study was the importance of education as the key to successful sustainability one foreign workers leave Haiti. The education of Haitian technicians for sustained rehabilitation services in Haiti once disaster relief efforts were

no longer needed is just one example of how our participants helped improve the quality of life for Haitian society.

The APTA recognizes seven essential core values that physical therapists should exude.[52] Out of the seven core values, four seemed to emulate the attitudes and attributes of the participants in the study. The four core values include: altruism, compassion/caring, professional duty, and social responsibility.

Altruism is defined by the APTA as "the primary regard for, or devotion to, the interest of patients/clients, thus assuming the fiduciary responsibility of placing the needs of the patient/client ahead of the physical therapist's self interest."[52] All participants volunteered in Haiti, leaving their family and friends and taking time off work to help people who were in need of physical therapy services. Additionally, the participants placed patients' needs above their own self interest by volunteering in a different country to help those affected by the earthquake in Haiti.

The APTA describes compassion as "the desire to identify with or sense something of another's experience; a precursor of caring."[52] Caring is explained as "the concern, empathy, and consideration for the needs and values of others."[52] Caring and compassion are strong attributes of the physical therapists who participated in disaster relief in Haiti. Each participant was able to articulate at least one moment where they were able to identify with their patients and subsequently show the patients they could appreciate the situation.

According to the APTA, professional duty is "the commitment to meeting one's obligations to provide effective physical therapy services to patients/clients, to serve the

profession, and to positively influence the health of society."[52] The participants were positively influencing the health of society by performing disaster relief in Haiti. They were educating patients on how to return to their lives after injuries such as fractures, amputations, crush injuries, and spinal cord injuries. Along with teaching patients, they were also educating the Haitians technicians to be able to sustain aspects of the profession after the volunteers have left Haiti. Other health care professionals were able to directly see that physical therapists are vital to the recovery process after a disaster to help improve the health of society.

The APTA core value of social responsibility is defined as "the promotion of a mutual trust between the profession and the larger public that necessitates responding to societal needs for health and wellness."[52] After returning home, the participants were all able to articulate the meaning of social responsibility. By volunteering for disaster relief work in Haiti, the participants were responding to the societal needs for improvement of health and wellness. They felt their skill set as physical therapists was needed to help improve the health and well being of the Haitian population affected by the earthquake.

Limitations

There were several limitations to this study. As stated in the methods section, we used many strategies to limit bias in our research. Even with these extra measures, our study does have some limitations. The first limitation is that our participants were a sample of convenience and may not represent all physical therapists who have volunteered in Haiti. Our resonance rounds with the PT participants in this study and the PTs from our resonance rounds not included in this study suggests that the description we

obtained was indeed a good representation for the PT participants in this study. Although our sample is small, it appears to be credible. Although our study consisted of a sample of convenience, we feel that the information may be representative of the experience of disaster relief in Haiti across the PT profession and other health care professions based on the responses we obtained in our resonance rounds. While our findings resonated well with PTs and other health care professionals, they may not resonate with the experience of disaster relief work in settings other than the 2010 earthquake in Haiti specifically.

Additionally, subjects were asked to recall events after they had returned home and had completed their re-entry back to their everyday lives. Looking back at an experience after a time of reflection gives a different perspective than the initial emotional response to the experience and may have influenced the results of our study.

Conclusion

The discussion summarizes the similarities and differences between our participant's experiences in Haiti, other physical therapists' experiences in Haiti, and other health care professionals' experiences in Haiti. The discussion also includes comparisons to health care professionals who have participated in relief work following other disasters. The common description resonated well with both physical therapists and other health care professionals.

Chapter VI: Conclusion

The participants in the study were able to verbalize their role in disaster relief work while in Haiti. Due to the types of injuries following the earthquake, the participants were an important part of the health care team. The participants utilized their knowledge of the musculoskeletal and neuromuscular systems to assist patients in regaining function to allow for full participation in their environment. Although we can't generalize our results to other disaster relief work sites, our participants' experiences describe the need for physical therapists in disaster relief work.

Physical therapists' roles as clinicians, educators, and consultants add to the quality of care patients received following the earthquake. Our participants described each of these roles to be a vital component of their experience. As clinicians, they discussed providing treatment of a multitude of injuries and illnesses. As educators, they taught patients and families the power of rehab and the potential for recovery following injury. In addition to educating patients and families, our participants educated local Haitian rehabilitation technicians on how to sustain health and continued recovery. As consultants, our participants worked closely with physicians, nurses, prosthetists, pharmacists and other health care professionals to determine the best plan of care for the patient.

The emergence of difficulty coming home as a central theme of the physical therapists' experience working in disaster relief work in Haiti brings forth the need to investigate the necessity of implementing of a re-integration program. As discussed

previously, a structured re-integration program may help volunteers participating in disaster relief work to adjust smoothly to their return home.

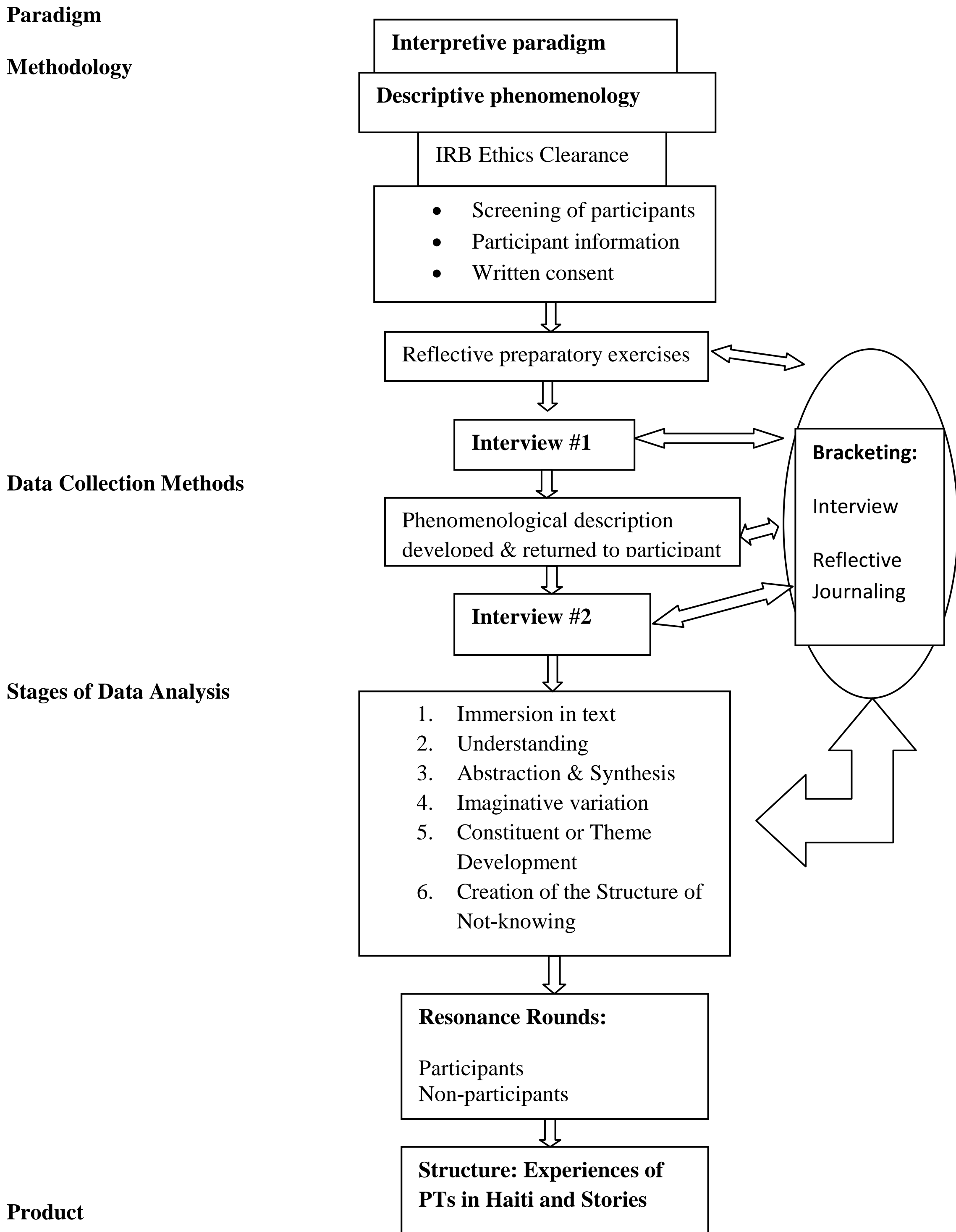
Table 1: Phases of Disaster Relief

		Definition	Example
Prevention		Efforts made to minimize the destructive effects of a disaster	Constructing buildings that are structurally sound and can withstand natural disasters
Preparedness		Implementing a safety plan that will minimize the loss of life and damage a disaster may bring	Having fire drills to ensure an evacuation plan is followed accurately in the event of a real fire
Relief and Recovery	**Pre-Disaster**	Warning or threat of an impending disaster	Severe weather warnings
	Heroic	Begins the moment a disaster strikes and proceeds through the search and rescue	Attending to the basic needs of the people affected by the disaster by providing food, shelter, and medical attention
	Honeymoon	1 week to 3-6 months post disaster; this phase is distinguished by the strong sense of community that emerges between those involved in the relief efforts	Continued support through the provision of food, shelter, and medical attention is given
	Disillusionment	1-2 years post disaster; this phase is distinguished by the decreasing number of volunteers and resources available to the site of the disaster	Education for the local community members on continuing the relief efforts and creating sustainable solutions for ongoing needs
	Recovery and Reconstruction	Many years post disaster; this phase is distinguished by efforts to rebuild the community	Relief agencies remove themselves from the community and management of institutions is now the responsibility of the local people

Table 2: Participants in Resonance Rounds by Professional Roles (n = 33)

Professional Role	**Number of Participants**
Physicians (USA, Canada, Colombia, Spain)	n = 5
Nurses (Spain, USA)	n = 6
Physical Therapists (Canada, US, Ireland, Israel, Argentina, Scotland)	n = 8
Physical Therapist Assistants (USA)	n = 1
Occupational Therapist (USA)	n = 1
Pharmacist (USA)	n = 1
Prosthetists (USA, Germany)	n = 6
Peacekeepers (USA, Italy, Russia)	n = 4
Translators (Haiti)	n = 1
Total Participants in Resonance Rounds	**n = 33**

Figure 1: Overview of Our Research Approach (Based on Dissertation Work of Klappa[28])



Appendix A: Recruitment Flyer

An opportunity to share your story . . .

You are invited to participate in a study on:

The lived experiences of physical therapists who have participated in disaster relief work in Haiti. We hope to learn about your struggles & your successes.

Study involves:

An opportunity to share your story
2 short interviews
No compensation

If interested, contact:
Sue Klappa PT, PhD
(651) 335-xxxx cell
(651) 690-8131 work
Email: sgklappa@stkate.edu

Appendix B: Consent Form: Professional experiences of physical therapist in disaster relief work in Haiti

Investigator: Dr. Susan Klappa PT, PhD . . . . 651-690-xxxx or sgklappa@stkate.edu

Please read this document and ask any questions you may have before agreeing to be in the study. The researcher is Susan Klappa, who is a physical therapist and assistant professor in the Doctor of Physical Therapy program at St. Catherine University. Five Doctor of Physical Therapy students are also participating in this study in partial fulfillment of the requirements for their DPT Degree.

You are invited to be in a research study about the professional experiences of physical therapist roles in disaster relief work in Haiti. You were selected as a possible participant because of your participation as a physical therapist during Haitian relief work.

Background Information:
The goal of this project will be to learn about the professional experience of physical therapists as they participate in disaster relief work in Haiti. The results may help us raise awareness of the challenges and barriers that physical therapists face and help inform curriculum to help prepare these therapists to be successful.

The guiding research question is: What is the professional experience of physical therapists participating in disaster relief work in Haiti?

Procedures: You will be asked to do the following things during this study.
If you agree to be in this study, we would ask you to do the following: Be interviewed two times in person or via the phone/Skype. The first interview will take about 45 – 60 minutes and will be audio recorded. It will involve talking about instances during your disaster relief work experiences. We will email you a copy of the transcript and a description of your experience. A second interview will be conducted to clarify that we have indeed captured the essence of your story. This interview will last approximately 30 minutes and will also be audio recorded.

The interviews will be held at a mutually agreed upon time and location. If you are not available for a second in-person interview, then a phone or Skype interview will be arranged.

The only direct benefit of your involvement in this research study is that you will be allowed to share your story.*You will not be paid for participation in this study. You will not be reimbursed for travel expenses to the interviews.

Risks and Benefits of Being in the Study:
Participation in this study does not involve any physical risk. You might feel some discomfort calling to mind and discussing difficult experiences from your visit to Haiti. You may withdraw from the study at any time without adverse consequences. You may end the interview before completion, refuse to answer any questions, or refuse to participate in the follow-up mail or emails responses confirming we have captured your story. You may ask that data from your interview be withdrawn from the study. After reading this consent form, we will ask you to tell us

about what you know about what you will be asked to do for this study. We want to be sure you understand what you will be doing.

Confidentiality:
The records of this study will be kept private. Any personal identity such as your name, place of employment will be kept anonymous. In the report we write, we will not include any information that will make it possible to identify you. You may in fact choose a pseudonym for your name.

After the students' graduation, we hope to be able to publish the results of this project. Again, only pseudonyms for you, your family, or any employer information will be used. Only the investigators and their advisor/professor will have access to the transcripts. Tapes and notes will be maintained in a locked bag during travel. The tapes, hard copies of the transcripts will be erased, and the hard copies of the transcripts will be stored in the locked desk drawer of the investigator. Hard copies of the transcripts will be shredded after 5 years.

Voluntary Nature of the Study:
You have the ultimate right to deny participating in this study or to withdraw from this study after you have agreed to participate at any time of your choice during the study. You also have the right not to answer questions posed to you by the researcher. Your decision whether or not to participate will not affect your current or future relations with St. Catherine University. If you decide to participate, you are free to withdraw at any time without affecting those relationships.

Contacts and Questions:
You may ask any questions you have now. If you have a question at a later time, please feel free to contact Dr. Susan Klappa PT, PhD at phone number: 651-690-xxxx or email at sgklappa@stkate.edu. If you would like to talk to someone other than the researcher, please feel free to contact our program director, Dr. Cort Cieminski PT, PhD at 651-690-xxxx.

The identifying number for this project is 10-N-62. **You will be given a copy of this form to keep for your records.**

Statement of Consent:
I have read the above information. I have asked questions and have received answers. I consent to participate in the study.

Participant's
Signature:_______________________________________Date_______________

Participant's Printed Name: ____

Signature of investigator or person gaining consent: _________________________

Interviewer: ____Date___________

Appendix C: Interview Guide

Experiences of physical therapists participating in disaster relief work in Haiti

Interview I:

- Think of the time during your disaster relief work in Haiti. Tell us about that situation:
  - Why did you decide to participate in relief work in Haiti?
  - What preparation did you have?
  - Did you have similar clinical experiences in your home or previous country?
  - What significance has relief work in Haiti made to your practice of physical therapy?
  - What challenges did you experience while in Haiti?
  - What challenges did you experience after returning to your home country?
  - What barriers did you experience? Why?
  - What went well? Why?
  - What assistance did you need?
  - How has your life changed now that you are home?
  - Are there differences working with patients in Haiti versus the US?

Additional Prompts:

- I'm interested by what you just said. Can you tell me more about what you mean by "____?"
- That's a phrase I haven't heard you use yet. Can you tell me what that means?
- I want to make sure I understand you right. Can you give me an example?
- Do you recall what you meant . . . a time . . . etc?

Follow-up Interview Questions:

- What did you notice about my interpretation?
- How does my interpretation of your story fit or not fit your experience of being you in it?
- Should I change anything about my interpretation of your story? If so, what should I change?

*Questions are based on the dissertation work of Dr. Susan Klappa (2010).[28]

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