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CARE TO THE OLDER ADULTS IN A NATURAL DISASTER BY FAITH-BASED LEADERS: A STUDY BASED ON GROUNDED THEORY

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ABSTRACT

The content of the present research is extracted from a PhD dissertation (Published in ProQuest 2016) that explored how faith-based leaders cared for community-dwelling older adults in a natural disaster. The research focused on Hurricane Sandy (Superstorm Sandy) which affected Long Island, New York, in October 2012. This study is purported to answer the research question: How faith-based leaders cared for community-dwelling older adults in a natural disaster such as Hurricane Sandy? Participants were male or female faith-based leaders (ordained leaders of their religious congregation) who were involved in caring for community-dwelling older adults in Long Island, New York during Hurricane Sandy (2012). A total number of 16 faith-based leaders were interviewed. This qualitative research utilized the Grounded Theory methodology of Strauss and Corbin (1998). Faith-based leaders identified that, during and immediately after a natural disaster, contact with the community, especially older adults, and providing need-based care are of prime importance for the better recovery. These categories with its conceptual parameters are explained in this article.

KEYWORDS: Older Adults, Hurricane Sandy, Contact with the community, Need based care, Natural Disasters, Faith-based leaders.

1. INTRODUCTION

Natural disasters are sudden and unexpected which can unfurl boundless devastation, loss, and disempowerment especially in older adults. Simultaneously, they can cause human suffering, injury and death. It will adversely affect communities, hospitals, and other infrastructures. Disasters are destructive events and often require help from outside the affected community (Joseph, 2016 & Stangeland, 2010). Major disasters can lead to severe disruption in the community and it can cause trauma, and loss of life to individuals and families. Victims of a natural disaster will be in a state of shock and disbelief. Surviving a natural disaster can cause financial strain that compounds the multiple losses already suffered by victims. Families that experience natural disasters may face loss of work and lose hope for the future. In such a situation, remedial measures cannot be undertaken instantaneously. The healing process involves the unity of individuals and the community. Symptoms of depression, anxiety and post-traumatic stress disorder are common after a disaster (Bei et al., 2013; Fernando & Herbert, 2011; Hackbarth, Pavkov, Wetchler, & Flannery, 2012; Owens, Schieffler, & Khan, 2011).

Older adults are more vulnerable than younger people in a natural disaster. They have been found to react differently due to mobility limitations and relocation problems. Older adults may not leave an unsafe situation during times of distress, and they can become disempowered after a natural disaster (Al-Rousan, Rubenstein, &Wallace, 2014; Joseph 2016, 2019; Langan& Palmer, 2012). The present study investigates how faith-based leaders cared for community-dwelling older adults of Long Island, New York, during the natural disaster brought about by Hurricane Sandy in 2012.

Impact of Hurricane Sandy in the United States

Hurricane Sandy started on October 22, 2012 which moved from the Caribbean Sea through the Atlantic Ocean; it made landfall in New Jersey and on Long Island in the early morning hours of October 30, 2012. Hurricane Sandy was formed off the southern coast of Jamaica and then moved over to Cuba as a category 3 storm. It made landfall off Atlantic City, New Jersey, on October 29, 2012 with huge storm surges (Kiernan & Lenhardt, 2013). In New York City and Long Island, the storm surges were extreme (Kunz et al., 2013). Hurricane Sandy caused severe devastation in the Long Island coastal areas. Many homes were destroyed and people were displaced.In the United States (US), 147 people died as a result of the hurricane; 64 fatalities happened in New York. Energy systems were badly affected with power outages in 21 states from northern Indiana to northern Maine including densely populated cities such as New York City (Blake, Kimberlain, Berg, Cangialosi, &Beven, 2013; Kiernan &Lenhardt, 2013; Kunz et al., 2013).The estimated financial loss from the hurricane was more than \$100 billion (Kunz et al., 2013; Subaiya, Moussavi, Valasquez, &Stillman, 2014).

2. LITERATURE REVIEW

Older adults are more vulnerable in a natural disaster because of their unusual health care needs, limited financial resources, mobility limitations and need for electrical power-operated devices. Al-Rousan et al. (2014) studied, 1304 community-dwelling US adults, 50 years and older, regarding their preparedness in natural disasters. They found that two out of three lacked an emergency plan and had never participated in a disaster education program. More than one third lacked food, water, or medication needed in the event of an emergency; 15% of the sample used medical devices requiring electricity. Limited financial resources also added challenges during disasters.

In any natural disaster, older adults are the rigorously affected because of their special health care needs when compared to younger victims. Langan and Palmer (2012) studied, how Hurricane Katrina in the US affected older adults. The participants in this descriptive exploratory study were selected from churches and senior citizen centers on the Gulf Coast of Mississippi. They explored how the hurricane affected older adult survivors prior to, during, and post Katrina, in late August 2005. Their study found that older adults are vulnerable to disasters because of (1) their impaired physical mobility, (2) diminished sensory awareness and (3) chronic health conditions.

Older adults are more vulnerable than others and prone to emotional reactions during a natural disaster (Joseph, 2016, 2018, 2019; Tang et al., 2014). We may also take into consideration of the fact that population aging and associated burden of care which is a global concern. In 1950 there were 205 million people over the age of 60 in the world; the population increased to 810 million in 2012 and is projected to reach 1 billion in less than 10 years and 2 billion by 2050 (United Nation Population Fund, Help Age International, 2012). Older adults are more vulnerable in a natural disaster due to pre-existing medical conditions and mobility limitations. (Tuohy, Stephens, & Johnston, 2014).

It has been found in many studies that in a natural disaster, older adults and the elderly are more affected than younger individuals because of their frail nature, deteriorating health conditions, limited financial resources and lack of communication tools. Power

disturbances are a major concern for the older adults (Al-Rousan et al., 2014; Tang et al., 2014; Tuohy et al., 2014) Putman et al. (2012) conducted a focus group study on the role and perspectives of faith-based relief providers who responded to the needs of evacuees following Hurricane Katrina. They worked with adult and child evacuees and found that churches and religious institutions had established systems to quickly assist evacuees. The faith-based providers raised more than \$2 million in food, goods, and services during the initial phase of the hurricane and helped in networking, coordinating and consolidating relief efforts while minimizing duplication. Churches put tents up for praver and a place to talk. They provided assistance with resettlement, transportation, medical needs, employment and school. Some helped rebuild churches and daycare centers. Faith-based relief workers identified that evacuees need love, comfort, and connection with other families along with physical and spiritual support, counseling, a place to feel nurtured and safe, and a location for individual or group spiritual worship. The faith-based providers also felt that there was a connection and common ground through shared faith between faith-based providers and evacuees. They facilitated religious coping strategies such as praying and providing guidance while ensuring a sense of safety, nurture and meeting basic physical needs. For these providers, sharing their own faith helped reduce emotional trauma (Putman et al., 2012).

3. METHODOLOGY

The present study was qualitative in its approach using grounded theory methodology as described by Strauss and Corbin (1998). The research question in this study was how faith-based leaders cared for community dwelling older adults in a natural disaster such as Hurricane Sandy. Data analysis was done using the constant comparative analysis method as explained by Strauss and Corbin (1998).

4. Settings and Sample

This study was done in Long Island, New York, USA, one of the areas affected by Hurricane Sandy in 2012. The participants in this study were faith-based leaders, male or female (ordained leaders of their religious congregation) who cared for community dwelling older adults on Long Island New York, (New York State, USA) including the counties of Queens, Nassau and Suffolk. Interviews were conducted with participants from January 2015 to May 2015.

5. Recruitment

An Institutional IRB approval was obtained and purposive sampling was utilized. The names of the faithbased leaders were obtained through community leader directory by personal contacts and by word of mouth. Potential participants were contacted in person, by phone and email. Participants were obtained through snowball strategy, evolving into theoretical sampling (Creswell, 2013; Polit& Beck, 2012). Ethical considerations were maintained during recruitment of the participants and throughout the study confidentiality was maintained. Participants were male or female faith-based leaders (ordained leaders of their religious congregation, including Catholic Priests, Rabbis, Christian leaders, and Muslim Imams) who cared for community-dwelling older adults on Long Island, New York, during Hurricane Sandy in 2012. The participants were 16 faithbased leaders of congregations located in Long Island New York. They ranged in age 33 to 75 years. They identified themselves as African American (3), Hispanic (1), Caucasian (10), Asian (2). There were 15 male and 1 female participants. Their religious affiliation were, Jewish (2), Roman Catholic (3), Methodist (2), Episcopal (1), Pentecostal (4) Lutheran (1) and Muslim (2). All participants were ordained leaders of their respective congregations. Their positions were Priests, Pastors, Monsignor, Bishop, Rabbi, and Imam.

6. Data Collection and Analysis

Data analysis was done using the constant comparative analysis method as explained by Strauss and Corbin (1998). For validation of the theoretical schema, a highlevel comparative analysis was conducted by looking at each category and connecting the findings with raw data. The schema was sent to the participants to see how well the theory fits their stories. The transcribed interviews and study summary of the theory was also provided to the participants and discussed with them, who verified and confirmed the findings. No variation from the schema was identified by the participants (Strauss & Corbin, 1998).

Data from this research identified four major categories: make available to the community by the faith-based leaders (contacting the community), need-based care, rebuilding the community and universal brotherhood and sisterhood that led to the core category of "faith-blind care"(Joseph,2016). In this article the need of contacting the community especially older adults after a natural disaster and the importance of providing need-based care as identified by the faith-based leaders are explained.

RESULTS AND DISCUSSIONS

7.1, Providing Presence to the Community and Older Adults

All the faith-based leaders provided a presence to the community older adults by contacting them. Providing presence was identified by all the faith leaders as the most important factor in a natural disaster. Presence involved reaching out to their community, contacting people by phone, visiting them, providing emotional and spiritual support, and meeting physical and health-related needs as well as material needs. This category consisted of four concepts: Keeping in touch with the community, providing hope by non-abandonment, encouragement, and empowerment, creating inter-community and intracommunity connections and providing a safety shelter.

Keeping in Touch with the Community

Keeping in touch with the community and continue contact with older adults was considered one of the most important aspects of caring by all the faith-based leaders who participated in the study. Since telephones were not working, the faith leaders had to go door-to- door in the community to find out if their congregants were safe. The older adults and elderly were checked on and given consideration. Traditional special communication methods could not be relied upon in Hurricane Sandy because there was no electricity and cell phones did not work. Contacting people on the church registry, going to each household, checking on the older adults with available contacts and utilizing young adults to contact older people to check on their health status were the strategies used by faith-based leaders during the disaster.

Reverend Samuel went door to door to check on his congregant. He used his laptop to send applications to Federal Emergency Management Agency (FEMA) so that reconstruction would not be delayed. He checked on his elderly parishioners many times a day. Providing safety was most important since many in his community were older adults. He contacted each and every one in his community. He stated thus:

I have an aging congregation to begin with...so many of my folks are older. So the first thing that I did was just to be present for them, to travel to their homes to make sure they are okay, to make sure they had access to food. I just basically did a round through the community a few times a day ... In a disaster, the first step was getting contact (with the affected); afterwards, it was keeping in touch with them (Reverend Samuel).

For Rabbi G, knowing about his community was of prime importance. The most important thing he did was to contact every member of the congregation. He and his Associate Rabbi phoned as many members as they could reach. He provided pastoral encouragement, spiritual support, and presence during the disaster. He said:

We contacted people, we called them up and checked in, we did a check in basically that was one thing that we did ... how we could help them, just giving them pastoral encouragement ... in a very difficult time for them...they found it really comforting to know that we were reaching out to them in that way (Rabbi G).

According to Monsignor Ignatius, providing presence was very important- yet very difficult. His community had almost 1,500 households and more than 4,000 people. He stated the following:

The chief of the fire department and I would go around trying to visit as many people as possible. From the first response time of Hurricane Sandy.... We visited the nearby places and houses to make sure that there was not anybody trapped.... Presence in the community is the important thing and people can sense that (Monsignor Ignatius).

Together with the fire and sanitation departments, Monsignor Joe tried to identify places with a significant number of elderlies. Despite warnings, many did not evacuate. He and his team tried to contact people and evacuate them. They were not only contacting the people but rescuing them and bringing them to the Church and providing them shelter. He points out the following:

The fire department was evacuating people by rafts and rowboats....we had the food pantry so we could, at least, give people something to eat. We had water and gave them something to drink (Monsignor Joe).

Pastor D has served the congregation for many years. Her community was affected by Hurricane Sandy. She opened the Church door on the day of the storm so that anyone could come to her Church if they were not able to evacuate on time. For Pastor D, contacting her congregation during Hurricane Sandy was the most important task at hand. She stated: "In the beginning with all the phones down there was just no way to contact each other except going door to door, checking on your neighbor" (Pastor D).

Reverend Julian served his congregation for many years. His church and community were completely affected by the hurricane and the church building was almost destroyed. His statement is worthy to be noted:

"When the hurricane hit, my job was to check and see if everybody was all right. I connected with them and stayed in contact with them and the location in which they lived.... We tried to contact each of those that we could help and could reach out" (Reverend Julian).

Reverend John served his congregation for eight years. His main concern was the safety of all older members of the congregation who were to be evacuated since he lived in the area worst hit by the hurricane. He stated:

My church community has, I'd say 75 percent older members, 50 and older. Our first concern here was just ensuring that our senior-most members, our most elderly members were out of town... (Reverend John).

Pastor C's community was completely affected by Hurricane Sandy.... He stated: "As a pastor, I just connected with people and families to find out if everybody was okay and in good condition. And then from there we moved to more people with their families."

Father Anthony had about 4,000 families in his parish, and many of them were affected by the hurricane. Many of the Church's Eucharistic ministers were already in contact with older adults of the parish throughout the years. The parish was able to contact older adults with the help of volunteers [and Eucharistic ministers]. According to him, ...and as people came, we told them... we needed help and we were really blessed by the number of people who came to help. Those who had some means of transportation... and knew of older people who might not have gotten out, and drove there with supplies in the car from our pantry to make sure that people were okay. (Father Anthony).

Rabbi 10 had about 3,500 members in his congregation, where he served for many years. He lived in an area hit hard by the hurricane. He continued to conduct prayer services and stated thus:

So the first thing was just make sure everybody was safe... the first few days was really just making sure that everybody was safe, making sure everybody had food to eat, clothing, shelter and working with all the authorities and all the other synagogues and churches and all the other groups to facilitate and make sure everybody was okay (Rabbi 10).

Providing Hope by Non-abandonment, Encouragement, and Empowerment

Providing hope to the older adults and community by faith-based leaders was one of the major perceptions that evolved from the data. The faith leaders provided constant contact, care and empowered individuals and families by communicating with them. After making sure that all the members of the congregation, older adults, the elderly and the community itself were safe, the faith leaders became instrumental in providing hope and encouragement, especially for the elderly. They followed the model of non-abandonment since many of the elderly felt disempowered. They tried to meet basic physical needs: food, shelter, and clothing. Providing hope involved reassuring the individuals and community that their damaged properties can be rebuilt. Helping them to rebuild their houses and helping them to fill out legal papers bestowed them hope that things could get better for them.

According to Reverend Samuel, providing hope was very important. Several of his congregational members' houses were damaged; so the Church organized work teams to go into their houses and strip out the floors. They "gutted and sanitized the houses so that the development of mold could be avoided." By helping to reduce the cost of rebuilding and construction, their valuable services also gave them hope.

Monsignor Joe stated that many of the elderly were surviving with fixed incomes and all their possessions were wiped out. They were psychologically in shock. To provide hope and encouragement was important for their recovery which required a multifaceted approach. After people were stabilized, faith leaders assessed what their needs were. According to him, the assurance that the parish was there to assist them and help them was important. And of course when I say the parish and people, you didn't have to be Catholic ... anyone that lived in the area, again, this goes into that whole sense of community cooperation and community spirit (Monsignor Joe). Pastor Caring had to reassure his community, provide hope, build their confidence, and build their faith. Building faith was his most important task. He stated: "for the senior citizens, just knowing who I am and that I'm there gives them that confidence. It just reassures them" (Pastor Caring).

According to Monsignor Ignatius, the Open-Door policy of the Church provided hope and encouragement to many people who gave up their hope. For Rabbi 10, nonabandonment of the congregation, older adults, and the community itself was the priority. According to Fr. Anthony:

A lot of the younger people came to collect stuff for the older people; luckily some who had two-story homes had something left. The first floors were all gone. And we were able to supply them with food and clothing immediately.... (Father Anthony).

Reverend John provided hope and encouragement to the community by continuing Church services. He stated thus: We kept the church open.... It made a big difference that we continued to worship on Sundays. The doors were open.... I have heard this from more than one plenty of folks and just to see some activity here made a big difference. It created a sense of hope and possibility. Even though it was largely symbolic, symbols are very powerful (Reverend John).

For Rabbi Machi, providing emotional support, hope, and encouragement was his priority. His words are put thus: At that very moment the only thing that we could actually offer as help were two things. Like everything else in life, material things ... and moral support.... (Rabbi Machi).

Creating Inter-community and Intra-community Connections

One of the concepts identified in the category of providing presence to the community is the importance of intercommunity and intracommunity connections in a natural disaster. A single faith community or government agency cannot function effectively during a disaster as community health is a major task, especially for the oer adults and vulnerable populations. From the data obtained in this research study, faith-based leaders worked hand in hand with fire departments, sanitation departments, the Red Cross, FEMA, and volunteer agencies to evacuate disaster victims and move them to safe locations thereby provide basic necessities in all phases of the disaster.

Monsignor Joe met with sanitation and fire department officials and made a preparedness plan and evaluated potential dangers. This helped them identify where elders were living and helped them evacuate older adults and the elderly who refused to leave, despite warning to do so before the storm arrived. He stated:

"It was a whole community effort. And the important thing was that the parish, the fire department, the sanitation department were all on the same page. We all were working together" (Monsignor Joe).

Safety shelter

The concept of safety shelter in this study is defined as providing a safe environment to disaster-affected victims in their place of worship, home, temporary adopted home, or shelter. All faith-based leaders agreed on the need to provide a safe environment for all, irrespective of where they were sheltered. After getting in touch with older adults and the community members, the faith-based leaders during Hurricane Sandy concentrated on providing safe shelters for them. Synagogues, Churches, Mosques, and community members' houses were utilized for providing a safe environment.

According to Reverend Samuel, his work was intended to ensure that people were safe, and their lives were not in danger. If there was no heat and no electricity in their homes, he checked that the elderly were not suffering from hypothermia and tried to get in contact with family members. He stated: "Of course there was no heat; there was no electricity so it was very uncomfortable. And so a big part of it was just making sure they were safe and that their lives were not in danger." Monsignor Ignatius told how he opened his Church doors right away so that people could come in: "Well, people started, gathering, and we were able to have the church open. Rabbi G said that, the synagogue was used as a warming center for victims of the hurricane: "Here in the building, what we did was we were able to ... set up a warming center..."

Father Anthony explained how his Church became a safe place for many victims of Hurricane Sandy:

People expect to be treated with care... So they came here expecting and hoping that we would help them and we did.... People initially came because they expect the church to be there for them and we were (Father Anthony).

Bishop Jake stated, 'In the case of Hurricane Sandy we provided ... food and some shelter, a place for them to come and reside until they could find a location." Imam 16 revealed thus: "We did open the mosque for them [Hurricane Sandy victims], anyone who came with any need, we opened the doors for them". During Hurricane Sandy Imam Maj stated that "the mosque was transformed into a sort of camp... and they allowed people to come and stay inside the mosque."

7.2 Need-based Care

One of the most important categories identified from the data was that faith-based leaders provided need-based care to older adults and the community. They reached out to older adults, met their physical, psychological, and emotional needs, and provided social and legal help. The category of need-based care included seeking and reaching out to the community, especially older adults, and the vulnerable, meeting the physical needs such as food, clothing, and shelter, meeting psychological and emotional needs, and providing social and legal help. All faith-based leaders who participated in this study articulated that providing need-based care is an essential component in a natural disaster. Each faith-based leader has provided an opportunity for all members to identify what their needs were and what they could offer. They used a faith-blind approach to offer fair treatment to all.

Meeting the psychological needs of individuals during a disaster and after the recovery period was given prime importance by the faith-based leaders. Once individuals were safe, faith leaders tried to meet the basic physical needs of disaster victims. People with worsening health conditions were moved to hospitals and people with worsening psychological conditions were referred for counseling. People were moved to a safer shelter or individuals' homes. Faith institutions were opened as holding areas. Hot food and clothing were provided to individuals in need.

Reach out to Provide a Support System

Seeking and reaching out was an important notion identified from the data. All the faith leaders cared for older adults and the community, reaching out to them so as to provide a support system. Need-based care was guided by the principle of fair treatment to all irrespective of faith or religious orientation. Thus, Pastor D stated that "We opened up a resource center here ... we were just checking in on each other all the time... making sure that people were cared for" (Pastor D).

Monsignor Ignatius made sure that everyone was safe and then looked at what their individual needs were. He told how the center and parking lot were used for the distribution of food, warm clothes, and gasoline for running generators. According to Reverend Samuel, the disaster brought out the best in people. He stated: "They came and people brought clothing, people brought in many cases. There was more than we could actually cope with." Rabbi G contacted people to make sure they had food and said, "We had our house opened, we let the word out that, that anyone who needed a place to come, we didn't have electricity, but I have a gas stove. So we had food, hot food up all the time." Pastor Caring became a facilitator for his community, which suffered primarily from physical damage to homes. His priority in reaching out was to help people get their personal documents together and do demolition work. Rabbi 10 made sure that people were responding to safety initiatives and provided information about the whereabouts of his congregants to distant relatives. He stated:

"The older people were frailer and they weren't able to handle the situation as well as younger people so we had to provide food and clothing and talk with them and find a place for them to stay temporarily...." (Rabbi 10).

Pastor C felt that it was very difficult for the elderly to cope with the natural disaster. He had to physically pull trapped people from their homes. For the older people it was very hard because ... they are not able to move and they live in conditions ... sometimes by themselves and we had to pull out older people ...[trapped] (Pastor C). Reverend John described his efforts to contact people:

Some of them were in high-rise buildings but they suffered from different kinds of disabilities or impairments, couldn't easily get out of the buildings ... many shut-ins. ...12 feet of water coming down those low-lying streets So we went down there... and made a good effort and a mostly successful effort [at contacting people] ... in locating and contacting the various members and parishioners who had stayed here in town during the storm (Reverend John).

Meeting Physical Needs

The data indicated that need-based care was the goal of the whole recovery process. The faith-based leaders felt that meeting physical needs was one of the most important things in the disaster especially for older adults.

Monsignor Joe told how he worked to bring people into the church. He stated that ...'we had ... people coming in all the time, if they needed food clothing, cleaning supplies, other toiletries, things like that.... So, the first thing you had to deal with was the necessities: the basic needs of existence for people (Monsignor Joe). In the words of Bishop Jake, "In the case of Hurricane Sandy we provided ... food and ... shelter, a place for them ... to come and reside until they find a location" [to reside]. According to Imam Maj, "we had a lot of groceries that were purchased and issued to the people. Many used the premises of the mosque during the daytime and returned at night to their relatives and families." Imam 16 stated that "our community helped other communities. We got together, Christian, Jewish and any other faith, without looking at what their religion is. A neighbor is a neighbor.... We may not know each other-still we help."

Meeting Psychological Needs of the Community

In any natural disaster, the psychological equilibrium of the victims is lost. People affected by Hurricane Sandy also suffered psychological shock; they felt their lives were shattered; they suffered from grief and depression and their possessions were vanished. Many were sent to professionals for counseling, to stabilize them. Monsignor Joe described their shock in the following way:

Psychologically, many of them were in shock ... their whole world, their whole life was shattered. Their

possessions that they had for 60, 70, 80 years were gone ... their memories were gone ... so you were dealing with people who were sometimes ... just mere shells of who they were. I mean, they were just sitting in front of you but they just stared off blankly because the amount of devastation was so great (Monsignor Joe).

The faith leaders were able to provide hope by their presence, by helping to rebuild people's homes and providing need-based care. Work teams around the country came to help the community, especially the older people, to get their homes rebuilt. Monsignor Ignatius felt that many of the elderly ended up being very disoriented and developed dementia after the storm. He stated thus: "Because there were some people who were psychologically so struck by the storm that they really gave up. And for younger people, people in better physical health, this was something they could rebound from, for a number of older people it wasn't."

Making available of their presence, psychological support, hope, and grief counseling, the faith-based leaders went around and visited people. Muslim, Hindu, Christian, and Jewish faith leaders went to five different parts of Long Island and held prayer services, healing services, and interfaith prayer services so that people could come, pray, and reflect together.

Reverend Julian found that the older people felt more depressed due to the hurricane. According to him, 'older people seemed to take it a little rougher than the other ones, because most of them were quite sickly and disabled and because of the storm, no lights and their condition with no heat ... they took it a little harder than the younger ones.... Reverend John expressed that his presence in the church provided emotional support: "Because there were some folks even here on the street... knew I was here. And it just made a psychological difference; it helped to make them feel safer to know that, to see me rattling around outside with my flashlight looking."

Social and Legal Help

After Hurricane Sandy many homeowners were completely devastated. Many of their houses had water in the basement or even in the first floor which required complete or partial demolition and rebuilding were essential. This was a major problem for the communitydwelling older adults who couldn't relocate easily to another town. Since they were of retirement age and living on a fixed income their houses represented valuable memories and possessions. It was very difficult for them to cope with the situation and deal with insurance companies and FEMA to get funds for repairs. Many of the older adults and elderly experienced anxiety and disequilibrium. The faith-based leaders organized work teams from the community and other states, helping older adults rebuild their homes and filing for legal paperwork with FEMA and insurance companies.

Rev. Samuel said that he went door to door to his aging congregation.

Pastor Caring became a facilitator for older adults and the elderly, stating that many members were taken advantage by demolition companies. Many didn't know the resources available to them. Insurance companies often sent agents who were unfamiliar with the area and many seniors did not have the right papers. According to him, "a lot of times they wanted me there just to talk with the adjusters because they didn't have confidence in the adjusters as senior citizens." Monsignor Joe's large congregation, together with community workers, the Red Cross, and FEMA, made a major effort to rebuild the community. With 4,000 families and 12,000 people. filing for claims was challenging. They set up a processing center to assist older adults, the elderly and the community with filing claims. He stated that people really never realized what their insurance didn't cover. We ended up really trying to help people, especially, getting grant money (Monsignor Joe).

Based on data obtained from the interviews it was recognized that need-based care was given to the community and older adults. Physical, psychological, spiritual, emotional, social and legal needs were met by following the principle of "seek and reach out." Together with need-based care, the faith leaders were instrumental in rebuilding the community. Special attention was given to older adults. Rebuilding physical structures was considered one of the most difficult tasks.

8. DISCUSSIONS

The number of older adults in the population and the care burden associated with it is a major concern. Physical and health changes in older adults can have an impact on how they cope in a natural disaster. Pre-existing medical conditions and reduced mobility can place older adults in vulnerable situations (Tuohy, Stephens, & Johnston, 2014). Older adults may be at risk for depression (Tang etal, 2014; Cherry et al, 2015) post-traumatic stress disorder (Bei et al.;2013) and myocardial infarction (Peters et al, 2014). All faith-based leaders in the Hurricane Sandy study agreed that preexisting medical conditions and mobility limitations are of major concerns for community dwelling older adults. Many of the older adults developed depression and needed counselling and treatment. Many older adults could not evacuate their homes during Hurricane Sandy (Joseph, 2016). It was noted that in a natural disaster, older adults and the elderly are more affected than younger individuals because of their frail nature, deteriorating health conditions, limited financial resources, and lack of communication tools. Power disturbances are a major concern for the older adults (Al-Rousan et al., 2014; Tang et al., 2014; Tuohy et al., 2014). In Hurricane Sandy disaster, power outages were for more than 2 weeks. It affected the elderly and people with disabilities, living in high rise buildings. As elevators were not working, it caused serious mobility problems.

(Joseph 2016, 2019). Faith-based leaders and the faith community are an integral part of a given society. Community members, especially older adults and the elderly, rely on faith leaders and faith institutions for coping and healing in a natural disaster (Owens et al., 2011; Stratta et al., 2013). Some faith-based institutions offer faith community nursing, health ministry teams, and faith-based clinics (Chase-Ziolek, 2015). Faith-based organizations are active in disasters. This may include creating disaster plans, conducting training, collecting disaster supplies, providing disaster relief, and taking part in lifesaving activities such as search and rescue, triage and basic life support (Stajura et al., 2012). There is a complex relationship between communities and community-based religious institutions. A collaborative approach involving religious institutions with state and private sector agencies involved in natural disaster management will contribute to risk reduction (Cheema et al., 2014) Protective social support had a positive effect on mental health outcomes (Cherry et al, 2015). Atkinson (2014), who studied the role of faith-based and nonprofit organizations in the 2011 flood in North Dakota indicated that these groups had an impressive impact on disaster response and recovery. He emphasized that faith-based and nonprofit organizations should be part of disaster preparation, not merely as an afterthought after the disaster. The Hurricane Sandy study data supports these previous findings. All faithbased leaders in this Hurricane Sandy study agreed upon the need for a disaster preparedness plan; but none had an emergency plan in place at the time of Hurricane Sandy. Many of the faith-based leaders in this study stated that they have some type of disaster preparedness plan in place currently. One of the faith leaders, with a congregation of more than 12,000 members reported having information in a database that can be easily accessed in case of a disaster. Many of the participants in this research study agreed that they have a registry for parish and congregation members but no separate registry of older adults or those with disabilities. They acknowledged the need for faith community nursing in every faith organization.

9. Policy Implications

Population aging is a major concern in the 21st century. The increasing number of older adults has far-reaching implications for society proposing social, economic, and cultural challenges to individuals, families and the global community. According to the U.S. Census Bureau, the 2014 population over age 65 was more than 46 million with more than 83 million between the ages of 45 and 64. Therefore, local and state governments need to address the vulnerabilities of older adults in a natural disaster. Having a registry of older adults in the community, either with local governments or through faith-based organizations, can be the primary intervention (pre-disaster disaster planning) in management

10. Practice Implications

Pre-disaster planning with identification of vulnerable population, older adults and special need population are crucial for effective disaster preparedness plan. It can be done through faith-based institutions, government and nongovernmental organizations. After identifying this population, a disaster plan can be made for each individual or a family so that they will be ready in case an evacuation is mandatory. Faith community nurses and Public health nurses can play a vital role in disaster preparedness. If faith institutions can recruit (volunteer) registered nurses to work as faith community nurses, it will benefit the congregation as well as the community in case of a natural disaster. Community-dwelling older adults and people with special needs can be registered with the congregations and faith community nurses can coordinate care for vulnerable population and collaborate with other health care workers and agencies in any natural disaster.

11. Strength of the Study

The recollections of the faith leaders were very clear and all the data they have provided pointed toward the common goal of providing faith-blind care to the community and to older adults. All faith leaders provided presence to their congregants and to the community. The faith leaders cared for the whole community with special attention to older adults. Participants were from varied faith orientations, which added to credibility of the data during analysis. Data saturation occurred when ten interviews were completed, and six more interviews were conducted for inclusion and delineation criteria. The study was about community-dwelling older adults, however, the rich descriptions of the data obtained, provided a basis for how faith leaders cared not only for older adults but also for the entire community.

12. Limitations

This study was done two years after the Hurricane Sandy. Personal interviews were used to develop the data. Descriptions were subjective in nature as they were based on experiences as described by the participants. A large-scale study with faith-based leaders from diverse cultural and socio-economic background could be done in future. This study was done among the faith-based leaders from Long Island, New York. A large study, that includes, most of the geographical areas affected by Hurricane Sandy, would provide more data and could give additional perspectives on how to care for older adults in a natural disaster.

13. CONCLUSION

Disasters can happen at any time. Previous studies identified that older adults are more vulnerable than younger population in a natural disaster. It is important to have a disaster management plan in the community with more emphasis on involvement of faith-based leaders. From the Hurricane Sandy study, it was clear that many of the Community dwelling older adults will go to their faith-based leaders and faith-based institutions as the primary source for rescue and shelter. An older adult registry with special need requirement is an important part in primary (pre-disaster) plan, to reduce causalities and for early recovery. Contacting the community especially older adults, keeping in touch with them and providing need-based care are essential in a natural disaster management.

REFERENCES

- Al-Rousan, T. M., Rubenstein, L. M., & Wallace, R. B. Preparedness for natural disasters among older US adults: A nationwide survey. *American Journal* of *Public Health*, 2014; *104*(3): 506-511. doi: 10.2105 /AJPH.2013.301559.
- Annear, M., Keeling, S., & Wilkinson, T. Participatory and evidence-based recommendations for urban redevelopment following natural disasters: Older adults as policy advisers. *Australasian Journal on Ageing*, 2014; *33*(1): 43-49. doi:10.1111 /ajag. 12053.
- 3. Atkinson, C. The 2011 flood in Minot (North Dakota, USA) and the role of faith-based and nonprofit groups in hazard event response and recovery. *International Journal of Disaster Risk Reduction*, 2014; *8*: 166-176.
- Bei, B., Bryant, C., Gilson, K., Koh, J., Gibson, P., Komiti, A.,... Judd, F. A prospective study of the impact of floods on the mental and physical health of older adults. *Aging & Mental Health*, 2013; *17*(8): 992-1002.
- Blake, E. S., Kimberlain,T. D., Berg, R.J., Cangialosi, J. P., & Beven, J. L. *Tropical cyclone report: Hurricane Sandy. Retrieved from* http://www.nhc.noaa.gov/data/tcr/AL182012_Sandy .pdf, 2013.
- Chase-Ziolek, M. Reclaiming the church's role in promoting health. *Journal of Christian Nursing*, 2015; 32(2): 100-107.
- Cheema, A. R., Scheyvens, R., Glavovic, B., & Imran, M. Unnoticed but important: Revealing the hidden contribution of community-based religious institution of the mosque in disasters. *Natural Hazards*, 2014; *71*(3): 2207-2229. doi:10.1007/s 11069-013-1008-0.
- Cherry, K., Sampson, L., Nezat, P., Cacamo, A., Marks, L., & Galea, S. Long-term psychological outcomes in older adults after disaster: Relationships to religiosity and social support. *Aging & Mental Health*, 2015; 19(5): 430-443.
- 9. Creswell, J. W. Qualitative inquiry and research design: Choosing among five approaches. Los Angeles, CA: Sage, 2013.
- 10. Fernando, D., & Hebert, B. Resiliency and recovery: Lessons from the Asian Tsunami and Hurricane Katrina. *Journal of Multicultural Counseling and Development*, 2011; 29(1): 2-13.
- 11. Hackbarth, M., Pavkov, T., Wetchler, J., & Flannery, M. Natural disasters: An assessment of family resiliency following Hurricane Katrina.

Journal of Marital and Family Therapy, 2012; 38(2): 340-51.

- Jia, Z., Tian, W., Liu, W., Cao, Y., Yan, J., & Shun, Z. Are the elderly more vulnerable to psychological impact of natural disaster? A population-based survey of adult survivors of the 2008 Sichuan earthquake. *BMC Public Health*, 2010; *10*: 172.
- 13. Joseph, M. (2019). Disempowerment of older adults in a natural disaster: A Study of Hurricane Sandy. *WORLD JOURNAL OF ADVANCE HEALTHCARE RESEARCH*, 2012; 3(1): 20-26.
- 14. Joseph. M Faith blind care: How faith- based leaders cared for community dwelling older adults in a natural disaster. *WORLD JOURNAL OF ADVANCE HEALTHCARE RESEARCH*, 2018; 2(5): 154-161. Retrieved September 13, 2018.
- 15. Joseph, M. Faith-based leaders caring for older adults in a natural disaster: A study of Hurricane Sandy (Doctoral dissertation, Molloy College, Published in ProQuest, 2016.
- Kiernan, M. K., & Lenhardt, M. F. What's in a name storm? What Sandy has taught us about flood, storm surge, and FEMA flood zones. *FDCC Quarterly*, 2013; 63(4): 318.
- Kunz, M. M., Mühr, B. B., Kunz-Plapp, T. T., Daniell, J. E., Khazai, B. B., Wenzel, F. F., & ... Zschau, J. J. Investigation of superstorm Sandy 2012 in a multi-disciplinary approach. *Natural Hazards & Earth System Sciences*, 2013; *13*(10): 2579-2598. doi:10.5194/nhess-13-2579-2013.
- Langan, J. C., & Palmer, J. Listening to and learning from older adult Hurricane Katrina survivors. *Public Health Nursing*, 2012; 29(2): 126-135.
- Owens, D. P., Jr., Schieffler, D. A., & Kahn, M. J. Healing and hope in the midst of devastation: Reflections on Katrina in the aftermath of September 11. *Journal of Religion and Health*, 2011; 50(3): 477-480.
- Peters, M., Moscona, J., Katz, M., Deandrade, K., Quevedo, H., Tiwari, S., Irimpen, A. Natural disasters and myocardial infarction: The six years after Hurricane Katrina. *Mayo Clinic Proceedings*, 2014; 89(4): 472-477. doi: 10.1016/j.mayocp. 2013.12.013.
- 21. Polit, D., & Beck, C. Nursing research: Generating and assessing evidence for nursing practice (9th ed.). Philadelphia, PA: Lippincott Williams & Wilkins, 2012.
- Putman, K. M., Blair, R., Roberts, R., Ellington, J. F., Foy, D. W., Houston, J., & Pfefferbaum, B. Perspectives of faith-based relief providers on responding to the needs of evacuees following Hurricane Katrina. *Traumatology*, 2012; *18*(4): 56-64. doi:10.1177/1534765612438945.
- 23. Stajura, M., Glik, D., Eisenman, D., Prelip, M., Martel, A., & Sammartinova, J. Perspectives of community- and faith-based organizations about partnering with local health departments for disasters. *International Journal of Environmental*

Research and Public Health, 2012; *9*(7): 2293-2311. doi:10.3390/ijerph9072293.

- 24. Stratta, P., Capanna, C., Riccardi, I., Perugi, G., Toni, C., Dell'Osso, L., & Rossi, A. Spirituality and religiosity in the aftermath of a natural catastrophe in Italy. *Journal Of Religion & Health*, 2013; 52(3): 1029-1037. doi:10.1007/s10943-012-9591-z.
- Strauss, A., & Corbin, J. Basics of qualitative research: Techniques and procedures for developing (2nd ed.). Thousand Oaks, CA: Sage, 1998.
- 26. Subaiya, S., Moussavi, C., Velasquez, A., & Stillman, J. A rapid needs assessment of the Rockaway Peninsula in New York City after Hurricane Sandy and the relationship of socioeconomic status to recovery. *American Journal* of Public Health, 2014; 104(4): 632-638. doi:10.2105/AJPH.2013.301668.
- Tang, B., Liu, X., Liu, Y., Xue, C., & Zhang, L. A meta-analysis of risk factors for depression in adults and children after natural disasters. *BMC Public Health*, 2014; *14*: 623. doi:10.1186/1471-2458-14-623.
- Tuohy, R., Stephens, C., & Johnston, D. Qualitative research can improve understandings about disaster preparedness for independent older adults in the community. *Disaster Prevention and Management*, 2014; 23(3): 296-308. doi: 10.1108/DPM-01-2013-0006.
- United Nations Population Fund. Ageing in the twenty-first century: A celebration and a challenge. Retrieved from <u>https://www.unfpa.org/sites</u> /default/files/pub-pdf/Ageing%20report.pdf, 2012.