

Vulnerable Populations in an American Red Cross Shelter After Hurricane Katrina

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TOPIC. *During Katrina, people suddenly encountered multiple losses, including homes, finances, medications, and death of loved ones.*

The Model of Vulnerable Populations illustrates how reduced resources placed individuals at greater risk for harm.

PURPOSE. *Using vignettes and the Model of Vulnerable Populations, a psychiatric nurse discusses her experiences as an American Red Cross psychiatric/mental health nurse volunteer after the Katrina disaster at a Mississippi shelter.*

CONCLUSIONS. *The role of the mental health nurse volunteer was demonstrated by assessment and interventions of advocacy, referral, crisis intervention, and general support and education.*

PRACTICE IMPLICATIONS. *Using the Model of Vulnerable Populations, psychiatric nurses can improve mental health assessment and services by counseling, advocacy, triage, and teaching disease prevention strategies such as hand washing.*

Search terms: *Disaster response, Katrina, psychiatric nursing, vulnerable populations*

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I had never previously volunteered for the American Red Cross (ARC), yet I was processed, provided a brief orientation to the Red Cross and disasters, and assigned within a matter of days. I was sent to an ARC shelter in Jackson, MI, as a psychiatric/mental health nurse counselor. I used a conceptual framework, the Model of Vulnerable Populations to help me understand my own experiences and those of the people I encountered. This model can help nurses develop a broader scope of their nursing practice by providing a conceptual means to consider the context in which their patients live and work.

Vulnerable Populations Model

The Vulnerable Populations Model, formulated by Flaskerud and Winslow (1998) provides an organized way to examine problems encountered by people whose lives were disrupted by Katrina and healthcare workers' responses who helped with those problems. Martone (in Thelander, 2003) asks us to consider the community as our patient, not the individual, and to use remedies that emerge from public health interventions even when dealing with mental health issues. Health professions need to ensure that vulnerable groups receive care in effective and acceptable ways, so examining the health needs of vulnerable groups is important and urgent (American Nurses' Association, 1985; U.S. Department of Health and Human Services, 1990). Although vulnerable individuals are at greater risk for harm, this risk may be neither voluntary nor under the person's control (Saunders & Valente, 1992). Stevens, Hall, and Meleis (1992) pointed out that the current healthcare system has placed the source of vulnerability within the individual. Placing core vulnerability within the individual can result in individual blame, while absolving society, government, and industry

of responsibility for conditions that give rise to vulnerability (Stevens et al.). Traditional psychiatric/mental health nursing also looks to individuals, not the community, for vulnerability. Some theorists and clinicians have associated vulnerability with painful events, such as the sudden death of a loved one.

Vulnerable populations are social groups with limited resources and consequent high relative risk for morbidity and premature mortality, and reduced quality of life (Flaskerud, 1999; Flaskerud & Winslow, 1998). This is a population-based model, rather than the traditional individualistic approach of psychiatric/mental health nursing. Consequently, health problems cannot be considered apart from the community forces that impact the individual (Saunders, 1999). A brief description of the Model of Vulnerable Populations was derived from the more comprehensive presentation in Flaskerud and Winslow: simply, the community's responsibility to the community is to supply conditions required for healthy living and reduction of disease vulnerability.

This model proposes that resource availability and relative risk and health status are related: (a) Lack of resources increases relative risk; (b) Increased exposure to risk decreases health status via increased morbidity and mortality in the population group; and (c) Health status and resource availability are linked through the effects that morbidity and mortality may have in a community by draining resource availability. At the ARC shelter, community resources were brought to shelter residents by the American Red Cross, local church groups, and government organizations, such as the Federal Emergency Management Agency (FEMA). Local healthcare staff conducted health clinics.

Nursing Practice and the Model of Vulnerable Populations

Having a population-focused model to conceptualize health problems has implications for clinical practice that draw on community health perspectives. Assessment and interventions of the individual and family

health continue to be important; community assessment and intervention strategies are also needed. For example, examining availability of resources and relative risk, the community resources and the person's access to those resources must be considered. Primary, secondary, and tertiary prevention strategies should be targeted at the link between risk factors and social and environmental resources. In a shelter, people are brought together in settings that offer little privacy. Residents experienced limited access to shared personal hygiene resources and toilets, and they ate in communal dining areas, so primary prevention education about hand-washing practices was pivotal to prevent communicable diseases. For example, signs needed to be posted in the bathrooms or at food distribution areas to remind people of the importance of hand washing.

In Katrina, people suddenly encountered multiple losses: of their homes, sources of income, sources of personal or business transportation, important documents that connected them with their resources, prescription medications, separation from family and loved ones, and sometimes death of a relative. Additionally, people arrived at shelters hopeful of help and safety; instead, many found rampant thievery and help that required long lines and frustrating bureaucracy. During the first 72 hrs of the shelter's availability, several thousand people were housed there. People with available resources (cash, credit, transportation, adequate insurance, and family) quickly accessed their resources and moved out of the ARC shelter.

Decreased Resources

While working with shelter residents, I encountered situations that needed more resources than were available in the shelter to help people with this immediate crisis and to rebuild their lives. Usually, the need for shelter services lasts only a few days. In this disaster, the losses were so profound and the numbers of persons affected so great that the demands on community and government resources were beyond their expectations and capacity. Nearly 9 months after Katrina,

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thousands of Americans made homeless by Katrina are still without permanent housing and jobs, and were notified by FEMA that they were no longer eligible for free housing (Dewan, 2006). Although some people had flood or disaster insurance on their homes, many did not, and were dependent on public community resources. Sometimes people believed they were adequately insured only to learn the insurance company determined that their damage was from a source not included in their policy—damage from flood, for example, when their policy was only for the hurricane wind damage. The ARC Shelters had resources to supply first aid, medical monitoring, limited medical care, and sometimes replacement of eyeglasses. Several case examples will illustrate levels of vulnerability among shelter residents that were related to the nature and number of resources they had available to them.

Katrina Shelter Residents as Members of a Vulnerable Group

Katrina traumatized large numbers of people with multiple losses from subsequent flooding, unstable living situations, relocation, hunger and thirst, exposure to dangerous behavior in shelters, and lack of access to their usual medications (Smoyak, 2005). Some waited days to be evacuated from their homes or from various public sites; community resources were simply inadequate to respond efficiently and within a reasonable time. Public officials responsible for public safety were caught up in personal losses, and their conflicting demands between family and public reduced their protective presence (safety measure, such as adequate police) in public places and shelters. Evacuation routes were overwhelmed by the volume of traffic. The vast numbers of people that needed public transportation in order to evacuate had not been foreseen by disaster planning personnel. These factors combined to increase vulnerability: people suffered huge personal losses and they turned to communities with inadequate resources to assist effectively. Some shelter residents were more efficient in using their available, but limited resources

than were other residents. The story of Annie illustrates vulnerability from a crisis of illness, housing, income loss, and stigma.

Annie came to Jackson a few days before Katrina and brought with her everything that she owned. Annie came to the ARC shelter after her friend's house, where she was staying, was destroyed by a fallen tree during the hurricane. Annie was lucky that she had identity papers to show who she was, but she had almost no money and no credit cards. She salvaged a few articles of clothing but had run out of her prescription medications. She had not had time to make arrangements for her medical care, refills, or financial assistance. Annie used the ARC medical clinic to receive medications for her symptoms. Her one major possession that she used to make her living, a sewing machine, was damaged when the tree fell. She had severe shortness of breath with exertion, and difficulty walking across the large parking lot to apply for financial assistance. Annie had no family to help her. What Annie wanted was an apartment and a few resources to help her get started again. She had a wonderful positive attitude and knew she could make it if she had a sewing machine to make the clothes and articles that she designed and sold. A volunteer filling out paper, work on Annie had labeled her homeless, which made her ineligible for housing assistance provided by one of the agencies at the shelter.

Lack of Resources Increases Relative Risk

When people are first rescued and provided temporary shelter, their common initial reaction is relief and happiness. However, frustration sets in once they reflect on the uncertainties in their situation (Smoyak, 2005). Families and communities differ in their preparedness for disasters, and problems may emerge that are beyond the scope of reasonable planning. Families with limited resources may not be able reserve resources for a disaster. Katrina affected many families with very limited resources who relied on community resources for food, shelter, transportation, and health needs. This

was true of most ARC shelter families after the first 5 days of the shelter's operation. Resources that most people brought to the ARC shelter consisted of a strong sense of family, some clothing, skills to make a little go a long way, and faith in a religion. Some had their own transportation and qualifications for jobs that paid livable salaries. Two men serve as examples of opposite capacities to manage, plan, and use resources.

James, an 18-year-old African American male, was separated from his family (mother and younger siblings), but regularly communicated with them. He found two part-time, unskilled jobs near the shelter: one in a hotel and the other in a fast-food restaurant. He sent most of his earnings to his family. When the shelter was closing, the only housing available was too far away from his two jobs, so James rented a room near his place of work. Lacking in tangible resources and job skills, James exceeded in energy, youth, health, and self-reliance. James reduced his risks by using available resources well, while another shelter resident, Clarence, with limited resources, was overwhelmed.

What James lacked in tangible resources and job skills, he made up with his energy, youth, health, and self-reliance.

Clarence managed to drive out of the New Orleans area just before the storm hit with its full force. On the way to Jackson, however, his tools were stolen from the back of his truck, along with his wallet and identification papers. His truck, in need of major repairs, barely made it to the shelter. Clarence, a single man in his early 40s, earned his living doing handyman work, and needed his tools. Clarence was overwhelmed by his losses. He had injured his leg on a job, and still walked with a painful limp. He had not applied for

any monetary assistance or housing, and seemed unable to form any plan. He lay on his cot or watched television, and did not have James's resilience when faced with a sudden depletion of his resources.

Rosa is a woman who was resourceful in caring for her family. She was a single mom with three children: a son (Jared) who was 15 and two daughters, about 6 and 4 years old. Jared babysat while Rosa checked out apartments and schools necessary to resettle her family. Rosa, a school teacher, had papers with her to establish her credentials. Their home had been contaminated with radioactive material so she and her family could not move back. Knowing that their family home could not be reoccupied helped Rosa mobilize her resources toward relocation. Jared loved football, but spent so much time babysitting and watching over their possessions to prevent their theft that he was forgetting what it was to be a normal kid. The mother was self-reliant, organized, and had good problem-solving skills, yet acting as a parent surrogate, Jared became the one at risk within this family.

Becoming more aware of the uncertainty inherent in the situation, ARC shelter residents realized that their losses were going to take much longer to address than they had expected. Their exposure to the risks from their losses would continue and increase.

Increased Exposure to Relative Risk Impairs Health Status

Many residents witnessed their chronic medical problems grow worse while living in the shelter, such as more frequent asthma attacks and higher blood pressures. People had three meals a day at the shelter, but food choices were limited and might not concur with special dietary needs of people with heart disease, diabetes, or food allergies. Space was limited for play areas for children. Days were hot and muggy so exercising outside challenged even the fittest, and the outside area was commercial and unappealing. Privacy was nonexistent. The National Guard asked me to talk to a man after he and his wife had argued,

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and she had walked out of the shelter. He pointed out that they had been married for 19 years and would be married many more years when she returned. It was just an ordinary argument, without violence, between a husband and his wife. The only difference was that 200 to 300 people were there to witness what should have been private.

Despite the presence of the National Guard, theft was a major problem from the very beginning. Larger families protected their belongings with one person staying in their space all the time. Individuals carried as many of their valuables with them as they could. Even these measures were not always enough, as Eduardo and his group learned. Eduardo was disabled from a severe seizure disorder and spent all his waking hours in a wheelchair. His full-time caretaker, Rachel, began taking care of Eduardo only the day before Katrina hit New Orleans. Rachel's husband and their two children rounded out this group. Eduardo was incontinent at night, as he could not awaken enough to know that he had to go to the bathroom. His incontinence caused frequent arguments between Eduardo and Rachel as she believed that he was incontinent on purpose. To make matters worse, someone stole all Eduardo's clothes from the shelter dryer. Eduardo was obese and wore only sweatpants, T-shirts, and sweatshirts, and he had no other clothes besides those stolen. This event created a major rift between Eduardo and Rachel and her family. Rachel was ready to resign from her position as caretaker. Without help, Eduardo would have to go to an extended care facility where he would lose the independent living that he valued so highly. Unable to establish telephone contact with his cousins, he felt frightened and abandoned. Important to Rachel's self-concept was seeing herself as a good and competent caretaker; this perception was now in jeopardy.

While the ARC Shelter served as a major refuge and provided needed, basic services, the nature of the living conditions also worsened the residents' vulnerability. The longer people stayed at the ARC Shelter, the more stress they showed. As the shelter moved toward closing, people became frightened that

they would have no acceptable shelter and access to needed resources.

Linked Health Status and Resource Availability

In times of community disasters and crises, the American Red Cross offers temporary assistance with food and shelter, first aid, and minimal health care. Besides providing cots or mattresses, the Red Cross has no facilities or procedures to distribute clothing, furniture, and other items people might need. After Katrina, the American Red Cross provided a one-only cash assistance to people who qualified, with the amount rationed by a graduated tier according to the size of the family. The ARC hoped this money would help people directly, and also indirectly help the local economy when people spent the money. The American Red Cross coordinated services with other community agencies that focused on aiding people find longer-term housing when needed, jobs, health care, etc. People stood in lines for appointments to apply for direct cash assistance, and then returned to a line on the day of their appointment: the first person in line was the first person served. Waiting in lines posed problems for many needing assistance.

The weather was hot and muggy, and sometimes rainy. Still people had to stand in line, as there was no way to preserve their space. Some were too sick to stand in line. For example, one older woman was weak from receiving chemotherapy for breast cancer; another younger woman was 9 months pregnant. Several people had visible mobility problems that made it difficult to stand very long. One man became ill standing in line and the paramedics were called; he was hospitalized for what I later heard was a heart attack, and he was not expected to make it. No system had been developed for triaging the line to identify those too frail to stand in the long lines. When approached, the nursing staff said they did not have the authority to create such a system. Nurses told me that the National Guard would not allow it. When I would take vulnerable individuals out of the line and move them inside,

ahead of others, I cleared it with both the National Guard and with the person in charge of the appointments. Helping two or three individuals, however, is different than having a system that would apply to everyone eligible. I did write up a recommended triage criteria for lines such as this and submitted it during my exit interview.

The National Guard provided security to ensure that only people with appropriate credentials entered or left the ARC Shelter. They teamed with the local law enforcement resources to ensure orderly behavior in lines waiting for services. These law enforcement groups only entered the ARC Shelter to intervene in specific events. Some safety existed because the communal living situation provided many witnesses to actions, although this was more effective in the evenings and nights when most residents were actually there. During the day, people came and went as they arranged for life beyond Katrina and the ARC Shelter. Annie, James, Clarence, Rosa, Jared, Eduardo, Rachel, and un-named others all needed individual and community interventions to help them move forward. The resources and interventions provided are discussed in the following section.

No system had been developed for triaging the line to identify those too frail to stand in the long lines.

Provision of Resources and Interventions

Providing health care to vulnerable groups involves bringing resources to people who lack them. In addition to evaluating individual health needs, nurses also must assess community resources and access to care. Nurses need skills in physical assessment, case

management, negotiation, advocacy, and referrals (Flaskerud, 1999). When I went with Annie to the Chaplain's office to apply for local housing, they explained that Annie was not eligible because she was homeless during Katrina. I explained that she was not homeless, just staying with a friend whose house was severely damaged in the storm. By acting as Annie's advocate, and redefining her circumstances, Annie became eligible for an apartment that was available that same day. One of the chaplain's volunteers also believed that she might find someone to donate a sewing machine to Annie. Annie and I scurried about for a mattress she could take with her from the shelter and to find the local address to apply for assistance. The Chaplain's office was a major resource in the shelter for housing and for needs requiring flexibility and immediate resources.

When Eduardo's clothes were stolen from the dryer, he had only a blanket to cover him in his wheelchair. Again, the Chaplain's office provided money to purchase sweats, T-shirts, and sweatshirts for Eduardo from a local discount store. Rachel and her husband needed some time together, away from the hassles associated with Eduardo's care and being in the shelter. I agreed to stay with Eduardo for 2-3 hrs, and another volunteer provided care so they could go out for breakfast together and have some time alone. I assisted Eduardo with his meals and toileting and talked with him about his frustrations and his desires. Despite his many quarrels with Rachel, he wanted her to remain his caretaker as past caretakers had beaten him. He wanted his own place to live, and was proud of his skills: using the telephone and feeding himself once the meals were prepared. He agreed to wear Depends at night. Eduardo also was finally able to reach his cousins by phone. They were relieved because they had been searching for him and feared he had died. After many more minor crises, Rachel and her husband found a duplex to rent with privacy for her family and access next door to Eduardo. At one time or another, every agency represented in the ARC Shelter had contact with Eduardo, Rachel, and her

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family. All agencies helped to reduce tensions, solve major problems, or provide respite care—combined efforts that helped this very tenuous family unit move ahead despite almost paralyzing obstacles. Volunteers and staff from all agencies learned the value of flexibility for effective assistance and resources.

After discovering that Clarence had been immobilized from all his losses, I began discussing some of the resources available and working out a plan with him. Although I showed him where the job ads and applications were posted he did not follow through and was vague about what he needed to do. He also had missed an appointment with another Red Cross volunteer who was working on housing for single men. Clarence responded best if we only discussed one problem and one approach at a time; once that approach had been tried, we met to evaluate the results and plan the next step. Clarence and I agreed that fixing his truck was the first goal. We located a guard who agreed to look at Clarence's truck, diagnose the problem, and to repair the truck on his off-duty time once Clarence purchased the part. Clarence borrowed the money for the part, found a ride to the auto supply store, and soon he had a truck that worked. He attended a medical clinic to have his leg evaluated and also to have his shortness of breath assessed. Another appointment was scheduled with the Red Cross volunteer for finding housing and Clarence moved to the local single men's housing shelter downtown. He found part-time work at the ARC Shelter with the crew that was cleaning up the shelter as residents were moving out. With a job, his own transportation, a little money in his pocket, and a place to live for the next few months, Clarence looked and sounded like a new man. He walked more erect and had a ready smile on his face. While Clarence needed a lot of initial assistance to connect him with needed resources, Rosa and her family were already moving in the right direction.

Rosa had been clear and focused from the time she and her three children arrived at the shelter. She had been methodical in checking the Jackson area schools,

districts, and other resources. They were clearly a close-knit family unit and Rosa quickly earned the respect and admiration of volunteers and staff at the ARC Shelter. When the ARC mental health counselor volunteers realized how much her teenage son, Jared, wanted to be more active with football and the local coach, plans were made to provide babysitting relief for him. This allowed him to spend more time with the local coach and other teenage boys at the shelter. Soon the family left to move into their newly rented apartment.

Conclusion

The Vulnerable Populations Model was useful in helping me to reflect on my volunteer experiences and to identify how individual or family vulnerability was relieved or worsened by community resources. The American Red Cross provided temporary food and housing, but needed to work toward increased safety in the shelter and in meeting dietary restrictions of residents with diabetes and hypertension. The ARC Shelter in Jackson brought together many community and government agencies to help people meet needs beyond the scope of the American Red Cross. The effective coordination of resources that were immediately accessible to shelter residents reduced their relative risk and vulnerability.

One of the system interventions that was implemented effectively was the coordination between ARC Shelter mental health counseling team and the Mental Health Staff in Jackson. At a joint meeting, plans were made for the Jackson MH staff to initiate follow-up appointments with those individuals and families who were remaining in the local area that we identified as needing further assistance after the ARC Shelter had closed. Some industries in the general area arranged with the ARC Shelter Staff to hold job fairs where people could apply for work in their plants. These were very welcome as few people at the shelter had jobs to return to when they left the shelter.

Many opportunities for primary intervention through encouraging hand washing or use of Purell before

meals were missed and could be instrumental in decreasing contagious illnesses (Todd, 2006). Systems need to be in place for future disasters for triaging frail and ill individuals who cannot stand in long lines and be exposed to uncomfortable weather and increased health risks. Cases showed the effectiveness of the mental health counselor through flexibility in the role to support actions of advocacy, referral, crisis intervention and general support and education. My survey of the literature revealed no evidence that the Vulnerable Populations Model had been applied and tested in the context of disaster nursing and this is a rich area for future research.

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