Challenges After Natural Disaster for Rural Residents with Disabilities

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Overview

Although this chapter focuses on natural disasters in the United States, we acknowledge disaster as a global phenomenon, and reference is made to international circumstances throughout. The long-term economic and social impacts of disasters often produce equally devastating consequences regardless of where they occur (Lynn, 2005). Disaster is the product of a combination of three elements: vulnerability, coping capacity, and hazard (United Nations Development Programme, 2004). Disasters generally are classified into two categories: natural (outside the control of humans) and technological breakdowns in human-made systems (International Federation of Red Cross and Red Crescent Societies, 2003; Quarantelli, 2003). Although hazards in themselves do not constitute disasters, natural hazards become a threat when they occur in an environment that pose a threat to human life, property, infrastructure, or the environment (Adebimpe, 2011). It is important to recognize that all disaster is local. That is, disaster has the greatest impact in the geographic area in which it occurs, resulting in physical, emotional, financial, cultural, and social devastation for those involved (Dass-Brailsford, 2008). The local impact of disaster involves "community-based planning that requires rehabilitation agencies play an active role in preparing their communities to respond to the functional needs of persons with disabilities before disaster occur" (Sprong, Lewis, Soldner, & Koch, 2011, p. 34). Moreover, Sprong et al. (2011) contend that as providers of services to PWDs, rehabilitation agencies are uniquely positioned to ensure an effective community-based response. In the event of the occurrence of disasters, emergencies, and other hazards, persons with disabilities face challenges in receiving timely response. Challenges, which are discussed later in this chapter, may be further exacerbated by functional limitations imposed by various demographic characteristics of PWDs (i.e., age and type of disability) for those in rural settings.

Naturally occurring disasters have a certain degree of historical predictability; however, the unknown factor is intensity due to climate destabilization (Hughbank & Cano, 2014) (see Chap. 33 for more information on weather and climate). Some natural disaster can be predicted and sufficient forewarning can be provided; nevertheless, history records that even when disasters are predictable, the outcome is still devastating. The lack of predictability means that most disasters will not have an immediate state or federal response,

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and more recent experiences have told us that even with forewarning, communities must be prepared at the local level (USA Center for Rural Public Health Preparedness, 2007). Too often, the result for rural areas is ion in which known hazards are addressed reactively rather than proactively (Bryant, 2009). To most effectively meet the needs of RFT residents, with and without disabilities, emergency management and response require a coordinated effort involving both horizontal and vertical coordination at the local, state, and national level and integrative efforts (USA Center for Rural Public Health Preparedness, 2007). In any case, providing disaster and recovery services to PWDs in RFT communities may require rehabilitation counselors to not only address issues related to a disability but also early interventions to connect with support networks and community resources and concerns regarding primary traumatization, emotional and cognitive processes, and somatic behaviors. Understanding of the rural circumstances of PWDs can assist in understanding of the timeliness of recovery and the severity of impact (Adebimpe, 2011).

Learning Objectives
By the end of the chapter, the reader should be able to:

1. Identify the challenges of rural, emergency management.
2. Identify the challenges of disaster recovery for PWDs in RFT communities.
3. Identify disaster recovery challenges for persons with specific types of disabilities.
4. Understand the impact of poverty on disaster response and recovery in rural communities.
5. Understand counselor credentialing and competencies required for disaster recovery assistance of persons with disabilities.
6. Understand issues impacting counselors who engage in disaster recovery.

Introduction

All states, tribal areas, and US territories include rural, which has been defined throughout as potentially isolating locations (National Council on Disability, 2009). There are more than 8.6 million Americans living within rural, frontier, and territory (RFT) communities with disabilities (U.S. Census, 2014) for whom surviving and recovering from a disaster can be an enormous struggle. For those in RFT communities, the need for immediate and long-term response intervention becomes a matter of life and death. Too often meeting the needs of PWDs in the RFT areas in the event of natural disaster is cumbersome because of two human resource obstacles: (a) too few PWDs have insufficient disaster response officials trained to effectively manage the needs of PWDs; and (b) too few PWDs possess knowledge about disaster preparedness that could help save their lives (Blanck, 1995; Bright, 2013; Bryant, 2009). In addition, understanding what appropriate response methods should be implemented for PWDs during disaster remains problematic partly as a result of insufficient research validating best practices (National Council on Disability, 2009). Recommendations to overcome the aforementioned human resource obstacles would be to involve PWDs in the emergency preparedness planning as they are best equipped and most knowledgeable about the needs, circumstances, and functional limitations of PWDs for those residing in RFT areas. See Table 25.1 for resources for involving persons with disabilities in emergency planning.

The challenges of emergency management are different for rural communities in comparison to their urban counterpart and are categorized as (a) resource limitation, (b) separation and remoteness, (c) low population density, and (d) communication (Bryant, 2009). See Table 25.2 for rural challenges and limitations. Aside from the aforementioned challenges, lack of appropriate healthcare resources affects rural areas greater as a result of being geographically remote, often more than 20 miles from the nearest clinic or hospital (Davis, Wilson, Brock-Martin, Glover, & Svendsen, 2010). In addition, lack of transportation is often inadequate, a fundamental necessity for residents considering evacuation during emergency conditions. Unfortunately far too many PWDs in RFT communities do not have transportation (see Chap. 3 for discussion on

Table 25.1 Resources for involving persons with disabilities in emergency planning

ADA Best Practices Toolkit for State and Local Governments: http://ada.gov/pcatoolkit/toolkitmain.htm
American Association for People with Disabilities: http://www.aapd.ocm
American Association of the Deaf-Blind: http://www.aadb.org/information/emergency_parparation/emerg_plan.html
American Red Cross: People with Disabilities: http://www.redcross.org/prepare/location/home-family/disabilities
Disaster Resources for People with Disabilities and Emergency Managers: http://www.jik.com/disaster.html
Emergency Evacuation Preparedness Guide: http://www.cdihp.org/products.html#evac_guide
Federal Emergency Management Agency (FEMA): http://www.fema.gov/
National Organization on Disability: http://nod.org/disability_resources/emergency_preparedness_for_persons_with_disabilities/
Rehabilitation Engineering Research Center for Wellness Technologies: http://www.wirelessrerc.org/content/newsroom/guidelines-help-you-prepare-emergencies
Rehabilitation Engineering Research Center on Communication Enhancement: http://www.aac-rerc.com/
US Department of Homeland Security: http://www.dhs.gov/index.shtm

Table 25.2 Rural challenges and limitations of emergency management

Resource limitations – a lack of availability of capital, which includes human, financial, social, cultural, and political capital
Human capital is limited due to urbanization and out-migration of young, educated residents
Financial capital is concentrated in the assets of the remaining aging population and is lost to rural communities when urban heirs inherit and liquidate these assets
Social capital is relationship within and between emergency service agencies, community organizations, and local businesses. Rural communities are generally rich with social capital when almost everyone knows everyone else. Volunteerism is a rich source of social capital in rural communities
Cultural capital is the nonfinancial social assets, knowledge, and ideas of people that enable them to succeed
Political capital is the trust, goodwill, and influence a politician has with the public, community, and other politicians that has been built through the pursuit of popular policies
Separation and remoteness – the distance between residents. The remoteness of rural areas results in longer response time; thus, the "golden hour" to provide lifesaving trauma care is often expended well before rural residents reach urban treatment centers
Low population density – population size of the community or the number of people per square mile
Communication – public education about preparedness. Communication is more costly per person. In rural communities increased cost leads to reduced outreach prior to disaster and throughout an event
Equal access – equivalent resources that are considered essential and of the same quality in urban and rural areas

Adapted from Bryant (2009)

transportation). As previously discussed, remoteness of RFT communities adds to the difficulties of accessible and reliable communication technology during and following natural disasters. For instance, access to assistive technology (e.g., interpreters, TDD communication, signaling devices) for persons who are deaf or are hearing impaired is often lacking. Moreover, individuals with cognitive impairments (e.g., brain injury, Alzheimer's disease, developmental disabilities) may not have access to reliable assistance which is essential to cope with new surroundings and to minimize confusion factors (Blanck, 1995, n.d.).

Equally as important is accessible and reliable rescue communications, which consists of a universal design approach to meeting the needs of persons with and without disabilities before and after a disaster (Blanck, 1995, n.d.).

National Disaster Recovery

The ability to recover from a natural disaster is highly dependent upon the level of preparedness before the occurrence of a disaster. There are federal guidelines to support state-level preparedness and response to disasters. Understanding the timeliness of response and following procedures is often the difference between safety and tragedy and life and death. In this section we identify several key national preparedness frameworks and organizations that provide guidelines for disaster recovery.

National Disaster Recovery Framework The *National Disaster Recovery Framework* (NDRF, 2016) was developed in response to the need to better understand the obstacles to disaster recovery and the challenges faced by communities seeking disaster assistance. The NDRF is a companion document to the *National Response Framework* (NRF, 2013). The NDRF is a guide to promote effective recovery, particularly for large-scale or catastrophic incidents. The NDRF provides guidance to support states, tribes, and local jurisdictions impacted by disaster. The "focus is on how best to restore, redevelop, and revitalize the health, social, economic, natural and environmental fabric of the community and build resilience" (NDRF, 2016, p. 1). The National Disaster Recovery Framework connects local, state, tribal, federal governments, private sectors, and nongovernmental and community organizations, which play vital roles in recovery. The NDRF has nine core principles (see Table 25.3) and is designed for ease of use for all individuals (with or without a disability) involved in disaster recovery.

The section of the NDRF on community considerations takes into account accessibility and recovery, ensuring inclusion of PWDs and rural

Table 25.3 Core principles of National Disaster Recovery Framework

Individual and family empowerment
Leadership and local primacy
Pre-disaster recovery planning
Partnerships and inclusiveness
Public information
Unity of effort
Timeliness and flexibility
Resilience and sustainability
Psychological and emotional recovery

Adapted from NDRF (2016)

recovery. For PWDs, issues related to children and adults with mental, physical, cognitive, intellectual, and sensory disabilities as well as others with access and functional needs are considered. Statutory and executive order obligations under the NDRF include accessibility in architecture, transportation, housing and effective communication, employment, education, policies, and programs including those receiving federal funding. Specific statutes and obligations are covered by the following:

- Robert T. Stafford Disaster Relief and Emergency Assistance Act (Stafford Act) of 1988, as amended (2013)
- Post-Katrina Emergency Management Reform Act; Rehabilitation Act of 1973, as amended
- Americans with Disabilities Act (ADA), as amended 2008
- Fair Housing Act of 1968, as mended
- Architectural Barriers Act of 1968
- Communications Act of 1934, as amended
- Individuals with Disabilities Act (IDEA) of 1975, as amended
- Title VI of the Civil Rights Act of 1964, as amended
- The Age Discrimination Act of 1975
- and Executive Order 13347, Individuals with Disabilities in Emergency Preparedness

National Preparedness Rural communities often need a pre-disaster regional recovery plan; however, they may lack the resources, leadership, or political autonomy to engage one.

The NDRF permits for flexibility of recovery needs in rural areas. Because of logistical challenges, particular recovery needs following disaster may not only relate to people but to rehabilitation of land. Broadly defined, rehabilitation of land refers to returning the land to some degree to its former state. Land degradation from erosion (flooding) or fire may result in the land become unsustainable and unsuitable. A loss of land because of a natural disaster creates economic vulnerability to the region. Local, state, or federal agencies assist in rehabilitation of land through the provision of grant dollars, tax credits to rebuild, and other government programs. Distinctively, RFT areas' dependence on land (i.e., farming) results in disproportionate impact from natural disasters that require a recovery approach that is distinct from urban areas and manufacturing centers (NDRF, 2016).

National Response Framework The NRF guiding principles are engaged partnerships; tiered response; scalable, flexible, adaptable operational capacities; collaborative effort through unified command; and readiness to act. "The NRF is based on the concept of tiered response with an understanding that most incidents start at the local level, and as needs exceed resources and capabilities, additional local, state, and Federal assets are applied" (National Response Framework, 2013, p. 46). It is not a one-size-fits-all organizational construct, rather NRF emphasizes that response to incidents should be handled at the lowest jurisdictional level capable of handling the mission. The NRF uses the findings from the Strategic National Risk Assessment (SNRA) to construct and deliver the response core capabilities. The role of the SNRA is to identify the threats and hazards that pose the greatest risk to the nation. Specifically, risk threats identified by SNRA include natural hazards, a virulent strain of pandemic influenza, technological and accidental hazards, terrorist organizations and affiliates, and cyber attacks (NRF, 2013).

Red Cross Separate from both the NDRF and NRF, the American Red Cross has developed a

booklet to assist PWDs and other special needs groups prepare for disaster (http://www.redcross.org/services/disaster/beprepared/disability.pdf). Although generic in nature, this booklet offers strategies that can be employed by PWDs in rural communities. Information include, for example, being informed, making a plan, assembling a kit, and maintaining a plan and kit. The Red Cross emphasizes being prepared means being equipped with the proper supplies that are needed in the event of an emergency or disaster. The recommendation is to keep supplies in an easy-to-carry emergency preparedness kit. Supplies include, for example, water, food batteries, medication, two-way radio, and first-aid kit. A more comprehensive list can be found at the Red Cross website at http://www.redcross.org/get-help/prepare-for-emergencies/be-re-cross-ready/get-a-kit. In conjunction with the Red Cross strategies, recommendations from other sources (i.e., listed in Table 25.1) can be used to improve pre-disaster preparation and recovery efforts that are specific to RFT communities. Beyond this, however, many of the recommendations of the Red Cross for disaster preparedness require PWDs to have adequate resources to obtain additional medications and supplies. Unfortunately, far too many PWDs in RFT communities do not have expendable income.

Rural Aspects of Social Vulnerability and Challenges of PWDs in RFT Communities

Often overlooked as mitigating factors of recovery from disaster for PWDs in RFT communities are poverty, vulnerability and health status, and disparities before and after a disaster in medically underserved communities (Davis et al., 2010; Lynn, 2005; Runkle, Brock-Martin, Karmaus, & Svendsen, 2012). Poverty is frequently defined and analyzed in terms of the lack of access to resources to sustain basic human capabilities of food, shelter, and safety (see Chap. 2 for additional information on poverty). Because of poverty, PWDs in RFT areas tend to have less than optimal healthcare coverage and have

chronic health disparities leaving them at greater risk following a disaster. Vulnerability, in general, and disaster vulnerability, in particular, possess conceptual complexity for rural communities (Adebimpe, 2011). These vulnerable subgroups' (e.g., low-income, physical or mental disability, elderly, children, LGBTQ, and racial/ethnic minority populations) disability and chronic health needs of PWDs in RFT communities are often aggravated by, resulted from, and in some cases overlooked during response efforts (Runkle et al., 2012). According to Davis et al. (2010), "disasters themselves can catalyze new or exacerbate existent disparities in health and health care within the affected population" (p. 30).

Poverty Poverty as a social vulnerability in RFT communities is an area that warrants additional attention in the discussion of natural disasters. According to Lynn (2005), because of difficulty of accessing resources and decreased income, "a poor society is often vulnerable to natural disasters that contribute to keeping it poor over time" (p. 1). Burney, Simmonds, and Queeley (2007) echoed a similar sentiment regarding people living in poverty stating, "the capacity to survive and recover from the effects of a natural disaster depends on two major factors: the physical magnitude of the disaster and the socio-economic conditions of individuals or social groups who experience the crisis" (p. 1). The most vulnerable to natural disaster are the poor, children, and persons with disabilities. Moreover, the already impoverished poor, many of whom are persons with disabilities, experience worsen socioeconomic conditions after a disaster. Persons from rural areas who are impoverished are more impacted because of poverty, lack of private transportation, limited to no ability to pay for public transportation, and limited availability of public transportation. Unfortunately, the most impoverished are considered most at risk before and after a disaster (Burney et al., 2007; Fothergill & Peek, 2004) (see Chap. 2 for discussion on poverty).

Healthcare When disaster strikes, the healthcare system is immediately overwhelmed with injuries and acute illnesses during the initial stage, and

long-term disabilities and chronic conditions may not be a priority. Moreover, as a vulnerable subgroup, PWDs are likely to receive inverse care (the people most in need of medical care are often the least likely to receive the care they need) in the weeks and months following a disaster (Davis et al., 2010). Often, acute illnesses occurring in the initial wave evolve into chronic health conditions or disabilities during the recovery phase of a disaster. From a public health perspective, Chandra and Aten (2012) suggested that the health status of people prior to a disaster is indicative of their status after a disaster. That is, healthy people are more resistant to illness and better able to survive disaster.

Housing/Shelter Sheltering is a major function of the response component of emergency management (Bright, 2013). "Shelter in place" suggests that often persons with special functional needs are served better by maintaining them in their own environment and providing supports to their location whenever possible. Sheltering in place for those living in poverty is difficult in RFT areas because their homes tend to be constructed of less durable materials and on unstable terrain. Isolation of many geographical locations is further hampered by lack of access to transportation. Relocation should be a consideration when it is not possible for individuals to safely remain in their location (Sprong et al., 2011). Service animals are included in sheltering, and owners will not only need to prepare evacuation supplies for themselves but for their service animals.

Resilience of Rural Communities Cutter, Burton, Christopher, and Emrich (2010) suggested the literature has divergent views on community resilience. Initially, the concept of resilience was applied to natural disaster to suggest resilience as the ability of a community to recover by means of its own resources (Mileti, 1999). Following, community resilience was viewed as a process linking the myriad of social capital and economic development adaptive capacities (Norris, Stevens, Pfefferbaum, Wyche, & Pfefferbaum, 2008). Eventually, Cutter et al. (2010) viewed "resilience as a set of capacities promoted through

interventions and policies, which in turn help build and foster a community's ability to respond and recover from disasters" (p. 2).

Just as social factors are associated with risk following a disaster, so too is resilience. Resiliency can promote a sense of control, empowerment, and normalcy following disasters to ensure individuals are able to return to their community (Madrid, Grant, & Rosen, 2009). Madsen and O'Mallaun (2016) examined community resilience following a natural disaster in a rural town and found community resilience was associated with higher levels of social connectedness, optimistic acceptance, learning tolerance and patience, and learning from the past to prepare for the future. In addition, they concluded social capital forms a vital part of community resilience, and although resilience is tested only during times of adversity, social capital needs to be developed well prior to the anticipation of natural disasters. The ability of rural communities to recover after disaster lies in the capacity of rural emergency management to connect and collaborate prior to disasters. Collaborative activities are essential for resilience in rural communities to adapt to changes caused by disasters and the ability to maintain operations with enhanced processes geared toward future sustainability (Kapucu, Hawkins, & Rivera, 2013; National Research Council, 2009) (see Chap. 7 for discussion on resilience).

For people with and without disabilities, their ability to respond to disaster is dependent on the support structure surrounding them. People with disabilities may have coping and resilience contingencies in place depending on their situation. According to Jackson and Cook (1999), an individual with a disability may have developed an approach that confronts adversity directly. As such, these individuals have the experience of adjusting and adapting to the unique circumstances and barriers to their particular situation and can often adapt these coping skills and strategies to respond to the challenges of disaster recovery. There are, however, times when the support structure is also stressed, which increases the risk to the person with a disability (Jackson & Cook; Neria, Galea, & Norris, 2009; Sever, 2015).

Understanding Disability in the Context of Disaster Response and Recovery

The functional limitations of a person with a disability vary, are individualized, and depend on the type of disability. It is beyond the scope of this chapter to present a comprehensive view of the impact of disaster on all types of disabilities and their functional limitation. Thus, discussion is on what should be considered regarding the impact of disaster on PWDs in RFT communities. It is important to consider a person's emotions during a crisis in which he or she may experience feelings of fear, shock, or distress about the disruption because the disruption itself may not precipitate trauma (Brammer & MacDonald, 2002). Some people with physical disabilities must often make adaptations to their surrounding environment. Specifically, for those residing in rural areas, the environment may be more challenging as a result of a lack of accessibility (i.e., lack of sidewalks, soft shoulder on the side of roads, lack of public transportation). When an environment undergoes significant change due to disaster, adjustment of persons with physical disabilities can be greatly affected (Jackson & Cook, 1999). Additionally, mobility may become increasingly problematic as a result of limited functional capacity or lack of transportation. For individuals with mental health disorders, functional capacity is often affected adversely by the stress that accompanies disasters. However, some researchers suggest that mental health issues can be created through inadequate disaster response (Galea et al., 2007; Madrid et al., 2009). Typically, there is a need of surveillance of behaviors as well as injuries during the acute phase (usually 6- to 12-week postdisaster) that lead to mental health disorders. The limited availability of mental health services in RFT areas prior to a disaster is complicated further after occurrence of a disaster.

Njelesani, Clever, Tataryn, and Nixon (2012) indicated different groups of people with disabilities arise in disaster situations – people with newly acquired injuries and impairments, people with pre-existing disabilities, and people with pre-existing impairments. Persons with newly acquired disabilities are usually the first to be targeted and treated post-disaster, while persons with pre-existing disabilities suffer particularly high rates of mortality and morbidity from disasters, partially as a result of being less able to flee. Individuals in this group also experience greater loss of autonomy after disasters. Furthermore, persons with pre-existing impairments, depending on type, may have not found their condition to be particularly disabling prior to a disaster but more so after a disaster because of destruction of infrastructure. Individuals with chronic conditions (e.g., diabetes, HIV) face deterioration due to interrupted medical treatment (Njelesani et al., 2012). Let's consider the case of Bill and implications of his disability

Case Study of Bill

Bill is a 46-year-old, white male that resides in a rural town off the coast in South Carolina. Bill has diagnoses of diabetes, type II, with complications of early onset of vision loss and amputation of both legs. Also, he is diagnosed as being obese. Bill is no longer able to drive and depends on the paratransit system for transportation to and from his doctors' appointments. Bill was employed as a farmworker for 28 years. Currently, he receives SSDI. Bill dropped out of high school in the 10th grade. He does not have a GED.

Bill lives with his wife in tenet housing on a dirt road that is 5 miles from a highway. Although the house is inland, it is till close enough to the coastline and has the risk of flooding from hurricanes or excessive rainfall. His wife works as a housekeeper 3 days a week. She relies on a 1983 automobile that is less than reliable transportation.

Questions

1. What are Bill's functional limitations and capacities?
2. What issues need to be address in an evacuation plan for Bill and his wife?
3. During post-disaster recovery, what type of services is Bill in need of?

living in a rural area. Although the case of Bill is of a middle-aged man with multiple disabilities who lives in the south, similar implications for disaster recovery can also apply to someone with a disability in need of assistance due to a snowstorm in Montana, a tornado in Kansas, or a wildfire in Colorado.

An understanding of disability in the context of disaster response and recovery requires rehabilitation counseling professionals to consider immediate and long-term issues. Arguably, the complexities of disability in disaster consist of a person's abilities, functional limitations, and environmental barriers. Any one or combination of these factors might influence the post-disaster outcome of a person with a disability. Let's consider the case of a woman who is quadriplegic in her exchange with a worker to arrange transportation evacuation during Hurricane Katrina that is presented in Discussion Box 25.1. The case of Belinda is one with a tragic outcome. She lived in an urban area and was unable to evacuate because of functional limitations and barriers to transportation. In Belinda's situation, transportation never arrived. Others who were able to get to bus stops were faced with non-accessible and ill-equipped buses and were unable to evacuate. Although the outcome could not have been any more tragic, imagine the additional barriers Belinda would have experienced if she were living in a rural area. In either scenario the outcome is tragic.

Subsequent to the response and recovery actions of various agencies during and after Hurricanes Katrina and Rita, the National Council on Disability published reports on inadequacies found in response procedures and made recommendations for planning and responding to the needs of persons with disabilities in disasters. After centering on the immediate and short-term needs of PWDs, the shift has become focused toward long-term employment concerns of evacuees. At this stage, rehabilitation counselors assume their primary role and responsibility.

Discussion Box 25.1

[On August 29] Susan Daniels called me to enlist my help because her sister-in-law, a woman who is quadriplegic in New Orleans, had been unsuccessfully trying to evacuate to the Superdome for two days. …It was clear that this woman, Belinda Caixetta, was not being evacuated. I stayed on the phone with Belinda, for the most part of the day… She kept telling me she'd been calling for a ride to the Superdome since Saturday; but, despite promises, no one came. *The very same paratransit system that people cant' rely on in good weather is what was being relied on in the evacuation…* I was on the phone with Belinda when she told me, with panic in her voice "the water is rushing in". And then her phone went dead. We learned five days later that she had been found in her apartment dead, floating next to her wheelchair … *Belinda did not have to drown* [emphasis added].

Questions

1. What are the complexities of disability in the context of disaster for Belinda?
2. What do you think the outcome would have been if Belinda lived in a rural area?
3. Imagine yourself talking on the phone to Belinda. What would you have said?

Source: National Council on Disability (2006)

Role of the Rehabilitation Counselor

In working with people who have experienced natural disaster, counselors should consider several fundamental principles. Benveniste (n.d.) offers and identifies strategies for working with individuals traumatized in the immediate after-

math of a major disaster. First, counselors should take care of themselves and their colleagues, physically and emotionally (discussed later in this chapter). Secondly, counselors need to maintain clarity because it is easy to lose perspective and become confused in a crisis. It is best to slow down and discuss one's clinical decisions with colleagues. Third, the counselor may also find it useful to make a checklist of priorities to evaluate what is important from what is not. In working with clients, you should remember that for them safety, medical concerns, sleep, food, and shelter must be attended to before any psychological intervention can begin. Moreover, counselors should be aware that it is impossible for their clients may not overcome their fear until the real danger has been removed. Fourth, counselors need to collaborate and seek supervision from one another, as well as other service providers. Interdisciplinary interaction and consultation become essential for conscientious crisis intervention. Fifth, counselors need to understand that working with clients in crisis is not the same as seeing them in their office or clinical setting. The setting in which you deliver counseling after a disaster may be a large room with many other people performing various tasks or may not be a building at all. Clearly, confidentiality may be compromised by the nature of the emergency, the setting, and the need to consult with others. Finally, counselors need to be able to think or their feet. That is, they will need to improvise with resources, time, and space. They need to assess their task and choose goals appropriate to the circumstances and the situation. Keeping these strategies in mind, when working with clients in crisis, counselors must be able to strike a balance between working long hours and avoid getting overwhelmed and self-care.

Rehabilitation counselors may be called upon to serve as crisis counselors either in providing immediate or long-term counseling support to persons with disabilities regarding the traumatic event. It is important to note that in general rehabilitation counselors are not therapists or may not possess the credentials required to provide crisis intervention. Suitably trained, rehabilitation counselors can provide crisis counseling and refer to mental health specialists to undertake long-term counseling and treatment. Nevertheless, rehabilitation counselors should possess basic knowledge and skills regarding crisis and trauma response. Hughbank and Cano (2014) suggested that counselors may assume the role of a "roaming counselor" and provide that much needed face-to-face support at the crisis center, focusing on the person's immediate needs and then moving to the emotional needs. Once the initial response to a crisis event is over, it is when individuals of trauma will require counseling and support and resources and referrals to support agencies and mental health professionals. A distinction is made between disaster mental health and traditional mental health and rehabilitation counseling programs. Disaster crisis counseling is designed to address incident-specific stress reactions rather than ongoing or developmental mental health needs. Outreach and crisis counseling activities are at the core of crisis counseling (Jackson & Cook, 1999).

In some rural areas, ethnic minority groups make up a large portion of the population, while in other areas, they may represent a smaller concentration within a largely homogenous racial population. Thus, training on cultural sensitivity and competence may be required for counselors working in crisis intervention (Stone & Conley, 2004). Increasingly, immigrant farmworkers are becoming a larger concentration of ethnic minority groups in rural areas. In addition to awareness and sensitivity of ethnic minority groups, counselors should be aware of the season effect of the work and accessibility in rural cultures. According to Jackson and Cook (1999), apart from the normal phases people experience after a disaster, there are timing considerations in farming areas such as times of seeding, ground preparation, and harvest that typically offer reduced accessibility of outreach workers to those affected by disasters. Thus, counselors need to be aware not only of ethnic culture but also of geographical cultural (i.e., rural).

Another cultural perspective that counselors need to be aware of in the referral and counseling process of rural residents after disaster is the stigma associated with mental health in RFT communities. Although rural residents value face-to-face contact very highly, their cultural

attitudes make it difficult for them to seek and engage in support services (National Rural Health Alliance, 2004). It is not as simple as the person walking through the door and requesting counseling services because he or she is experiencing PTSD or trauma after exposure to a disaster. The asking for mental health services may be more difficult for rural residents because of their independent and interdependent culture. It is therefore important to make contact through an outreach or community support, which they can accept. In addition to cultural stigma regarding mental health, rural residents tend to distrust outsiders and might be reluctant to seek assistance. And, within a cultural context, language and communication barriers may exist because of the person being non-English speaking or may have difficulty reading. If it is necessary to work with a translator, the counselor must consider how this dynamic may affect the way in which services are provided. The counselor is guided by a code of ethical conduct in this matter.

Counselors must also understand and respond to diversity within the population of people with disabilities, women, children, older adults, and other vulnerable populations and realize their responses to stress and stress-related disorders are quite different from that of others. When communicating with residents in rural communities, there is a need to consider terminology that is reflective of meaning and interpretation that is familiar to the area. Finally, rehabilitation counselors can benefit from knowledge of existing resources in the rural community. As expected, first responders are involved in crisis intervention and mental health professional in addressing mental and emotional consequences of disaster. However, the counselor needs to look beyond traditional crisis responders and personnel to those recognized as gatekeepers that are a vital part of the rural community's support system (e.g., clergy or churches, funeral directors, veterinarians, cooperative extension services) (Jackson & Cook, 1999).

Beyond the role of crisis counseling, the primary role of rehabilitation counselors is to assist persons with disabilities find employment and training opportunities. Frequently, natural disasters destroy places of employment. For persons with disabilities who were in the process of seeking employment when a disaster occurs, the counselor or employment specialist might lose contact with their client. In addition, clients who were already employed or in training might have become displaced. Much effort is devoted to reestablishing contact and resuming services. Rehabilitation counselors, however, should be aware that even after initial aftermath and recovery, clients might look to them for comprehensive services, especially in rural communities.

Standards for Disaster Crisis Counselors and Credentialing and Competence

Standards exist within the profession and educational training for counselor for responding to crisis and disaster. Jordan (2010) presents six general national/international standards that have been proposed for crisis counselors to use in responding to people and communities affected by disaster. The first is the need and capacity, which is dependent on the severity (i.e., loss and destruction) and duration of the disaster, the relief organization's capacity (i.e., funding, qualified crisis volunteers), and the local capacity (i.e., available mental health professionals, mental health facilities). The second standard is information gathering and initial assessment. This process includes the most vulnerable, at-risk population (e.g., persons with disabilities, older adults, children). Care should be taken to maintain confidentiality of information. The third standard is related to service delivery. Counselors are to be respectful of the culture, religious and spiritual values and beliefs, socioeconomic status, and history of the people with whom they are working. In addition, counselors are to provide impartial nondiscriminatory services according to the needs of the people affected by disaster. Standard four is process and outcome assessment. Process and outcome assessment help counselors identify emerging issues. Both should be done within the context of local culture, values, beliefs, and practices and also in the larger ecological perspective (e.g., historical, socioeconomic status). Standard five is counselor evaluation, which is to ensure accountability

and to improve practice. The evaluation results are "lesson learned" for counselors and help the organization or agency in assessing what training, skills, and knowledge their counselors should have. The final standard is counselor skills and responsibility. Counselors require appropriate training, skills, and experience in traumatology, disaster mental health, and crisis counseling, as well as psychoeducational program delivery in which they learn how to assess their ability to function effectively in disaster-affected areas. This standard helps counselors to recognize signs of compassion fatigue, their own coping skills and resiliency, and previous history of trauma or present life cycle transitions (Jordan, 2010). Counselor can, and often times do, fall victim to emotionally charged stress (Hughbank & Cano, 2014).

The 2016 Standards of the Council for Accreditation of Counseling and Related Educational Programs (CACREP) require counselor education programs to offer coursework on understanding response to crisis, disaster, and trauma-causing events. Credentialing and cultural competence are interwoven aspects of providing services to RFT residents in recovery from disaster. Counselors are to follow their professional code of ethics or conduct and the six standards. Moreover, counselors should not practice beyond their skill level and scope of practice (Code of Professional Ethics for Rehabilitation Counselors, 2010; Jordan, 2010).

Counselor Self-care Issues

Counselors as service providers may be called upon to provide support and intervention to PWDs in the aftermath of natural disasters. In addition, counselors who themselves are residents of rural communities must be prepared to deal with disaster not only as a service provider but as a member of the community. Research suggests that human service providers and first responders are at risk for development of acute stress disorder, post-traumatic stress disorder (PTSD), and depression because of exposure to working in post-disaster areas (Fullerton, Ursano, & Wang, 2004). Post-traumatic stress

disorder may occur within weeks of experiencing trauma or as long as years or decades later. "Despite a general trend for symptoms to occur after a traumatic event, then gradually abate, it is also important to note that there are a number of different trajectories the emergence of mental symptoms follow" (Harvey et al., 2015, p. 25). For example, delayed onset of PTSD was found in the 8-year follow-up of police officers responding to the World Trade Center attack; 9% were described as having a delayed onset of PTSD symptoms (Pietrzak et al., 2014). Similar results are seen in military members who were in combat. Experts declare that counselor self-care is essential in the midst of helping others in a crisis or after disaster situation (Benveniste, n.d.; Wehrman, 2010).

Gauthamadas (2005) asserted that disaster responders in all phases of disaster relief, including counselors, experience considerable demands to meet the needs of the survivors and the community. Typically, they are altruistic, compassionate, and dedicated people who occasionally have difficulty knowing when it is time to take a break from the recovery operation. Overwhelmingly, people who end up in the helping profession are more inclined to take care of others. The result is usually professional burnout. Other risk factors that counselors encounter during and after disaster recovery are presented in Table 25.4 and the manifestation of symptoms is in Table 25.5. Taking care of yourself or wellness is one of the critical assets of being a healthy counselor. To be an effective counselor, helping

Table 25.4 Risk factors for disaster recovery responders

Age – older people often fare better than their younger counterparts, in part, due to older relief responders having additional experience that serves as protective factors
Level of exposure – physical stress and fatigue and threat to life or other potential for harm
Lack of support
Perceived threat because of ethnicity and gender
Frustration in the ability to fulfill tasks that the counselor wants to undertake may be an added stressor (e.g., being unable to save lives)

Adapted from Gauthamadas (2005)

Table 25.5 Symptoms of stress in disaster relief responders

Psychological and emotional	Cognitive
Feeling heroic, invulnerable, euphoric	Memory problems
Denial	Disorientation
Anxiety and fear	Confusion
Worry about safety of self and others	Slowness of thinking and comprehension
Anger	Difficulty calculating, setting priorities, making decisions
Irritability	Poor concentration
Restlessness	Limited attention span
Sadness, grief, depression, moodiness	Loss of objectivity
Distressing dreams	Unable to stop thinking about the disaster
Guilt or "survivor guilt"	Blaming
Feeling overwhelmed, hopeless	
Feeling isolated, lost, or abandoned	
Apathy	
Identification with survivors	
Feeling numb	
Behavioral	Somatic
Change in activity	Physical exhaustion
Decreased efficiency and effectiveness	Exhaustion
Difficulty communicating	Loss of energy
Increased sense of humor	Gastrointestinal distress
Outbursts of anger, frequent arguments	Appetite disturbances
Inability to rest or "letdown"	Hypochondria
Change in eating habits	Sleep disorders
Change in sleeping patterns	Tremors
Change in patterns of intimacy, sexuality	Headaches
Change in job performance	Anxiety and nervousness
Periods of crying	Depression
Increased used of substances	
Social withdrawal, silence	
Vigilance about safety or environment	

Table 25.5 (continued)

Avoidance of activities or places that trigger memories	
Proneness to accidents	
Difficulty being close to others	

Adapted from American Counseling Association (2011), Gauthamadas (2005), and Zalaquett, Carrion, & Exum (2010)

yourself first is a principle that applies directly to all counseling professionals; if you are in need of care yourself, it is difficult to help others. Counselors who neglect their own mental, physical, and spiritual self-care are often replete of energy to assist others (Mursch, Swain, & Harding, 2007). In addition, the counseling process is a one-way encounter in which the counselor is offering empathy to the client, with no reciprocal return. In addition to burnout, counselors often encounter several other roadblocks to self-care: vicarious traumatization, compassion fatigue, and impairment. Vicarious traumatization or secondary traumatic stress is similar to PTSD in which counselors are affected by the trauma they hear about through clients. Compassion fatigue occurs when counselors experience exposure to the suffering of clients along with an inability to rescue them from the suffering results in feelings of depression, anxiety, depletion, or emotional withdrawal. Impairment occurs when the counselor demonstrates substantial negative functioning to the extent that it compromises client care or poses potential harm to the client (Shallcross, 2011). In fact, counselor impairment is a violation of ethical behavior. In order to remain an effective counselor to those affected by a disaster, awareness of and provision for one's own well-being need to be maintained throughout all phases of a disaster (Mursch et al., 2007).

Zalaquett et al. (2010) suggested group debriefing for counselors is important as it allows for an opportunity to share their experiences during the crisis and how it affected them. This process decreases the potential for isolation and

behavior described in Table 25.5. Counselors should have a plan for individual and group self-care (because they are members of a team that provide services) (Wehrman, 2010). In fact, Hughbank and Cano (2014) recommended that all emergency recovery plans should include post-incident stress-related evaluations that will serve as a long-term mechanism to help ensure a more emotionally fit individual. It is important for counselors to know their personal limits, have a debriefing plan, and examine their own regular coping techniques used to decompress daily and determine if they are transferrable to the new setting or situation. Similar to working with residents of the community, interventions should be culturally appropriate and reflective of the counselor's worldview and cultural values.

Rehabilitation Agency Strategies to Minimize Service Disruption During and After Disaster

Because occurrence of natural disaster is inevitable, a degree of preplanning by agencies should occur. Too often a significant amount of confusion is present following disaster. Similar to the adaptive capacity of rural communities to sustain recovery at multiple levels (Kapucu et al., 2013), so too is sustainability an important element for rehabilitation counseling services in rural communities because preventive and intervention strategies and policies can reduce losses and minimize disruption of service. Immediately after a disaster, clients with disabilities continue to need vocational rehabilitation services and probably more so. The ability of rehabilitation agencies and counselors to meet the needs of clients will more likely be interrupted by disaster. Therefore, the question is how can disruption to vocational rehabilitation services be minimized during and after disaster? In this section, we discuss several recommendations for implementation.

First, planning should be an ongoing activity that includes input and support from multiple agencies. Both planning and responsibility should be based on partnerships and cooperation among public, private, and different levels of government and focus on strengthening networks among these interdependent segments to respond rapidly after disaster (Kapucu et al., 2013). Interagency cooperation becomes increasingly important because the effects of disasters and disruption to services are not confined to one particular agency. For example, agencies' personnel can facilitate information flow and provide consultation to professional colleagues across agencies. The intent is for agencies to be able to draw on a range of practices or services that may not originally be intended for them. Hurricane Katrina is an example of failure to have appropriate plans in place and coordination to maximize services for persons with disabilities, which resulted in significant loss of life (White, Fox, Rooney, & Cahill, 2007).

Second, the plan should be practiced annually. While a plan is the necessary first step, the plan is only as good as its implementation. Usually, rehabilitation counselors attend an annual statewide professional conference. An annual review of the plan and strategies can be a training session at that conference. In addition, conference organizers may also include a training session or preconference workshop by the state or local emergency management office. Once the initial training has occurred, it is crucial that there is ongoing staff awareness of the plan and strategies. Ongoing awareness and practice is necessary because during a crisis people tend to be agitated and confused because of a need to act immediately. Together, the planning and training processes offer a means of reducing some of the stress associated with disaster crisis.

Third, cross-training of human service personnel should be implemented at the state level. Various human service agencies can develop training materials and webinars to counselors, social workers, mental health professionals, cooperative extension personnel, healthcare staff, and so on as a statewide network for disaster recovery services for persons with disabilities. A network approach is feasible because rehabilitation counselors cannot be all things to all people all of the time.

Finally, post-disaster recovery is long term and has periods of progression and relapses.

Therefore, human service agencies should have interagency contingencies in place in which PWDs are able to initiate or reinitiate services at one of several agencies, especially one in close proximity to their resident. The intent is to have in place a service delivery continuum.

Summary

Persons with disabilities are at heightened risks during and after natural disasters. In addition, many persons with disabilities are further disadvantaged by post-disaster response. Risks are compounded where there are pre-existing barriers to persons' with disabilities full participation in the community. Risks are multiplied for residents with disabilities in RFT communities. Both persons with disabilities and RFT areas are vulnerable people and communities. Recovery from disaster in rural areas is an interdependent process; for the individual to recover, the community must recover and vice versa. Rehabilitation counselors can provide helpful consultation to and effective collaboration with other human service agencies and community supports in recovery efforts after disaster. Regardless of the amount of planning and level of networking, organizations require adequate resources to sustain their efforts of post-disaster recovery.

Resources

American Red Cross: http://www.redcross.org
Disability.gov's Guide to Emergency Preparedness and Disaster Recovery: https://www.disability.gov/resource/disability-govs-guide-energency-preparedness-disaster-recovery
Disaster and People with Disabilities (slide show) by David Alexander, University College, London. Available at http://www.slideshare.net/dealexander/disabled-people-in-disaster
Disaster Risk resilience Planning Network – Rural Disaster Resiliency Planning Tools: http://www.drrplan.net/node/141
Encyclopedia of natural Hazards. (2016). Switzerland: Springer International Publishing.

Federal Emergency Management Agency (FEMA): http://www.fema.gov
International Society of Physical and Rehabilitation Medicine: Rehabilitation Disaster Relief: http://www.isprm.org/collaborate/who-isprm/rehabilitation-disaster-relief

Learning Exercises
Self-Check Questions

1. Which type of activities lessen the severity and impact a potential disaster may have on rehabilitation services and community operations?
2. What is meant by emergency management and response require both horizontal and vertical coordination?
3. What are some challenges and limitation of emergency management in RFT areas?

Experiential Exercises

1. Review a disaster management and response plan to determine how it will be implemented in a RFT area and whether procedures are included for PWDs. If not, make some recommendations for accommodation of PWDs.
2. Develop a plan and protocol for counselor self-care for implementation in a post-disaster situation.
3. Interview a PWD to determine if he or she has a response plan to disaster. Identify and develop a resource manual for the individual. Be sure that the manual is in an available format.

Multiple-Choice Questions

1. Which of the following is helpful in meeting the communication needs of persons with and without disabilities before and after a disaster?
   (a) Social protocol
   (b) Universal design

    (c) Blanket communication

    (d) Dispatch radio

2. Which of the following is the focus of the National Disaster Recovery Framework?
   - (a) How to best restore, develop, and revitalize the community to build resilience
   - (b) How best to provide services in a cost-effective manner
   - (c) How best to amend the Architectural Barriers Act of 1968
   - (d) How best to require manufacturing centers to supplement disaster recovery

3. Which of the following is based on tiered response, scalable, flexible, and collaborative effort through unified command and readiness to act?
   - (a) National Disaster Recovery Framework
   - (b) Red Cross
   - (c) National Response Framework
   - (d) National Forrest Alliance

4. Which of the following affects the capacity to survive and recover from the effects of a natural disaster?
   - (a) Physical magnitude of the disaster
   - (b) Socioeconomic condition of individuals or social groups
   - (c) Poverty
   - (d) All of the above
   - (e) None of the above

5. Illnesses occurring in the initial wave evolve into _____ during the recovery phase of a disaster.
   - (a) Chronic and disabilities
   - (b) Mental and dissolution conditions
   - (c) Acute and chronic conditions
   - (d) Transitory and disabilities

6. Which of the following is a presumption about people with disabilities' ability to respond to the challenges of disaster recovery?
   - (a) Having the experience of adjusting and adapting to the unique circumstances and needs caused by their particular situation, they often are depleted and cannot adapt these coping skills and strategies to respond to disaster recovery.

   - (b) Having the experience of adjusting and adapting to the unique circumstances and needs caused by their particular situation, they can often adapt these coping skills and strategies to respond to disaster.
   - (c) Having been protected from adversities in life and discrimination because of their disability, they cannot adjust and cope with disaster recovery.
   - (d) Having been emotionally challenged and having to adjust to a lack of accommodation, they choose not to exhibit resilience in response to recovery.

7. Which of the following is most likely to present barriers to people with disabilities who did not find their condition to be particularly disabling prior to a disaster but more so after a disaster?
   - (a) Destruction of infrastructure
   - (b) Loss of federal aid
   - (c) A roaming counselor
   - (d) Getting overwhelmed

8. Which of the following is designed to address incident-specific stress reactions rather than ongoing or developmental mental health needs?
   - (a) Traditional mental health counseling
   - (b) Rehabilitation counseling
   - (c) Disaster crisis counseling
   - (d) Cultural competence counseling

9. Which of the following organizations require counselor education programs to offer coursework on understanding response at crisis, disaster, and trauma-causing events?
   - (a) Council or Rehabilitation Education
   - (b) National Rehabilitation Association
   - (c) American Association on Disaster Preparedness
   - (d) Council for Accreditation of Counseling and Related Educational Programs

10. Which of the following best describes the recovery process from disaster in rural areas?
   - (a) Independent
   - (b) Resilient
   - (c) Rehabilitative
   - (d) Interdependent

Key

1. – B
2. – A
3. – C
4. – D
5. – C
6. – B
7. – A
8. – C
9. – D
10. – D

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