Vicarious Traumatization: Potential Hazards and Interventions for Disaster and Trauma Workers

Kathleen M. Palm, PhD;[1] Melissa A. Polusny, PhD;[2] Victoria M. Follette, PhD[3]

1. Brown Medical School and Butler Hospital, Providence, RI, USA
2. Minneapolis Veterans Administration Medical Center and University of Minnesota Medical School, Minneapolis, MN, USA
3. University of Nevada, Reno, Nevada, USA

Correspondence:
Kathleen Palm, PhD
Addictions Research
Butler Hospital
345 Blackstone Blvd
Providence, RI 02906 USA
E-mail: Kathleen_Palm@brown.edu

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Abbreviations:
PTSD = post-traumatic stress disorder
CISD = Critical Incident Stress Debriefing
WTC = World Trade Center

Abstract
Disaster and trauma workers often disregard their own reactions and needs when focusing on caring for those directly exposed to traumatic events. This article discusses the concept of vicarious traumatization, a form of post-traumatic stress response sometimes experienced by those who indirectly are exposed to traumatic events. It includes an examination of how vicarious trauma reactions are experienced across different professions, and suggestions on how to limit or prevent vicarious traumatization. The authors review self-care strategies as well as training and organizational considerations that may be beneficial for individuals and organizations to address.

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Introduction

Terrorism, natural disasters, war-related combat, and other large-scale traumatic events have led to an increased interest in identifying risk factors and developing effective treatment for post-traumatic stress reactions. While there has been a great deal of research on post-traumatic stress disorder (PTSD) among trauma survivors, few researchers have examined the effects that traumatic events have on people who are indirectly exposed. Although studies suggest that physical proximity to traumatic events is related to a greater likelihood of experiencing traumatic symptomology,[1,2] people who do not experience the event directly also may report stress reactions.[3–5] This phenomenon has been referred to in the trauma literature as "vicarious traumatization," "secondary traumatization," or "compassion fatigue." While there has been some debate about how these concepts differ,[6] for the purposes of this paper, the term vicarious traumatization is used to refer to post-traumatic stress reactions experienced by those who are indirectly exposed to traumatic events.

Vicarious trauma reactions may include intrusive imagery and thoughts, avoidance and emotional numbing, hyper-arousal symptoms, somatization, and physical and alcohol use problems similar to those experienced by direct trauma survivors.[7,8] Further, working with trauma survivors may lead to changes in self-identity, world-view, spirituality, and general psychological functioning.[9] It has been suggested that trauma workers may experience a disruption in major beliefs regarding safety and personal vulnerability, benevolence of the world, and feelings of powerlessness.[10] Consequently, the way these individuals make sense of or find meaning in the world may be altered. People who may experience indirect effects of disasters include family, friends, neighbors, work colleagues, and professionals who assist the primary vic-

tims.[11] In addition, technological advancements that have allowed for extensive media coverage of disasters, war, and other potentially traumatic events also have exposed media specialists and large numbers of the general population repeatedly to vivid images of life-threatening and horrific events, potentially resulting in negative emotional consequences for many.

While there has been much discussion in the literature about vicarious traumatization, a great deal of this material has been anecdotal and based on few empirical studies.[12] The extent to which vicarious trauma reactions interfere with general functioning has not been determined, and the empirical evidence supporting the phenomenon of vicarious trauma has been inconsistent.[12] The findings are mixed in regard to the prevalence and severity of vicarious trauma reactions among disaster workers, the predictors of distress, and individual and organizational risk factors; hence, the implications for prevention and treatment also are unclear. In this paper, we review representative findings and present suggestions on how to limit the potential hazards of trauma work, based on the current state of the literature.

Impact of Indirect Trauma Exposure on Professionals

There are a number of occupations that may be particularly affected by vicarious or indirect trauma. Pearlman and Saakvitne suggested that indirect trauma reactions are more likely among those whose job duties require an empathic interaction with trauma survivors.[13] Some of these professionals include healthcare providers, emergency service personnel, journalists, and other media specialists involved in mass communication.

Disaster Professionals

Many people in different professional areas care for the immediate and long-term needs of disaster victims, including physicians, nurses, mental healthcare providers, and emergency response personnel (i.e., police officers, firefighters, paramedics). While individuals in these occupations have focused a great deal of their attention on meeting the needs of trauma survivors, the personal psychological risks also are significant and should be addressed.

Healthcare Providers

Empirical research, while somewhat limited, suggests that adaptation to traumatic material depends on the interaction between the characteristics of the situation and the characteristics of the individual. The former includes listening to descriptions of graphic details of the event, personal event-related loss, and consecutive interactions with trauma survivors.[13–15] Some individual characteristics that influence adaptation include the efficacy of coping skills, current stress, and physical and mental health. This interaction is important to consider, given that in most disasters, many people have been directly affected by one event. Not only will professionals have to work with a greater number of traumatized individuals than before the current traumatic event, but they also may be involved in treating consecutive cases in which the same overall trauma content is dealt with.

The findings of research examining the relationship of healthcare providers' exposure to severe trauma cases and vicarious trauma reactions have been inconsistent. Some literature suggests that stressors related to disaster and trauma work (i.e., loss of friends or family and fear for personal safety) increase disaster professionals' vulnerability to psychological and emotional distress, which also may affect their professional work. Other research suggests that disaster workers, especially those who are involved in rescue work, are well-prepared and experienced, and may be quite resilient to indirect trauma effects.[16]

Other examples of inconsistencies in the literature include findings that indicate no significant relationship exists between psychological distress and the number of trauma survivors in individual professional's caseloads.[15,17] However, other studies have found the opposite—the number of trauma survivors treated is associated with increased reported distress by mental health professionals.[18–20]

Eidelson and colleagues surveyed 592 mental health professionals who have practices at varying distances from Ground Zero, the site of the 11 September 2001 World Trade Center (WTC) terrorist attacks.[21] Proximity to Ground Zero was associated with increased work demands, changes in personal life, and work-related stress. On the other hand, previous experience working with trauma survivors seems to have been a protective factor against developing vicarious trauma reactions. Mental health practitioners with fewer years of experience were more likely to report increased work-related stress. This latter finding is consistent with Pearlman and MacIan's research on vicarious traumatization that indicated that trauma therapists with less experience, reported greater disruptions in self-trust, self-intimacy, self-esteem, and overall distress.[22] Interestingly, Eidelson and colleagues found that participation in volunteer activities was a significant predictor of positive feelings in working with disaster victims.[21] Anecdotal reports of respondents suggest that these positive attitudes were related to the therapists feeling a greater sense of purpose in their activities, perhaps similar to their motivations for engaging in volunteer work.

Emergency Service Personnel

Emergency services personnel often are directly and indirectly exposed to disasters. As might be expected, research has documented that the prevalence of post-disaster psychiatric disorders is lower among those indirectly exposed to disaster compared to those directly exposed to the same disaster.[23] Two years after the Oklahoma City bombing, Tucker and colleagues surveyed body handlers involved in the aftermath, including medical examiners, pathology residents, dental residents, and students.[23] They found higher rates of alcohol-use disorders among body handlers (25%) compared to direct trauma victims (10%). These relatively higher rates of alcohol abuse/dependence among disaster personnel do not appear to have been due to increased alcohol use following bombing-related work; rather, the data suggest that rescue workers may be more likely to cope with occupational stressors in general through alcohol use. Although most of these particular disaster workers showed

emotional resiliency and reported low levels of symptoms two years after the disaster, increased alcohol use was associated with higher post-traumatic stress and depressive symptoms.[23] Other studies suggest that emergency workers are at risk for developing post-traumatic stress reactions and other psychiatric symptoms (i.e., depression), even if they have not directly experienced major disasters.[24,25]

Clohessy and Ehlers surveyed 56 paramedics and ambulance technicians regarding their exposure to traumatic events and post-traumatic stress reactions.[24] Although these individuals did not directly experience major events, 21% met symptom criteria for a diagnosis of post-traumatic stress disorder. Potentially traumatic incidents that were rated as most stressful by participants were dealing with cot death, dealing with incidents involving children, relatives of patients, and burn patients. The most frequently reported symptoms were intrusive thoughts about the event, irritability, sleep disturbance, and detachment from others. In addition, work conditions, such as shift work, false alarms, and unpredictability, contributed to the participants' reports of distress. In a similar study, Van der Ploeg and Kleber assessed psychological distress in ambulance workers.[25] Of the 187 participants who completed the questionnaires, 85% had responded to one or more traumatic incidents within the past five years; 12% of this subsample indicated experiencing clinical levels of post-traumatic stress symptoms. Further, compared to a reference group, the ambulance workers were more likely to report greater fatigue and risk factors associated with burnout.

Journalists

Anecdotal reports and surveys of journalists suggest that this group and other mass media personnel frequently experience distress following intense, trauma-related assignments.[26] Many correspondents, cameramen, and photojournalists become first-responders, like police and firefighters, when they venture into combat zones and disaster areas and witness or directly experience traumatic events. Journalists' exposure to traumatic material may be complicated further by conducting interviews with victims, witnessing the aftermath of horrific events, and the limited time they may have to process emotional reactions between the interviews and writing their news stories.

Despite the inherent risks involved in this profession, there only have been two published studies that assessed the psychological effects of journalists' direct and indirect exposure to such traumatic events. Feinstein, Owen and Blair surveyed 140 war journalists and a comparison group of 107 journalists who never had covered war.[27] War journalists reported significantly greater levels of PTSD and depressive symptoms compared to their peers, and had lifetime prevalence rates of PTSD similar to PTSD rates found in combat veterans. In addition, war journalists reported drinking excessively, consuming nearly 2–3 times more alcohol weekly than did non-war journalists. However, they were no more likely to receive psychiatric help than were the non-war journalists. In a recently published study of 906 American newspaper journalists, Pyevich, Newman, and Daleiden found that greater work-related trauma exposure, such as witnessing or covering stories about traumatic events, was significantly associated with PTSD symptoms, even after accounting for personal exposure to other traumatic situations.[28] Moreover, journalists with more negative cognitive beliefs (e.g., beliefs regarding the benevolence of the world, meaningfulness of the world, perceived personal invulnerability) tended to experience more work-related PTSD symptoms.

Researchers have begun to study the impact of media coverage of disasters on vicarious traumatization in the general population. These findings suggest that television coverage of traumatic events can be a trigger of traumatic memories, reactivate PTSD symptoms in veterans, and elicit immediate physiological arousal among those who have experienced individual traumatic events such as motor vehicle accidents or assault.[3,29] Therefore, it is reasonable to extrapolate that media specialists who report on the aftermath of disasters and mass trauma may be at significant risk of experiencing vicarious traumatization.

Suggestions for Limiting Vicarious Trauma Reactions

In order to ensure effective response to and care for disaster survivors, it is important to establish conditions that will enhance personal and occupational functioning among those who are indirectly exposed to trauma through their occupations. However, focusing exclusively on reducing an individual's trauma responses misses the greater scope of the problem.[30] Effective service delivery not only should include individual but also organizational considerations.

Disaster Professionals—Individual Considerations

Some disaster workers and healthcare professionals may be overwhelmed by their own personal responses to disaster in addition to the accounts reported by their clients and patients. When there is insufficient physical or psychological distance from the trauma, there also is increased risk for negative outcomes. However, there are naturally occurring strategies that individuals can use for themselves and others in order to cope more effectively; for example, spending time with other people, asking for support, and engaging in activities that provide a sense of purpose. Moreover, it is important that disaster workers and healthcare providers attend to their personal needs in order to have the physical and psychological energy to work more effectively with others. These significant personal factors include physical health, balance, social support, and acceptance.

Maintaining a balance between the professional, physical, and emotional aspects of living is important for everyone.[31,32] This balance can be fostered by attending to the non-professional parts of one's life (i.e., role as parent, partner, student, gardener, hiker, runner, artist, etc.). Paying attention to these multiple dimensions may be beneficial in several ways, including the fostering of engagement in pleasant life activities, and connection with social support networks. The therapy outcome literature suggests that these two factors are important treatment components for alleviating depression,[33] and this may well generalize to treatment for trauma exposure.[34]

Maintaining balance as much as is possible in the work environment also is an important consideration.[15] For example, therapists working with disaster survivors should

consider ways to provide more balance at work by developing a caseload of clients with different types of problems; working with populations other than trauma survivors; limiting caseloads; avoiding the scheduling of difficult clients one after another; scheduling breaks during the day, and finding opportunities to work with colleagues. Additional changes to consider include attending support groups, taking vacation time, identifying personal limits, and talking to co-workers. Disaster workers who are unable to communicate with co-workers about their reactions to various difficult situations may have more difficulty seeking support, and therefore, be at increased risk of experiencing feelings of isolation. Related findings by Van der Ploeg and Kleber indicated that poor communication with co-workers was predictive of ambulance worker's post-traumatic responses one year after the event.[25]

Despite efforts to manage stress at work, there are times when the demands of the emergency situation will not allow for any real balance at work. For example, immediately following the terrorist attacks of 11 September, all emergency care providers worked long shifts with little or no opportunity to escape from the Ground Zero site. Therefore, when there is a break in the work schedule, general care strategies are extremely important. Some suggestions that are provided to trauma survivors seem reasonable for disaster professionals as well. Adequate social support outside of the work environment is an important aspect of self-care for disaster professionals,[20,35,36] and feelings of connection in both professional and personal contexts may help them meet their own needs more effectively. Therefore, it seems advisable for therapists to spend time with family, friends, religious/spiritual groups, and/or other organizations in order to bolster and benefit from the natural support systems present in their environments.

Emotional distress is a natural and understandable outcome of working with those who have survived horrifying events. Accepting these responses as "normal" allows for the opportunity to explore these reactions without blame, shame, or pathologizing. However, feelings of shame, anger, and sadness are not necessarily problems. Rather, it is the struggle to deal with these experiences that may lead to personal complications.[37] Avoiding these issues may lead to further isolation, doubt, shame, and ineffective behaviors (e.g., substance use, aggression, self-harm). The literature suggests that the likelihood of experiencing high levels of PTSD symptoms decreases as a function of using acceptance as a coping strategy.[38]

People may differ in their resiliency and the extent to which indirect exposure to traumatic material leads to vicarious traumatic stress responses. However, a useful preventive strategy may be to limit unnecessary exposure to further traumatic material; for example, decreasing repeated television viewing of disastrous events. Some additional suggestions include limiting television viewing before sleeping, and reading news media that may not be as graphic in communications about the disaster (e.g., newspaper or journal articles).[39]

Disaster Professionals—Organizational Considerations

It often is possible to make structural changes at the organizational level such that the risk of vicarious traumatization reactions amongst individuals is decreased, in part by making resources for coping more readily available. Changes that can be made at this level include providing appropriate training, ensuring manageable caseloads, and having adequate consultation opportunities available for difficult cases the healthcare provider is treating. There are several organizational resources that decrease the likelihood of negative psychological responses from working with trauma survivors. Some examples include: access to continuing education; fostering a respectful and supportive environment; encouraging vacations; and offering community support networks for disaster workers and healthcare providers.[31]

Efforts to improve work environments can be made within organizations to limit the potential of indirect trauma reactions among disaster workers. According to reports by disaster workers, factors related to organizational setting, including lack of social support from co-workers, lack of support from supervisors, and poor communication, were important predictors of vicarious traumatization, burnout symptoms, and fatigue.[24]

Consistent supervision of cases and consultation should be a regular part of the healthcare provider's work.[18,40] In our view, organizations have the responsibility to create an environment that supports the pursuit of on-going learning and consultation. Mental health professionals should be encouraged to seek training in empirically supported treatments for traumatic stress and related problems. An outside consultant may be invited to provide in-service training in the delivery of treatment services to trauma survivors, as well as discuss the indirect effects of working in trauma areas. In the wake of a large-scale disaster, it is possible that a significant percentage of staff may experience trauma symptoms, and therefore, outside resources may be better suited to provide needed case supervision. Professional, organizational, and personal strategies for self-care also can be discussed in the case-supervision context.

Journalists and Other Mass Communication Specialists—Individual Considerations

Similar to other personnel whose occupations require that they respond to disasters and care for trauma victims, journalists and other media specialists likely will benefit from the self-care strategies discussed above. However, unlike healthcare providers who often have received formalized education and training in the detection and treatment of traumatic stress, mass-media specialists may have little knowledge or understanding of the psychological impact of exposure to traumatic events. As a result, they may be less able to identify problematic coping strategies that may exacerbate their distress. Therefore, journalists and other mass communications professionals should be provided with information about traumatic stress reactions, effective coping, and possible interventions. Specifically, they should be provided with information that will help them to utilize their natural social support systems.

Mass-media specialists who develop work-related, post-traumatic stress disorder (PTSD) may benefit from empir-

ically validated treatments for PTSD; however, further research is needed to explore how such interventions can be best modified to most effectively help this particular group. Brief interventions, such as critical incident stress debriefing (CISD), have been developed and applied with other first responders, i.e., fire fighters, police. These interventions have been controversial and possibly may be more iatrogenic than beneficial. Given what we know about brief interventions with other first responders,[41] care should be taken to develop and test effective interventions for journalists.

Journalists and Other Mass Communication Specialists—Organizational Considerations

Emerging data on the psychological hazards experienced by journalists in covering traumatic events should be of serious concern to news organizations. Behaviors such as alcohol abuse, that may function to temporarily lessen stress responses, can significantly reduce one's quality of life and may result in chronic impairment. Most disaster professionals, especially mental health workers, have some knowledge and training related to traumatic stress. The extensive training of mental health professionals in diagnosis and treatment of psychological problems as well as the increased likelihood that mental health professionals have participated in their own personal therapy,[42] may better prepare these particular individuals for the psychological hazards of trauma-related work. Journalists, on the other hand, may enter into assignments to cover traumatic life events with little or no training or understanding of the hazards they face. Journalism and mass-communication programs should incorporate information about the growing evidence of the potential psychological hazards of certain types of journalistic work into their curricula, and should disseminate basic information about traumatic stress responses and preventive self-care.

It would be highly beneficial if news organizations worked to create an atmosphere in which mass-communication specialists can freely discuss their responses to work assignments without fear of being passed over for other assignments. Access to appropriate treatment of post-traumatic stress responses should be made available and encouraged, again, without negative consequences to those distressed. While some extended assignments may result in repeated indirect and direct exposure to traumatic situations, it may be useful for news organizations to consider ways in which work assignments can be varied to include correspondent work that does not involve traumatic situations.

Conclusions

At an individual and at a societal level, there has been a significant shift in our sense of safety in the world. While people always have been aware of the dangers inherent in life, through wars and natural disasters, several factors have enhanced our sense of vulnerability. Technology most certainly is at the core of this shift on many levels. Advances in our media technology allow for instantaneous coverage of terrifying events around the world. Beginning with coverage of the Vietnam War, horrific events involving war and other disasters were brought into our homes with the evening news. Over time, the intensity of this media coverage has escalated, with journalists reporting from the front, embedded with the troops they are covering. Not only is the reporting nearer in proximity to the event (both in time and space), images are repeated over and over in the television and print media. Individuals who lived through 11 September 2001 never will forget the image of the planes flying into the WTC towers. This intensity of media coverage combined with many other significant tragedies, for example, the Challenger and Columbia space shuttle catastrophes, multiple wars, Hurricane Andrew, and numerous other massive natural disasters, have increased individuals' contact with the fragility of life and a sense of increased vulnerability in the presence of so many dangers. We have created a world in which trauma has become commonplace; however, we believe that there are positive actions that can be taken. We work within a number of imbedded systems, and there are several points of possible intervention. Many professionals will be brought into increased contact with traumatic material simply as a function of their jobs. Healthcare workers, rescue personnel, firefighters and police, mass-media specialists, and many others will be involved regularly in experiences that are painful and traumatic. For these professionals, there should be regular training on general strategies for dealing with trauma, including normalizing responses to these abnormal situations. Organizational structure should include appropriate supervision, case management, and opportunities for professional support. Equally importantly, we should not fail to emphasize that natural forms of support through friends, family, and spiritual groups have been found to provide protection from long-term trauma reactions.

Professional training that addresses the broader issues involved in working with trauma also is important. Additionally, we would argue that empowerment of trauma workers to advocate for survivors and work on relevant policy issues can have a positive impact. As a society, we need to move forward, identifying areas for both acceptance and change. Whatever our professional roles, we can live lives that affirm values of compassion, hope, and support. As Margaret Mead stated so eloquently, "Never doubt that a small group of committed people can change the world. It is the only thing that ever has."

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