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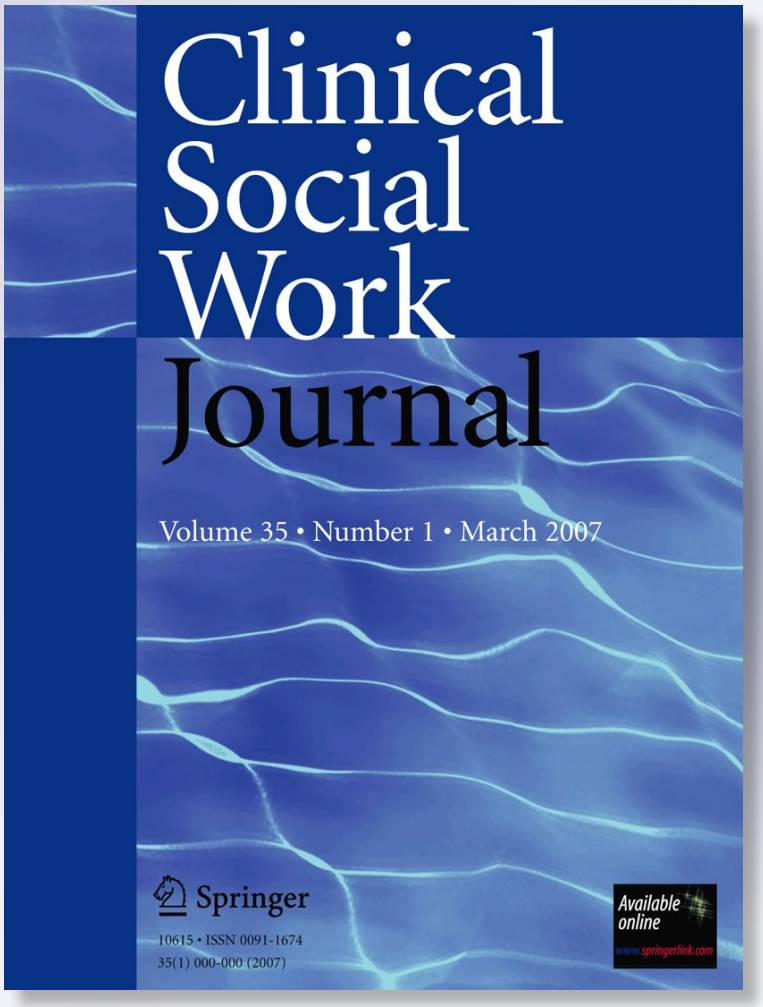

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ORIGINAL PAPER

The Ripple Effect: Lessons Learned About Secondary Traumatic Stress Among Clinicians Responding to the September 11th Terrorist Attacks

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Abstract Secondary Traumatic Stress (STS) symptoms experienced by mental health clinicians who treated clients for issues related to the terrorist attacks of 9/11 were intense and unprecedented. An exploratory study, using qualitative techniques as the primary information gathering method, was conducted to gain a better understanding about "indirect" exposure to terrorism. Twenty-six mental health clinicians participated in this research effort. As part of this study, questions regarding STS were explored. STS levels among clinicians who provided care to victims of 9/11 were high 30 months after the attacks. Most clinicians lacked experience providing disaster relief mental health care. Availability of supervision and agency support was described as "weak;" however, peer support was deemed helpful. Over the past decade, progress has been made in addressing STS issues. Implications are included for social work practice, disaster mental health administration, funding sources and policy. Recommendations for future research are identified.

Keywords Secondary traumatic stress · Terrorist attacks of 9/11 · Shared traumatic reality · Disaster mental health · Indirect exposure · Ripple effect

A decade has passed since the terrorist attacks of September 11, 2001, that traumatized many throughout the nation and produced serious mental health issues for many residents in New York City (NYC). Social workers and others in the NYC mental health community rallied to help those in need. However, those with direct exposure are not the only victims of traumatic stress. Victimization has a "ripple effect," spreading out to all those with whom they have intimate contact (Remer and Ferguson 1995). The impact of exposure to others' pain and suffering must be realized. As a result of indirect exposure to the specific traumatic occurrence, via close contact with the survivor, individuals may experience similar symptoms as the survivor. This process has been called Secondary Traumatic Stress (STS) or Compassion Fatigue (Figley 1995a).

It is important to study STS among mental health clinicians working with clients who had 9/11-related issues. For many mental health professionals, this work was especially complicated. Clinicians had been exposed to the same disaster as their clients, a shared traumatic reality. For many, the impact of hearing the clients' stories impacted their own stress levels and concerns about the terrorist attacks, heightening their STS reactions beyond the effect of either factor taken alone. This study was among the first to qualitatively explore the STS reactions of clinicians involved in the 9/11 recovery effort. Over the past 10 years, mental health professionals have rallied to bring STS and Shared Traumatic Reality to the forefront of discussion (Baum 2011a, b; Tosone et al. 2011). Trainings, conferences, and publications have been crucial in continuing the dialogue about the supports needed to better equip professionals should another terrorist attack or urban disaster occur.

Overview of Secondary Traumatic Stress

It is recognized that persons may manifest symptoms of Post Traumatic Stress Disorder (PTSD) through second-hand exposure to the trauma histories of others (Figley

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1995b). Such cases include Holocaust survivors and their children (Danieli 1985; Krystal 1978), intimates of rape victims (Kelly 1988), police officers (Piotrkowski and Telesco 2011), and mental health professionals who work with trauma survivors (Figley 1995a; Stamm 2002).

Literature generated from within the field of traumatology has also emphasized the potential for harm to therapists who specialize in trauma therapy. Some researchers refer to this aspect of the impact of therapeutic work as vicarious traumatization. Vicarious traumatization includes disruptions of self-capacities, beliefs, relationships, worldview and spirituality (Figley 1995a, b; Pearlman and MacIan 1995; Killian 2008). They are exposed to the stressors and psychic pains experienced by their clients, and carry the professional burden of being expected to remain open and available to their clients on an emotional level. This empathic involvement sets the stage for the potentially deleterious effects of therapy to impact the professional. These effects are cumulative and permanent, and evident in both a therapist's professional and personal life (Wilson and Raphael 1993; Argentero and Setti 2011).

Figley (1995a, b) defines STS as the natural consequent behaviors and emotions resulting from knowing about a traumatizing event experienced by a significant other—the stress resulting from helping or wanting to help a traumatized or suffering person. In the process of learning about the client's trauma and trying to understand and identify with their experience, the therapist may actually experience emotions and other symptoms that are very similar to those of the victim.

Secondary traumatic stress reactions/symptoms have been categorized in three areas: indicators of psychological distress or dysfunction, changes in cognitive schema, and relational disturbances. Indications of psychological distress or dysfunction may include distressing emotions such as sadness, grief, depression, anxiety, horror, fear, rage, and shame (Dutton and Rubinstein 1995; Figley 1995b). Other indications of distress may include intrusive imagery, such as nightmares and flashbacks of images generated during and following the client's recounting of traumatic events (Herman 1992; McCann and Pearlman 1990). Numbing or avoidance of working with client's traumatic material may also occur (Dutton and Rubinstein 1995).

Cognitive shifts may result from STS. These include shifts in clinicians' beliefs, expectations, and assumptions. Dutton and Rubinstein (1995) note that therapists may find their cognitive schemas altered or disrupted by long-term exposure to the traumatic experiences of their clients, in the areas of trust, safety, power, or independence.

Relational disturbances, both personal and professional, are the final category of STS symptoms. Therapists' personal relationships may suffer due to increased stress, difficulty with trust and intimacy, or increased sensitivity to relationship dynamics that are similar to those being discussed by a trauma survivor (i.e., exploitation, abuse, violence). The clinician's response to the survivor client may be either over-identification or detachment, or vacillation between the two (Miller 2000; Dutton and Rubinstein 1995).

Individual, organizational, social, community, and traumatic event factors may either increase or decrease one's vulnerability to STS. They can include: history of psychiatric symptoms; demographic characteristics such as age and ethnicity; level of identification with the victim; organizational influences on the recognition of, and recovery from, on-the-job-trauma; social support networks; level of community response/support for the disaster recovery; and characteristics of the traumatic event (Beaton and Murphy 1995; Creamer and Liddle 2005). Disaster mental health workers may be at particularly high risk for STS (Argentero and Setti 2011; Naturale 2007; Pulido 2007). They can be in unfamiliar, sometimes dangerous settings and have to deal with an overwhelming number of clients and crisis issues (Miller 2000). STS is expected to be higher when disasters are low in predictability and high in destruction and duration of impact, as was 9/11. The fact that 9/11 was a deliberate act may also heighten the potential for STS (Pulido 2005).

Another construct that is important to review and relevant to this study is that of "shared trauma" or "shared traumatic reality." This refers to situations whereby the clinician, helper or first responder is exposed to the same disaster as those they were helping (Tosone et al. 2003, 2011; Baum 2010, 2011a). According to Baum (2011a) these situations are characterized by two components. The first is that the clinician and the client belong to the stricken community. The second is that the helping professional is doubly exposed to the disaster and therefore may experience both primary and secondary trauma due to their personal exposure and then the work with their client. As Tosone et al. (2011) convey, the terrorist attacks of 9/11 were a shared traumatic event for many of the clinicians involved in the recovery effort. This construct may enhance the field's understanding of the factors that contribute to a higher STS level in clinicians following a potentially traumatic event like a terrorist attack.

Method

Participants

Availability sampling was used to recruit participants. A letter describing the study was mailed to an extensive list of Executive Directors and Clinical Program Directors at social service, mental health, and government agencies; and to hospitals in NYC that participated in 9/11 relief

efforts. Recipients were asked to share the recruitment letter with their clinical staff. Eligibility to participate meant that individuals had to be *mental health clinicians* with *indirect exposure* who had engaged in 9/11- related therapeutic work with clients. The term "mental health clinician" encompassed Masters and Doctoral level therapists, social workers, psychologists, and psychiatrists. "Indirect exposure" was defined as not having been physically located below 14th Street in Greenwich Village, NYC on 9/11, and not having a family member or close friend harmed in the attack.

A demographic survey, administered before the one-on-one interview, was used to collect data on the respondents. Twenty-six clinicians ranging in age from 26 to 63 years participated in the study, of which 92% were female reflecting the constituency of the field. Slightly less than half the sample were of minority status; 58% were White, 19% were Latino, 15% were African–American, 4% West Indian, and 4% were bi-racial. Ten participants held a graduate degree in Social Work, eight had MSW degrees and had taken postgraduate courses in the social work field, and eight held a doctoral degree in either Social Welfare or Psychology. Nine participants had over 20 years of experience as mental health clinicians; eight had practiced between 10 and 20 years; three had practiced between 5 and 10 years; and six had practiced for 5 years or less. The majority had not participated in any support sessions following 9/11. Regarding other supports outside of work, 19 of the respondents reported they were not currently in therapy. Five reported that they were currently in therapy and one respondent reported being in therapy and using psychotropic medication. One respondent did not answer this question.

Materials and Procedure

Data were collected between February and June of 2004, using an in-depth, one-on-one interview. A field guide was developed for this purpose. Demographic information was collected by survey. The questions regarding STS were (a) "As a clinician, what was the extent of your work with clients impacted by 9/11?" (b) "How did working with these clients and their issues affect you?" and (c) "What types of supports were available to you through your job for handling 9/11-related stress?"

Each interview was tape-recorded. Verbatim transcriptions of all audiotaped interviews were produced. This resulted in manuscripts of approximately 14–17 single-spaced pages for each respondent. Technical procedures based on the methods of Miles and Huberman (1994) were utilized to analyze transcripts. Three types of coding methods were used—open, axial, and selective coding. Open coding is the process of breaking down, examining, comparing, conceptualizing and categorizing the data. This was followed by axial coding, a process whereby the codes were consolidated and evidence was located for core themes and constructed support in the data for them. Identifying multiple instances of empirical evidence strengthened the connection between a theme and the data. Finally, selective coding was the process of selecting the core category, systematically relating it to other categories, validating those relationships, and filling in categories that need further refinement and development (Strauss 1987). Once the researcher had an understanding about the main themes, categories and subcategories, a cross-case analysis of the data was completed. Approximately 1,100 passages from the transcripts were reviewed during the coding process. A comprehensive code sheet was constructed.

Results

For the construct of STS, the final coding categories were (a) types of problems encountered with 9/11 clients, (b) familiarity and comfort level with these problems, (c) biggest challenges faced with client work, (d) impact on the clinician, and (e) level of clinical support received during this period. This section presents the findings related to each of these five categories.

Working with 9/11 Clients: Types of Problems Encountered

The clinicians' experiences differed based on the type of 9/11-client. Some dealt directly with family members who had lost loved ones, other dealt with people who fled the burning towers, and some worked with individuals considered *indirectly* exposed, but were still fearful and symptomatic. Helping families through the ordeal of body part identification, procuring DNA samples, planning memorials or funerals without the family members' remains, and mass bereavement were some of the issues that faced the clinicians.

Clinicians who were stationed at Ground Zero and the Armory found that their experiences were quite intense and the problems they encountered extremely serious and stressful. Clinicians helped families when they had to identify the remains of their family members. They helped process DNA and legal paperwork for missing persons and wills.

> We were at the Armory. I had jobs like going through the body list and the names on the death list, helping families look for things. If there was a torso with a tattoo on it, did your loved one have a tattoo? What did it look like?

Several clinicians dealt with clients who received notice that human remains were identified long after 9/11 had passed. They expressed their own shock and amazement of

having to help a client deal with these heartbreaking, sometimes grotesque situations, usually after the client had come to terms with the tragedy and was trying to move on with their lives.

> I had one woman who had started to receive some body parts. I think that was one of the most horrific experiences for me… I met with the mother and she said that somebody had come to her door with no warning and she was told that a part of her husband's foot and a part of his arm were found, and she had a daughter, in the house. And these families were being asked to decide what they wanted to do with it. Now they had all had their memorial services. They had all done what they were going to do.

Others provided support to clients who had endured multiple losses. "One of my clients, not only did her brother die, but her two brother-in-laws…—they all died." Clinicians reported that they worked with clients that had fled the World Trade Center (WTC) towers or the financial district on 9/11. Another common complaint was their fear of being trapped in the subway system. Many of these clients were experiencing flashbacks, survivor guilt, or were tremendously fearful of returning to their jobs in the area. "The client's company did eventually go back to Manhattan. He resorted to drinking. When he went back on the day they relocated, he said that he could still hear the people … screaming."

Familiarity and Comfort Level: Disaster Work "New" Territory

For the majority of those interviewed, the types of problems encountered with clients were "new" territory. The majority (80%) was not trained in disaster mental health counseling and did not have prior experience handling the types of problems their clients brought to sessions. "This was a whole new set of issues. What do you say to someone that says to you 'I was trapped on the 50th floor' and was able to escape?" However, the clinicians appeared to be evenly divided regarding their ability to draw upon their past clinical expertise and training to provide counseling for these clients. A clinician with four decades of experience in traumatic grief counseling stated that her past work experience left her well prepared. "They are my conditions, you know so I almost feel like I've been in them." Some were comfortable providing services to clients with 9/11-related issues. "Luckily, I was trained well, so I knew how to counsel. You work as good as you train."

The other half of those interviewed reported that neither their prior clinical experience nor their previous training prepared them for the challenges that were presented to them. "No! I mean like I was straight out of my Masters!" They reported feeling under more pressure than usual and reported increased stress during these sessions. They reported that "it's sink or swim and I was determined to swim."

Biggest Challenge to the Clinician

Clinicians reported that as they continued to help clients with 9/11-related issues, their stories became more painful to hear. The cumulative effect of repeatedly listening to their clients' stories pushed some of them across the threshold to higher STS levels. Some had trouble distancing themselves from the scenarios that the client was reporting, or had similar fears about the terrorist attacks.

> Because you know in this business, I had to relive it, many, many times with my clients, when I wasn't ready to do that. So, it took like a kind of superhuman effort, to pull myself together to do this, for my clients. Going in and dealing with their issues while I was dealing with my own issues. You know, we all travel that same road; I wasn't much further along that road than they were. But I could never say, "Don't talk or enough, stop!" I wanted to though, I definitely wanted to.

One clinician shared the following story.

> One of my clients, a young man, wanted to pack up his family and leave the city and move to Canada. Now, really, on one hand I was thinking, this is avoidance, an overreaction. But on the other hand, I was thinking "who am I to tell him it's an overreaction? What about the Jews who fled when they heard of what Hitler was going to do? If they hadn't fled, they'd be dead. So, who am I to tell him that it's an over-reaction? He may in fact be the smart one. This increased my anxiety about my safety.

Impact on the Clinician

Many clinicians experienced intense and painful emotional reactions after learning of their clients' problems and when trying to provide intervention. About a third reported feeling angry and irritable both during and after the sessions. About half of those interviewed found processing the events of 9/11 extremely distressing and often wept. The emotional distress was evident as many cried during the interviews as they recalled their work. Handling children's distress seemed exceptionally provocative causing anguish for clinicians. One clinician was teary as she recalled how a child asked her to call a superhero to rescue his mother from the rubble of the smoldering towers.

> Some aspects of the work I'd like to forget cause [sic] it was really, really emotionally draining. Detaching myself, detaching myself, and staying focused and hearing their stories—like that little seven year-old

> boy…I was walking with him through the picture gallery and he showed me a picture of Superman. And I said "tell me about your picture." And he told me that he wants me to call Superman to go to fly to the building and pull his Mom out. Oh my God. I couldn't detach any longer. That killed me. He was around 7 years old—that killed me. I asked to be removed from there. That night I couldn't do any more interviews.

During the interviews, the clinicians described how they internalized the pain and suffering of their clients who had lost loved ones in the attack. About half expressed that they could not do enough for their clients and had anxiety about how they were "failing" them when the services they could provide did not meet their clients' needs. Undocumented clients presented with additional difficult challenges for clinicians. "This particular lady who lost her son, her only son and she didn't have anybody here [in the United States]. She was undocumented and she felt afraid of looking for services for fear of being deported. I wanted to do something more, but I couldn't. I was devastated."

Another respondent stated, "I used to go home carrying all of the details and all of their sorrow and all of their pain with me. I couldn't detach from the pain."

Several of the clinicians expressed how sad they felt doing this type of work. Many cried after seeing clients, some cried with the clients. "Now I remember my first home visit. We all just sat there and cried. I cried, and let the kids cry." Another stated, "I kind of take what happened to them, like when somebody died, and I imagine what that must feel like, and then it just makes me so sad. It was very draining, again, very sad, draining."

Several respondents reported they felt as if they were reexperiencing the trauma of 9/11 when their clients discussed their stories. This appeared to provoke intrusive STS symptoms in the clinicians.

> I found the images that my clients shared with me reverberating with me. That was pretty upsetting. The concrete gory details, reading about it in the paper was different from having an individual who was actually there telling you. This is what happened to me. I found it very painful and hard to assimilate. It was painful, very painful.

Another stated:

> Any reminder—I mean I was living in it. Everything made me think about it. Pictures about it just popped in. I do remember trying not to think about it, but it couldn't happen. I started to not talk to anybody when I went into stores. Because I could not bear to hear any more stories, so I really shut down. I could hear it in my office, but there I have a role, I can help somebody. I couldn't in public. I just stopped talking to people outside of work.

Several respondents also reported experiencing flashbacks of their clients' stories.

> I found that what was happening to me, I was having flashbacks. I was taking on a lot of what my clients were saying. For me it was like actually seeing what they were talking about, actually feeling like I was there, when really I wasn't.

Several respondents reported physical and mental exhaustion as the days stretched to months. A bone-aching tiredness permeated their systems. Just summoning the strength to drive home from work after draining days was difficult. "Tired, always tired, even if I got enough sleep… Tired all of the time. It went from your knees to your shoulders."

Several reported that their social life also suffered. "I think for that time period, I did not want to do anything socially. I was just too fatigued. I didn't have any energy." In contrast, some clinicians described feeling like they were in a constant state of arousal, another symptom of STS. They described a need to keep doing and doing for clients, but at their own expense.

> I don't know if it's because crisis throws me into a rescue mode that I feel other people's needs more…So, the more I feel someone else's needs, the more I respond to them. I was scheduling patients at 7 pm at night, which I never do. I guess I was really vulnerable. I was exhausted, I was drained, I was a wreck.

Others felt increased stress from "not being able to do it all." They found that they had to shortchange their normal penchant for expert work in order to meet the overwhelming demand for their services. This made them stressed and uncomfortable.

> I had 50 messages from clients and finding that I wasn't able to get back to people. It was terribly painful for me not to be able to do what I would typically do—return a call as soon as I could, or call someone back because they had sounded upset in the last call.

One clinician who was stationed at Ground Zero, spoke both of the intensity of the experience and the sense of commitment to the job at hand.

> Once you got down there, you were hooked and you couldn't give it up. Just like the police said they don't want to be pulled from there. There was a need you felt you had to be there and I think the need was to see it through. You know, you couldn't pull out. I couldn't remove myself.

Anger and frustration were emotions reported by half of the respondents. "I just felt angry, like there is nothing we can do for these people, nothing." One respondent reported that her anger "came out of nowhere" after 9/11 when she saw people enjoying themselves.

> I remember being on the West side and seeing all of these people at cafes and eating lunch and I thought, "What are they doing!" It was just weird, all of these people were just sitting there like drinking wine and eating—I had a very strange feeling, the anger, I almost felt like screaming at them "Don't you know what happened!" I don't know what that was about.

Clinicians reported that their emotions and symptoms were held inside until most of their disaster relief work was completed. They "didn't allow themselves to feel" until one or 2 years had passed. At that time they reported experiencing STS symptoms.

> I think then I had more of the grieving process and the sadness [after December 31, 2003]. I don't think I ever cried when it happened and then all of a sudden when it was like closing a chapter. It was like I had to deal with all of these feelings to close it with the chapter. I don't think I meant not to deal with them before. I think it was more like your professional self took over your personal self in the midst of the events.

Others commented, "I still am numb in one way." Or, "I felt like I had to keep my emotions in check all of the time. So, I think that what happened was that first of all, almost 3 years later, I'm just starting to allow myself to feel."

Clinical Support Needs and Issues

Symptoms of STS appeared to be either exacerbated or alleviated, based on the types of clinical support and supervision that clinicians received. The problems encountered by the clinicians were new to them. The majority reported that they needed additional support and supervision during this time. One clinician was upset with her agency's stance that mental health providers should be strong enough not to need additional support.

> Everybody was talking about the need to get this country running again and deal with all of this trauma. But no one was saying, "How are we going to help the clinicians process this traumatic event, and have someone to talk to, so that they can go out there and be effective." It was like we, as clinicians, didn't matter, because this is what we do. It was just, "go out there and do what you do." Basically that was what was said to us. "You are mental health providers. You are not supposed to fall apart." You should know better, this is your job.

When asked: "What supports were available to you through your job for handling 9/11 stress? Almost half of the clinicians responded "None." One reported, "Can you call it a support, when you are not allowed to talk about it? The party line was "business as usual."

Clinicians reported an increase in their stress levels due to what they perceived as a "lack of support" from their agencies, networks or profession in general. "No, there were no formal structured supports that helped me through the workplace" or "There was not much out there because everyone was scrambling. I wished there had been something."

As stated earlier, 50% of the respondents reported that there was no supervision or support offered to them. Approximately 25% of those interviewed reported that there were services available, but chose not to participate in them. They reported that they received e-mails, but did not open them; flyers that they received were not read. Crisis numbers were posted, but they did not utilize them. These methods did not meet the clinicians' needs. It appeared that the support was ineffectual at best. "I didn't open up any of the e-mails, though my boss made sure that our H.R. person sent us numbers of crisis help." Another noted, "They encouraged us to use our E.A.P. They did send us e-mails, but I didn't pay any attention. At that time I felt like I had to just deal with it myself." One clinician felt her participation in a support group would add to her stress level. "I'm not one of those people who runs around voicing fears. I would not go to a support group. Cause then I wouldn't have to deal with just my fears, but everybody else's. Spare me!"

Approximately 25% reported that clinical support was available and beneficial. It helped them by reducing their STS levels related to the 9/11 work.

> Well, we had the debriefings. Basically, at the end of the day, we would all get together and talk about our experiences of the day and how it affected us, what our goal plan was for tomorrow, what we were going to do for ourselves.

Having an employer or agency that was willing to accommodate a new set of clinician work needs was also mentioned as having a positive impact. Several clinicians reported that "flexibility" helped them continue to provide services when stress was at its height. Many clinicians worked much longer hours than usual and on weekends and had to juggle family needs as well. They expressed gratitude that their agencies gave them leeway. "Flexibility, if I needed to run across the bridge and go home and see the kids and come back, that was fine. The ability to send people home from work, when they had enough pressure for one day was helpful." "I had support in that I

could do what I wanted to do. There would be times when I would look at a staff member and say, "Okay, go home, you are getting burned out."

> Several of the clinicians went outside of their agencies to get support.
> Well there were some colleagues who had done disaster work, we all sought each other out. We all felt a certain level of responsibility on our shoulders, a heavy responsibility. We hadn't been in a kind of supportive context before, together, but there was something we just knew, we were sharing something very important together.

Discussion

Clinicians who worked with clients with 9/11-related issues experienced significant STS reactions. There are several factors specific to the 9/11 disaster that may help to explain the high levels of STS reported. Most important is the fact that both the client and the clinician shared the experience of 9/11. The majority of the clinicians reported that this shared traumatic reality heightened their own stress and anxiety. A common theme expressed was, "I was not much further along the road to recovery about 9/11 than my client."

The clinicians interviewed for this study expressed their surprise at the intensity of their STS reactions. They repeatedly stated "I had many more reactions that I expected." They were drained emotionally, physically and psychologically. Clinicians reported crying after sessions and feeling more anxious and distressed after sessions with 9/11 clients. Many reported having trouble detaching from their clients' pain and suffering. For many, these interviews, conducted several years after the attacks, served as the first time that they had discussed their 9/11 work and the stresses they encountered. This factor alone speaks volumes for the lack of support that they received while providing such intense clinical support for their clients.

There were many other factors that contributed to STS reactions. The effects of 9/11 were felt nationwide and there was exceptional potential for client traumatization. The event was unpredictable, sudden and uncontrollable. There was enormous damage and destruction in NYC. Further, the disaster was intentionally caused by humans. Numerous researchers and authors have claimed that the more human causation behind a disaster, the more pathogenic it seems to be in terms of psychiatric morbidity. These include acts of war, violence and terrorism. People were more likely to be impaired if they experienced mass violence rather than natural or technological disasters (Myers 2001; Norris et al. 2002; Myers and Wee 2005).

Another complicating factor was that many of the 9/11 clients' presenting problems were potentially more traumatic than the usual problems handled by these clinicians. Clients described seeing body parts of victims, receiving their loved ones body parts, fleeing from the burning WTC towers, their extreme fear of returning to the area, flashbacks of the event. Some of the clinicians themselves were directly involved in the initial recovery effort at Ground Zero and the Armory, heightening their exposure.

The results of this study indicate that there was an uneven pattern of organizational and professional support for clinicians. Surprisingly, a field that prides itself on and stresses the importance of clinical supervision was described as "weak." Several clinicians sought out their own professional support systems. They found it very helpful to meet with peers and colleagues to discuss client cases and to help recognize and deal with their own STS symptoms.

Very few of those interviewed utilized counseling or psychotropic medication to handle their stress, although some stated that it would have probably been helpful. Several were given hot line numbers or Employee Assistance Plan (EAP) information but did not avail themselves of these resources.

Limitations

Several aspects of the study limit its generalizability. First, the sampling method used is unlikely to produce a representative cross-section of the mental health clinician population. Second, the sample was small and females made up the majority (98%). However, this may reflect the much higher percentage of females in the mental health field. Third, the study was conducted more than 2 years post- 9/11, requiring retrospection during the interviews. Other "tragic" events such as the NYC black-out in 2003 or the war in Iraq may have impacted their recollection of the tragedy and/or their symptoms. The results have limited generalizability; instead, consistent with the exploratory purpose of the study, they yield questions and frameworks for future exploration.

Recommendations and Implications for Practice in 2011 and Beyond

This study holds particular relevance to the social work field, specifically for mental health professionals who will provide disaster mental health recovery services. The results shine a light on the critical need to develop training and expand support systems for clinicians in order to combat STS. A decade after 9/11, the field continues to build on the knowledge gained since this event. A set of recommendations is offered for clinicians providing disaster mental health services, especially those exposed simultaneously to the disaster.

First, it is important for mental health professionals and those involved in their training to recognize the impact that this challenging work has on individuals. Professional,

organizational, and personal standards to prevent and alleviate STS should be developed by the mental health field. Adequate supervision and support systems must be implemented for clinicians in disaster mental health. Debriefings, supervision, training and peer support have been shown to be effective methods to ameliorate stress symptoms from traumatic events and hasten recovery (Hernandez et al. 2010; Naturale 2007; Baum 2010). Clinicians who were able to receive these services, reported that they were beneficial, and that they appeared to help reduce their stress levels.

Secondly, the clinicians in this study expressed a desire for a central repository of training materials that they could readily access for response to future terrorist disasters. This should include information on dealing with client reactions, therapeutic interventions and referral sources. Clinicians expressed a desire for more training sessions and workshops dealing specifically with topics related to terrorist trauma. It should also include information for clinicians to prevent and manage STS reactions (Harrison and Westwood 2009; Naturale 2007). Currently, several NYC agencies, such as the Department of Health and Mental Hygiene's Medical Reserve Corps, have developed ongoing, structured training sessions for those who will be involved in future disaster response. These efforts must be supported by continued funding.

Third, supervisors should ensure that clinicians have a varied caseload and monitor the time that a clinician spends at the disaster site, or working with disaster victims. This may also be helpful to offset STS reactions. Perhaps, if supervisors or agency heads had a greater recognition and understanding of STS risks involved for clinicians when treating traumatized clients, there would be a more supportive and encouraging milieu for clinicians to utilize therapeutic support for themselves. Administrators should attend training on managing and preventing STS and take appropriate organizational action to boost support for their clinical staff (Tosone et al. 2011). Along these lines, since 9/11, the construct of shared traumatic reality is making strong inroads into disaster recovery efforts (Baum 2010, 2011b; Tosone et al. 2003, 2011). The double exposure level encountered by the clinicians must be taken into account when the clinician is both living and working in the impacted area. Adequate supports to help them such as debriefings, supervision and counseling can be expanded to include how the feelings and experiences that arise from their double exposure (Baum 2011a).

Fourth, follow-up care for disaster mental health workers must be considered a priority. Many clinicians reported they began to experience STS reactions 30 months following the attacks. Unfortunately, this was often the time when their contracts to provide services ended. Unemployed, they were left to deal with their reactions on their own, without any organizational or professional support. Follow-up programs and activities targeted for these clinicians at regular monthly intervals following the end of their contract period should be integrated into the overall framework of terrorist disaster recovery plans. This programming should include: an overview of the symptoms of STS; why disaster recovery clinicians experience STS; examples of 9/11 STS reactions; the differences between STS and "Burnout"; a self report measure for STS, Burnout and work satisfaction; and the various types of interventions that can be put in place to prevent and manage STS, an unavoidable, but manageable, aspect of disaster trauma recovery work (Pulido 2005).

Finally, several researchers, (Bauwens and Tosone 2010; Harrison and Westwood 2009) have reported on the positive changes that working with survivors of trauma can produce for the clinician. They include positive changes within the therapeutic relationship, increased compassion and connectedness with clients; developing mindful self-awareness, consciously expanding perspective to embrace complexity; active optimism; maintaining clear boundaries and holistic self-care. Tosone et al. (2010) also offer insight into factors that bolster resiliency among trauma recovery clinicians. There is much to be gained from integrating these findings into training and practice.

Future Research

Based on the results of this study, further research should include varying samples such as clinicians working in different types of disaster relief efforts, or a higher number of male clinicians. Another area with little research is the extent and impact of non-profit and government agencies support of their clinicians involved in disaster recovery efforts (i.e., types of assignments, length and duration of tours of duty, debriefing frequency, and emphasis on preventing STS). Aspects of supervision and what clinicians deem helpful would also be enlightening to explore.

Although beyond the scope of this study, it would be interesting to compare the type of STS reactions of clinicians treating different types of clients, such as veterans, survivors of domestic violence, crime victims and other groups of trauma survivors with those who treated 9/11 clients.

Summary

This study highlighted the multi-faceted nature of STS exposure through work with clients. Several suggestions were made for the field. The presence of effective, clinical support systems are essential to help clinicians following a terrorist attack, and more broadly, any community disaster. The stress of providing services to clients while dealing with one's own reactions should not be underestimated. For the majority of these clinicians, these types of problems were new. The needs of the clients were significant and complicated. It was heroic—but difficult work.

References

Argentero, P., & Setti, I. (2011). Engagement and vicarious tramatization in rescue workers. *International Archives of Occupational Environmental Health, 84*, 67–75.

Baum, N. (2010). Shared traumatic reality in communal disasters: Toward a conceptualization. *Psychotherapy, Research, Practice, Training, 47*(2), 249–259.

Baum, N. (2011a). Emergency routine: The experience of professionals in a shared traumatic reality of war. *British Journal of Social Work,* 1–19. doi:10.1093/bjsw/bcr032.

Baum, N. (2011b). Trap of conflicting needs: Helping professionals in the wake of a shared traumatic reality. *Clinical Social Work Journal.* Published online: 10 May 2011.

Bauwens, J., & Tosone, C. (2010). Professional posttraumatic growth after a shared traumatic experience: Manhattan clinicians' perspectives on post-9/11 practice. *Journal of Loss and Trauma, 15*(6), 489–517.

Beaton, R. D., & Murphy, S. A. (1995). Working with people in crisis: Research implications. In C. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 51–81). New York, NY: Brunner-Routledge.

Creamer, T. L., & Liddle, B. J. (2005). Secondary traumatic stress among disaster mental health workers responding to the September 11 attacks. *Journal of Traumatic Stress, 18*(1), 89–96.

Danieli, Y. (1985). The treatment and prevention of long-term effects and intergenerational transmission of victimization: A lesson from Holocaust survivors and their children. In C. R. Figley (Ed.), *Trauma and its wake* (pp. 278–294). New York, NY: Brunner/Mazel.

Dutton, M. A., & Rubinstein, F. L. (1995). Working with people with PTSD: Research implications. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized* (pp. 82–100). New York, NY: Brunner/Mazel.

Figley, C. (1995a). *Compassion fatigue: Coping with secondary traumatic stress disorder in those who treat the traumatized*. New York, NY: Brunner/Mazel.

Figley, C. (1995b). Compassion fatigue: Toward a new understanding of the costs of caring. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self-care issues for clinicians, researchers, and educators* (pp. 3–28). Lutherville, MD: Sidran Press.

Harrison, R. L., & Westwood, M. J. (2009). Preventing vicarious traumatization of mental health therapists: Identifying protective practices. *Psychotherapy: Theory, Research, 46*(2), 203–219.

Herman, J. L. (1992). *Trauma and recovery*. New York, NY: Basic Books.

Hernandez, P., Engstrom, D., & Gangsei, D. (2010). Exploring the impact of trauma on therapists: Vicarious resilience and related concepts in training. *Journal of Systemic Therapies, 29*(1), 67–83.

Kelly, L. (1988). *Surviving sexual violence*. Minneapolis: University of Minnesota Press.

Killian, K. D. (2008). Helping till it hurts? A multimethod study of compassion fatigue, burnout, and self-care in clinicians working with trauma survivors. *Traumatology, 14*(2), 32–44.

Krystal, L. (1978). Bruxism: An anxiety response to environmental stress. In C. D. Spielberger & I. G. Sarason (Eds.), *Stress and anxiety* (pp. 45–58). New York, NY: Wiley.

McCann, L., & Pearlman, L. A. (1990). *Psychological trauma and the adult survivor: Theory, therapy and transformation*. New York, NY: Brunner/Mazel.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis*. Thousand Oaks, CA: Sage Pub.

Miller, L. (2000). Traumatized psychotherapists. In F. M. Dattilio & A. Freeman (Eds.), *Cognitive-behavioral strategies in crisis intervention* (2nd ed., pp. 429–445). New York, NY: The Guilford Press.

Myers, D. (2001). Weapons of mass destruction and terrorism: Mental health consequences and implications for planning and training. In *The ripple effect from ground zero: Coping with mental health needs in time of tragedy and terror.* New York: American Red Cross.

Myers, D., & Wee, D. (2005). *Disaster mental health services.* Routledge, Taylor & Francis Group: New York, NY.

Naturale, A. (2007). Secondary traumatic stress in social workers: Reports from the field. *Clinical Social Work Journal, 35*, 173–181.

Norris, F. H., Friedman, M. J., & Watson, P. J. (2002). 60,000 Disaster victims speak: Part II. Summary and implications of the disaster mental health research. *Psychiatry, 65*(3), 240–260.

Pearlman, L. A., & MacIan, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice, 26*(6), 558–565.

Piotrkowski, C., & Telesco, G. (2011). Officers in crisis: New York City police officers who assisted the families of victims of the world trade center terrorist attack. *Journal of Police Negotiations, 11*(1), 40–56.

Pulido, M. L. (2005). *The terrorist attacks on the world trade center on 9/11: The dimensions of indirect exposure levels in relation to the development of post traumatic stress symptoms -The "ripple effect."* The City University of New York; UMI -ProQuest Company: Ann Arbor, Michigan.

Pulido, M. L. (2007). In their words: Secondary traumatic stress in social workers responding to the September 11th terrorist attacks in New York City. *Social Work, 52*(3), 279–281.

Remer, R., & Ferguson, R. A. (1995). Becoming a secondary survivor of sexual assault. *Journal of Counseling and Development, 73*(4), 407–413.

Stamm, B. H. (2002). *The helper's power to heal and to be hurt—or helped by trying.* [Register Report]. Washington, DC: National Register of Health Service Providers in Psychology.

Strauss, A. L. (1987). *Qualitative analysis for social scientists*. Cambridge: University Press.

Tosone, C., Bettmann, J., Minami, T., & Jasperson, R. (2010). New York City social workers after 9/11: Their attachment, resiliency, and compassion fatigue. *International Journal of Emergency Mental Health, 12*(2), 103–116.

Tosone, C., Bialkin, L., Campbell, M., Charters, M., Gieri, K., Gross, S., et al. (2003). Shared trauma: Group reflections on the September 11th disaster. *Psychoanalytic Social Work, 10*(1), 57–77.

Tosone, C., McTighe, J., Bauwens, J., & Naturale, A. (2011). Shared traumatic stress and the long-term impact of 9/11 on Manhattan Clinicians. *Journal of Traumatic Stress, 24*(5), 546–552.

Wilson, J. P., & Raphael, B. (Eds.). (1993). *International handbook of traumatic stress syndromes*. New York, NY: Plenum Press.

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