

# Secondary Traumatic Stress: Prevalence in Humanitarian Aid Workers in India

Siddharth Ashvin Shah, Elizabeth Garland, and Craig Katz

**Background:** Humanitarian aid workers (HAWs) who aid traumatized populations experience emotional, cognitive, and physical consequences. This study documents the extent of secondary traumatic stress (STS) in a group of HAWs in Gujarat, India. **Method:** A standardized 17-item self-report questionnaire, the STS Scale, evaluated STS symptoms and severity in workers belonging to humanitarian organizations that provided psychosocial aid to traumatized people in India. **Results:** All the HAWs ( $N = 76$ ) reported STS as a consequence of their work; 8% met criteria for posttraumatic stress disorder (PTSD). HAWs

of lower socioeconomic status (SES) ( $p < .001$ ) reported higher trauma scores compared with those of higher SES. **Conclusion:** Substantial STS exists among HAWs 5 months after widespread mass violence. To bolster resilience appropriately, preventive measures must focus on the prevalent types of traumatic stress in HAWs.

**Keywords:** burnout; compassion fatigue; work stress; humanitarian aid worker self-care; occupational hazard; relief worker PTSD; secondary traumatic stress; vicarious traumatization

Several occupations expose their practitioners to victimized individuals or traumatized communities. *Primary traumatic stress* is the term used for individuals who respond with intense fear or helplessness after experiencing a traumatic event firsthand. *Secondary traumatic stress* (STS) occurs as a result of indirect exposure to trauma through a firsthand account or narrative of a traumatic event (Zimering, Munroe, & Gulliver, 2003). For the purposes of this article, humanitarian aid workers (HAWs) are *nonclinician* employees or volunteers who may (a) ask details of or (b) provide care to those exposed to severe physical or psychological trauma. The professional literature shows that *clinicians* who listen

to survivors' stories of fear, pain, and suffering may develop deleterious emotional, cognitive, and physical consequences (Carbonell & Figley, 1996; Collins & Long, 2003; Danieli, 1996; McCann & Pearlman, 1990; Salston & Figley, 2003). Workers like HAWs, who are not trained clinically but do this work in the course of duty and/or out of compassion, have not been studied adequately.

The adverse psychological impact of working directly with people who have experienced trauma has been discussed in the nursing, emergency medicine, and psychotherapist literature (Alexander & Atcheson, 1998; Carson, Leary, de Villiers, Fagin, & Radmall, 1995; Hodgkinson & Stewart, 1991; Melchior, Bours, Schmitz, & Wittich, 1997; Wall et al., 1997). Whether it is disaster work in the field or clinical work in professional settings, the occupational hazards of such work may include episodes of nightmares, sleeplessness, hopelessness, and other forms of STS that appear to be linked to working with psychological trauma (Figley, 1995). The concept that trauma can occur indirectly is consistent with the *Diagnostic and Statistical Manual of Mental Disorders* (4th ed.)

---

From Psychosocial Assistance Without Borders and the Center for Integrative Medicine at George Washington University, Washington, DC (SAS); Department of Community and Preventive Medicine, Mount Sinai School of Medicine, New York, NY (EG); Department of Psychiatry, Mount Sinai School of Medicine, New York, NY (CK).

Address correspondence to: Siddharth Ashvin Shah, Center for Integrative Medicine, 908 New Hampshire Avenue, Suite 200, Washington, DC 20037; e-mail: pawb99@gmail.com.

*criteria A* for posttraumatic stress disorder (PTSD), which asserts that traumatization is possible without being personally harmed or threatened with harm. Traumatization can occur through contact with narratives of primary traumatic stress. Like clinicians, HAWs come in close contact with such narratives of traumatic exposure.

The adverse psychological consequences of working with primarily traumatized individuals have been described in various ways: secondary traumatic stress disorder (STSD), compassion fatigue, compassion stress, and vicarious traumatization (McCann & Pearlman, 1990; Pearlman & Saakvitne, 1995). A worker can experience negative changes in professional functioning, self- and worldviews, sense of security, self-capacities, and psychological needs (Saakvitne & Pearlman, 1996). This psychological morbidity often goes unnoticed until people decompensate with more serious consequences such as clinical depression, anxiety problems, substance dependence, burnout, or PTSD. Frequent, numerous interactions with survivors of trauma might increase the likelihood of developing STSD (Figley, 1999).

While STSD can result from acute, subacute, or chronic exposure to stress, the category of *burnout* is generally used to refer to exhaustion from the cumulative buildup of stress (Figley, 1999; Maslach, 1982; Maslach & Jackson, 1986). It is characterized by "a state of physical, emotional, and mental exhaustion caused by long term involvement in emotionally demanding situations" (Pines, Aronson, & Kafry, 1981, p. 3). Burnout is not strictly based on psychiatric diagnostic criteria for traumatic events or traumatic symptoms. One study documents how HAWs may underestimate *both* how much stress they would experience and the extent to which they would use less adaptive coping mechanisms, such as alcohol and cigarette consumption (Britt & Adler, 1999).

A study done in 2002 in Australia found that 27% of the community mental health case managers who worked with the traumatized experienced extreme distress from this work. A study of Oklahoma City trauma workers found that 64.7% of them suffered from symptoms of PTSD (Wee & Meyers, 2002). Data from the response to the World Trade Center attacks are currently being analyzed, with one of the first published studies showing that "a substantial proportion of clergy and others in the tristate New York area are at significant risk for compassion fatigue" (Roberts, Flannelly, Weaver, & Figley, 2003,

p. 758). There, the Compassion Satisfaction and Fatigue Test (Figley, 1995) found the following levels of compassion fatigue: extremely high 27.5%, high 11.7%, and moderate 15.4%.

Finally, there are a range of studies that identify protective or intensifying factors vis-à-vis occupational traumatization (Baird & Jenkins, 2003; Brady, Guy, Poelstra, & Brokaw, 1999; Chrestman, 1995; Ghahramanlou & Brodbeck, 2000; Kassam-Adams, 1995; Johnson & Hunter, 1997; Stamm, 2002). In a very large review of primary, nonoccupational traumatization during disasters, Norris, Byrne, and Diaz (2001) concluded that the following factors cumulatively increase the risk of adverse outcomes in adults:

- Female gender
- Age in the middle years of 40 to 60
- Ethnic minority group membership
- Poverty or low socioeconomic status (SES)
- The presence of children in the home
- Psychiatric history
- Severe exposure to the disaster
- Living in a highly disrupted community

Insofar as HAWs work in hazardous conditions, they risk primary trauma exposure whose outcomes might follow the above personal vulnerabilities. However, the question remains as to which personal factors of HAWs cause vulnerability with regard to secondary exposure.

### **Humanitarian Aid Workers Operating as "Barefoot Counselors"**

In India, as in other countries suffering shortages of professional mental health workers, HAWs who are not trained in mental health treatment find themselves in a position where they have to provide important psychological support. In the 1960s and 1970s, in regions of China with few or no fully trained physicians, there were barefoot doctors who were actually peasants who had been given a "crash course" to diagnose/intervene in cases of rural infectious diseases and maternal health. HAWs in India constitute an informal, unorganized system of "barefoot counseling." For many communities, they are the only source of counseling by default. Yet most HAWs do not receive a crash course on counseling; they improvise on the job and in the field.

Typically, these humanitarian workers are employed for roles such as arranging housing, securing food, transporting people, sharing legal aid, and providing client advocacy. However, they find themselves operating as barefoot counselors insofar as they also take up the following roles: providing emotional support, counseling for sexual trauma, conducting play therapy, and making referrals to therapists/psychiatrists. They may also provide psychotherapeutic services during multiple client visits, and they typically do this sensitive psychological work with little or no formal training.

Other factors leading to unrecognized trauma include the culture of HAW groups and the larger society's attitude toward mental health treatment. HAW culture is often cavalier and oriented toward the care of others, not self (Diamond, 2002). In Indian society, there are multiple barriers to procuring psychological support services. Compared with those in Western societies, the services available are fewer in India because of an absolute scarcity of resources and a relative deprioritization of mental health. There is a pervasive belief (Laungani, 1993) that professional psychological help is appropriate only for those who are "really crazy"—presumably suffering from severe, debilitating mental illness. Additionally, services that are available are often unaffordable because of the luxury status of psychological treatment.

Given that Indian HAWs typically work 6 to 7 days a week without structured opportunities to process their encounters with pain and suffering, and given that they may escape detection for all the reasons described above, this subgroup may be at risk to be profoundly distressed and impaired (Laungani, 1993, 1994; Mehrotra, Rao, & Subbakrishna, 2000). Indian HAWs are usually part of the population they serve; therefore, they may be affected directly by the trauma. They are almost always affected indirectly, and they may strongly identify with the affected population. Studies quantifying STS and identifying risk factors for this classification of HAWs (those giving nonclinical, peer psychological support) are lacking.

### Context of Mass Violence in Gujarat, India

When unprecedented political and religious mass violence erupted in the Indian state of Gujarat in February 2002, the metropolis of Ahmedabad saw 3 days of gruesome mob lawlessness, gang rape,

execution squads, public maiming, and police complicity (Human Rights Watch, 2002, 2003; Medico Friend Circle, 2002). HAWs from a variety of service organizations responded to this pogrom of violence. The first author (known to some Indian organizations for doing psychosocial work) received the following e-mail from a HAW organization director on June 26, 2002:

We ourselves are feeling burnt out as a team . . . listening, taking statements and testimonies, on the latter part distributing relief and now presently making affidavits of the witnesses and victims of this carnage. We have been working on violence against women particularly the sexual violence and the police atrocities. It has been devastating in the manner in which the women have been vandalized. It is almost as if we were the victims.

I want to be honest and frank, at this moment we want to avoid people as our pain has hardened and we are feeling numb. It could be good, if you could work with us for two days to help us free out this pain.

### Methods

The study protocol was approved by the Institutional Review Board of Mount Sinai School of Medicine. The Institutional Review Board review was sought at Civil Hospital, Ahmedabad, India; however, the study was deemed exempt because there is no experimental protocol.

### Sample

Nongovernmental organizations (NGOs) known to be working with people exposed to violence, sexual trauma, and housing/safety crisis contacted the first author in June 2002. Four NGO leaders in Ahmedabad expressed interest in providing their staff with evaluation, education, and treatment regarding work-related stress. Cross-sectional observational data were obtained. There would have been more than 20 NGOs working directly with this trauma; however, because of time and resource constraints, only the first 4 were offered services. None of the NGOs refused services nor did any individual HAW refuse to participate (except the two leaders mentioned below).

The following organizations participated:

1. *Sahr Waru* (SW), an Ahmedabad citywide women's grassroots group, is dedicated to the empowerment of and service to mostly poor, slum-dwelling

- women. The entire staff was in the violence epicenter and involved in the postviolence response.
2. *Navsarjan* (NS), a Gujarat statewide advocacy and grassroots group, is dedicated to the empowerment of and service to Dalits (former untouchables). Most of the staff is distributed throughout the state, and therefore, some staff responded to the mass violence, whereas others did not.
  3. *Janvikas Center for Social Justice Paralegals* (JV), a Gujarat statewide advocacy group, is dedicated to the empowerment of oppressed populations. Again, most of the staff is distributed throughout the state, and therefore, some staff responded to the mass violence, whereas others did not. The NGO leader did not participate.
  4. *St. Xavier's Social Service Society* (XS) is an Ahmedabad citywide group promoting grassroots development work in slums. The entire staff was in the violence epicenter and involved in the postviolence response. The NGO leader did not participate.

### **Instrumentation (Including Description of Translation/Back Translation)**

The evaluation tool was the Secondary Traumatic Stress Scale (STSS), which is a 17-item instrument with Likert-type choices operationalized "to measure intrusion, avoidance, and arousal symptoms associated with indirect exposure to traumatic events via one's professional relationships with traumatized clients" (Bride, Robinson, Yegidis, & Figley, 2004, p. 27). Respondents are instructed to read each item and indicate how frequently the item was true for them in the past 7 days using a 5-choice, Likert-type response format ranging from 1 (*never*) to 5 (*very often*).

A non-paralegal, administrative member of JV volunteered to translate the STSS into Gujarati. To confirm that it is similar in meaning to the original English version, two different bilingual individuals translated the Gujarati version back to English. The two back translations differed only in sentence structure and wording; they agreed in content. The final line reading "consumer, patient, recipient, etc." was modified to read "affected people, beneficiaries, untouchables, tribals, oppressed people, etc."

### **Data Collection**

For most participants, the STSS was administered within the first hour of the psychotherapeutic, psychoeducational encounters. The first author led

didactics and discussion regarding STS awareness and prevention strategies. Attendees were mandated by their executive directors to attend the core curriculum, after which there were voluntary sessions for people who wanted more information or attention. In all cases, the STSS was administered face-to-face in a group fashion so that individuals could ask for clarification and the entire group could hear the investigator's response.

The questionnaire itself was of a voluntary and anonymous nature, except for the fact that the organization was identifiable, because the encounters occurred with a single organization at a time. It entailed no more than minimal risk. Participants were offered appropriate psychotherapeutic interventions according to their STSS scoring, including grounding techniques, systematic relaxation, guided imagery, breathwork, brief psychotherapy, and referrals to local mental health professionals. The inclusion criteria for this study brought in all available workers, including the organizational leaders. All individuals not working in humanitarian aid were excluded from this study. None of the workers in this study was directly attacked during Gujarat's 2002 mass violence; however, because participants all lived within Gujarat, they all had varying levels of exposure to the primary trauma of their acquaintances (nonclients) being traumatized, television coverage, hearsay of atrocities, curfew stress, and general civil insecurity.

### **Analysis**

The Statistical Package for the Social Sciences (SPSS) was used for statistical analyses. Only those who completed all 17 items were included for an analysis of STSS cumulative means; however, the responses of the excluded participants were analyzed when omitted items were not being used in the calculation. In the case of no response or double responses (an item having two choices circled), the following choices were made for data entry: No response for an item would be retained as a missing value for the purposes of data analysis, thereby reducing the effective sample size *N*. For double responses of 1 and 3, 2 and 4, or 3 and 5, the middle value would be used for analysis. For consecutive choices, such as 1 and 2, the lower value would be taken, erring on the side of underestimating the STS score.

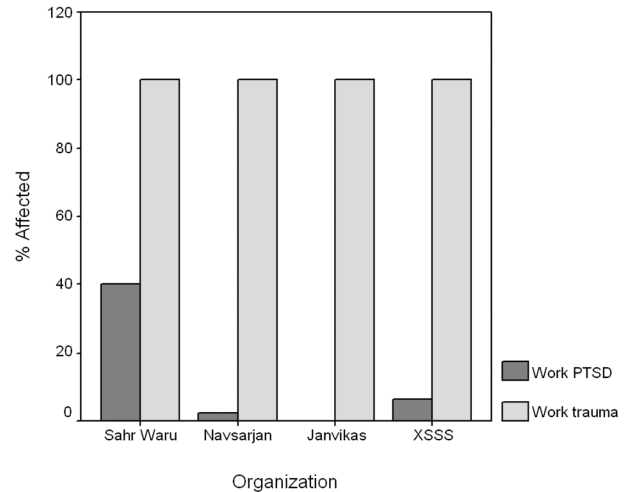
Comparisons of the STSS means were made using Kruskal-Wallis nonparametric tests; *t* tests were performed for tests of significance. The same means were cross-checked for significance in using an analysis of variance (ANOVA) with post hoc Fisher's least significant difference multiple comparisons and to discern specifically which pairs differed. The same methods were used to test for significance in the three-symptom cluster means (the instrument Items 2, 3, 6, 10, and 13 tested for intrusion symptoms; Items 1, 5, 7, 9, 12, 14, and 17 tested for avoidance; and Items 4, 8, 11, 15, and 16 tested for arousal). Based on the data, which contain a small range for standard deviations, equal variances were assumed for *t* tests and ANOVA multiple comparisons.

Given that 5 months had elapsed since the mass violence, and that every HAW began to work on the humanitarian crisis immediately, STSS criteria correlate with the formal criteria of chronic PTSD. Chronic PTSD in the *DSM-IV-TR* (American Psychiatric Association, 2000) is constituted of the following: exposure + negative reaction such as fear + one persistent intrusive symptom + two persistent arousal symptoms + three persistent avoidance symptoms + such symptoms present 3 months after initial exposure. Meeting the criteria is not a clinical diagnosis but, rather, recognition of qualitative and quantitative matching with the statistical criteria—a gauge for the severity of STS.

## Results

Seventy-six HAWs across four separate organizations met the criteria to form a convenience sample. None refused the STSS evaluation, and 100% ( $N = 76$ ) volunteered to give a copy of their worksheet. Therefore, data was gathered on every available HAW in all four organizations. The two leaders of JV and XS who declined the STSS and psycho-education stated that they had no time available. The number of participants per organization were as follows: 10 from SW, 39 from NS, 11 from JV, and 16 from XS.

All evaluations were completed in August 2002, approximately 5 months after the mass violence. Of the 76 worksheets of 17 items each (1,292 items in total), there were 6 instances of no response to an item and 3 instances of double responses. The instances of no response occurred in five respondents (one respondent had two items skipped), and according to the methods, these respondents could not be included in the analysis of organizational means. Therefore,  $n = 71$  for the analysis of organizational



**Figure 1.** Percentage of humanitarian aid workers reporting stress. Darker bar is “Work-related PTSD” and lighter bar is “Any work trauma stress.”

means (Tables 1-3); and  $n = 76$  in the analysis of any specific symptom (Figures 1-3).

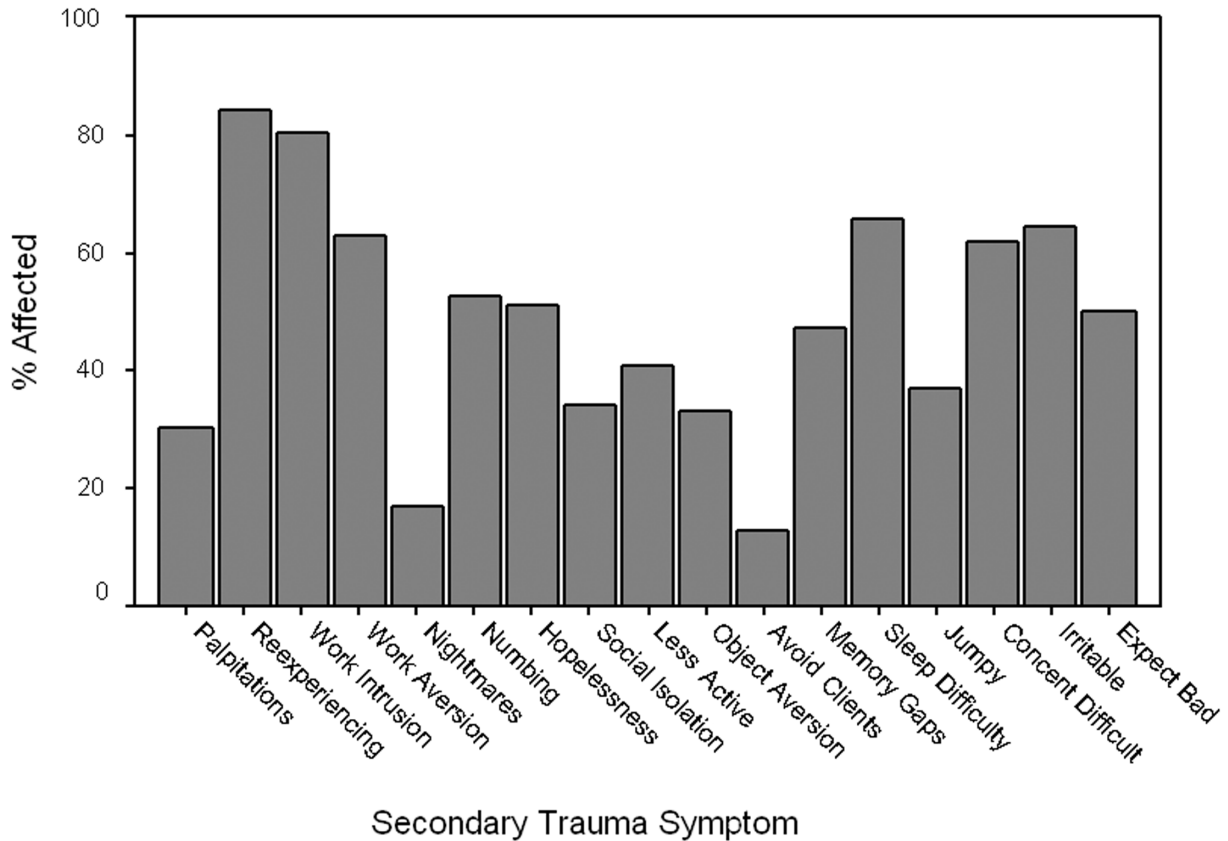
All the participants in the study (100%) reported at least one symptom of STS as a result of their work with people exposed to violence. Six participants (8%) endorsed sufficient symptoms to meet criteria for PTSD. The percentage of individuals attributing symptoms to their work that would otherwise meet criteria for PTSD varied greatly among the various organizations: 44% in SW, 3% in NS, 7% in XS, and 0% in JV (Figure 1).

The following items on the STSS were reported by the most number of participants (Figure 2) as experienced *occasionally*, *often*, or *always*:

- It seemed as if I was reliving the trauma experienced by my client (84%).
- I thought about my work with clients when I didn't intend to (80%).
- Memories of my work with clients upset me (63%).
- I had trouble sleeping (65%).
- I was easily annoyed (65%).
- I had trouble concentrating (62%).

The following items on the STSS were endorsed by the least number of participants as experienced *occasionally*, *often*, or *always*:

- My heart started pounding when I thought about my work with clients (29%).
- I had disturbing dreams about my work with clients (17%).
- I wanted to avoid working with some clients (12%).



**Figure 2.** Percentage of humanitarian aid workers reporting specific STS symptoms *occasionally, often, or always*.

The mean STS summary score (Table 1) reported by participants differed among the four organizations as follows: SW and NS had similar means of 45.44 and 43.32, respectively, and JV and XS had similar means of 38.40 and 36.40, respectively.<sup>1</sup> With a STSS summary score range of 17 to 85, the mean score was 41.44 ( $SD = 7.10$ ).

There were significant differences ( $p = .001$ ) among these four group means. SW and NS had significantly higher scores (Tables 1 and 2) than both JV and XS. When the STS symptoms were analyzed by symptom clusters, it was found that arousal and intrusion means between the groups differed significantly ( $p < .001$ ).

Because of the politically sensitive nature of their work, these workers risk exposing themselves to social boycott or physical harm if they divulge information that would identify them with this kind of work; therefore, no demographic data were collected. Publicly available information, however, yielded two site characteristics that allowed for further analyses.

### Site Characteristic “SES Privilege”

Being grassroots organizations, both SW and NS draw their workers from underprivileged, traumatized communities, which are characterized by poverty and disempowerment. NS has a cadre made up of Dalits, an underprivileged population singled out for the worst discrimination in India; being a Dalit is analogous to having an ethnic minority status (Human Rights Watch, 1999). SW is a women’s group working for women; therefore, it has exclusively female workers, mostly coming from poor households.

Therefore, SW and NS are inferred to be groups with a larger proportion of their membership from socially traumatized, disadvantaged (because of caste or gender discrimination), and economically poor backgrounds. For the purposes of this study, these groups are considered to have a “less privileged SES.” Conversely, not having grassroots work staff, JV and XS are considered to have a “more privileged SES,” which is a relative term given that

**Table 1.** Organizational Means for Total Secondary Traumatic Stress

Organization	<i>n</i>	Mean	Standard Deviation	95% Confidence Interval for Mean	
				Lower Bound	Upper Bound
Sahr Waru	9	45.44	6.65	40.33	50.56
Navsarjan	37	43.32	6.31	41.22	45.43
Janvikas	10	38.40	6.04	34.08	42.72
XS	15	36.40	6.91	32.58	40.22
Total	71	41.44	7.10	39.76	43.12

**Table 2.** ANOVA With Post Hoc LSD Multiple Comparisons for Differences in STS Means

Organization (I)	Organization (J)	Mean Difference (I-J)	Significance	95% Confidence Interval	
				Lower Bound	Upper Bound
Sahr Waru	Navsarjan	2.12	.379	-2.66	6.90
	Janvikas	7.04*	.020	1.13	12.95
	XS	9.04*	.001	3.62	14.47
Navsarjan	Sahr Waru	-2.12	.379	-6.90	2.66
	Janvikas	4.92*	.036	0.34	9.51
	XS	6.92*	.001	2.98	10.86
Janvikas	Sahr Waru	-7.04*	.020	-12.95	-1.13
	Navsarjan	-4.92*	.036	-9.51	-0.34
	XS	2.00	.450	-3.25	7.25
XS	Sahr Waru	-9.04*	.001	-14.47	-3.62
	Navsarjan	-6.92*	.001	-10.86	-2.99
	Janvikas	-2.00	.450	-7.25	3.25

NOTE. ANOVA = analysis of variance; LSD = Fisher's least significant difference; STS = secondary traumatic stress.

\*The mean difference is significant at the  $p < .05$  level.

the standard of living in India for HAWs is generally modest.

### Site Characteristic "Distance to Epicenter"

The two groups working in the slums of Ahmedabad (SW and XS) are likely to have had greater exposure to the mass violence than the two groups with staff distributed throughout the state (NS and JV). Accordingly, SW and XS are considered "epicenter proximal" groups, presumably having been exposed to more casualties in a shorter time. NS and JV are dubbed "epicenter distant," given that fewer workers worked in Ahmedabad during the 2002 violence.

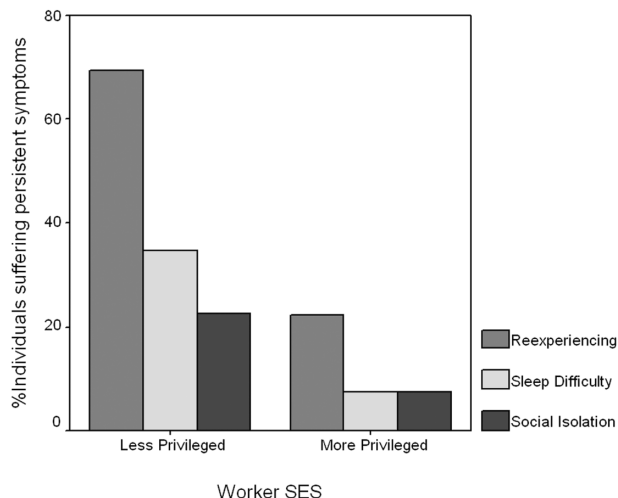
Analysis by the site characteristic SES Privilege (Table 3) yielded significantly different means ( $p < .001$ ). The mean STS score for organizations with less privileged workers ( $\bar{x} = 43.7$ ) was significantly

higher compared with that for organizations with more privileged workers ( $\bar{x} = 37.2$ ). Indeed, there were far greater numbers of workers from less privileged SES reporting persistent symptoms as compared to more privileged workers (Figure 3). Persistent is defined as *often* or *always* on the Likert-type scale.

Analysis by the site characteristic Distance to Epicenter found that epicenter distant groups had greater STS means (Table 3) ( $\bar{x} = 42.3$ ) than epicenter proximal groups ( $\bar{x} = 39.8$ ), but this difference was not statistically significant ( $p = .17$ ).

### Discussion

A common complaint heard from HAWs is that they have no one to talk to or that they have no explicit forum. This is because program directors/managers seem to be unequipped to deal with or are overwhelmed by these issues and not because they are



**Figure 3.** Percentage of humanitarian aid workers reporting persistent (*often or always*) symptoms in less privileged SES groups versus more privileged SES groups.

**Table 3.** Mean STS Scores and Site Characteristics

	Mean	Standard Error	<i>P</i>
SES privilege			<.001
Less	43.7	0.9	
More	37.2	1.3	
Distance to epicenter			.165
Distant	42.3	1.0	
Proximal	39.8	1.6	

callous or ignorant (Morisset, 2002). Because people are at risk of becoming deskilled during times of crisis, explicit STS prevention and intervention training may be valuable.

The interventions offered by the first author included techniques from both Western and non-Western sources: grounding techniques, systematic relaxation, guided imagery, breathwork (*pranayama*), brief psychotherapy, and referrals to local mental health professionals. The range of interventions was to some extent arbitrary. Why were physical yoga and meditation excluded? Yoga and meditation were, in fact, mentioned repeatedly in open-ended discussions regarding "A list of things I can do to manage stress." Both yoga and meditation for stress relief require more than a few hours for substantive training, and this was left for another forum. Clearly, those who work in cross-cultural trauma situations must question the exclusion of non-Western modalities

if the most optimal, cost-effective services are to be offered to diverse populations (Shah, 2006, in press).

The participants in this study perform a wide range of duties, including those of lay social worker, patient advocate, counselor, humanitarian relief worker, social activist, and legal consultant. All have contact with potentially traumatic material in their work. Studies to detect work-related trauma and appropriate interventions are called for in places such as India, where workers not formally trained in mental health are thrust into situations where they have to provide psychological support. Inadequately prepared workers who undertake heroic measures may be at particular risk for secondary stress when they are responding to a mass disaster. It has been suggested that managers in charge of trauma services should select (recruit) and maintain (assign) their staff on the basis of psychological well-being and compassion satisfaction (thought to be protection against compassion fatigue) (Collins & Long, 2003).

The STSS research instrument in this study seems to confirm and expand STS concepts. People who come to the aid of others do experience negative consequences as a result of their work. This study significantly confirmed the finding that trauma appears to affect those of low SES more severely. However, this study yielded a nonsignificant result for whether proximity to the violence epicenter correlates to more trauma.

There are several limitations to this study. The STSS has been validated for master's-level, U.S. professional "social workers who work in one southeastern state" (Bride et al., 2004, p. 32). It was not tested for other U.S. helping professionals like paraprofessionals, nurses, or psychiatrists. This study, therefore, applies the STSS to a new population. It assumes that the STSS detects traumatic stress accurately in other service providers who work with trauma. It assumes that the scale can be applied transnationally and transculturally. The STSS awaits these broader validations by other investigators.

A further source of respondent pool mismatch may stem from endorsement factors that are culturally conditioned. Indians may be more prone to recognize and endorse certain phenomena ("Work intrusion, I know what that's like") or vice versa. The low reporting of nightmares in this study may stem from Indian notions that contrast with the widely accepted notion in the United States that nightmares are reflective of confronting a frightening reality. Additionally, culture may differentially condition a person's perception of shame with regard to particular symptoms. For instance, the acceptability of



admitting “I feel like avoiding my clients” may differ between U.S. and Indian participants. These hypothetical transnational and transcultural variations reinforce the need for a control of unexposed Indian HAWs to better understand baseline rates.

There was no comparison group of social service providers in India not exposed to mass violence. Nor, for that matter, are there baseline data from another nation’s workers for comparison. The most similar study population known is from a study of war journalists, who were mailed a questionnaire based on the Impact of Event Scale–Revised (Feinstein & Owen, 2002). A study with controls or a comparison group from previous studies might help answer questions about whether untrained workers are more vulnerable to STS. Similarly, comparison would help establish whether pogrom-like violence, political harassment, or a need for amnesty changes the severity of traumatization.

The use of the STSS with one organization (SW) in the middle of the psychotherapeutic encounter may have caused more robust reporting of symptoms as a result of SW learning about such symptoms during its educational encounter. Yet even though SW may have been more sophisticated in its ability to identify symptoms, it was the one organization that actively sought out services because it was explicitly aware of negative effects from its work. It is unclear what impact the timing of administration may have had on STSS scoring. Ultimately, retesting and further consistency with similar groups are the only way to accurately establish the degree of traumatic stress they sustained.

A confounder for measuring STS is primary traumatic stress. Primary trauma could be (a) trauma from the distant past that becomes reactivated or (b) as a result of surviving the very trauma to which one then occupationally responds. This instrument did not inquire about distant past primary traumatic stress in the individuals. Nearly all the participants were living in Gujarat during the February-March 2002 violence and were therefore exposed variably to the violence, television coverage, hearsay of atrocities, curfew stress, and general insecurity. During that time, these people may have sustained primary traumatic stress as an additional layer to STS.

Although the STSS is worded to record only work-related symptoms, respondents may conflate their primary traumatic stress with their STS. What may seem like misattribution may be a reflection of the mind’s reality: Primary trauma and secondary trauma intermingle and inform each other. Keeping these separate would be difficult for any respondent,

and such increased reporting should probably be assumed to play a part in any STS study.

Apart from primary traumatic stress augmenting the reporting of trauma, survivor guilt may play a part in magnifying STS. In the context of a mass disaster, workers and responders are among the survivors. They may push themselves to work excessive hours, neglect sleep and hunger, and suppress grief, possibly to pay for the fact that they were fortunate enough to survive. They may not feel as though they deserve to live, but they continue to work in order to pay homage to the casualties. Professional social workers are typically taught the pitfalls of the rescue fantasy, in which an unconscious force motivates a helper to work against great odds to symbolically repair intrapersonal pain. Because this fantasy is commonplace in humanitarian work, its contribution to STS and/or burnout should be investigated.

Finally, reporting that some workers would be “likely to meet the *DSM-IV* criteria for PTSD” is an inference that highlights a particular clustering of symptoms. The *DSM-IV*, although validated in other cultures, may still be strained in particular cultures and with particular diagnoses. Furthermore, reporting those who may qualify for PTSD has the consequence of de-emphasizing those who do not meet the criteria for PTSD but who may have substantial suffering and disorder in their lives. With the knowledge that the *DSM-IV* is designed to be a statistically advantageous method for identifying disorder, subclinical PTSD ought to be taken seriously on a person-to-person basis.

## Conclusion

This study highlights the human costs of humanitarian work in two ways: (a) the constellations of symptoms that represent mental suffering and work dysfunction and (b) the symptoms persisting well beyond the time of exposure. The STS symptoms reported in this study were captured 5 months after mass violence had subsided in Gujarat. The data demonstrate elevated risk among workers from socially traumatized backgrounds, supporting the findings of previous studies (Baird & Jenkins, 2003; Pearlman & Mac Ian, 1995).

Given that every worker reported some combination of STS symptoms, looking only for PTSD, worker burnout, or decompensation/disorder would potentially miss significant psychological impact. STS of any order is costly, potentially translating to lower quality of life and work performance. For

example, the 40% of SW HAWs who meet the criteria for PTSD are likely to be suffering a serious, substantially debilitating disorder.

The greater STS mean of less privileged groups supports the hypothesis that, compared to workers from a more privileged SES background, workers from a less privileged SES report more STS symptoms. Consistent with the findings of Norris et al. (2001), a larger burden of traumatic stress may be present in organizations that have workers who are ethnic minorities, female, of low SES, and from traumatized communities.

Local and international agencies can use data on the extent, type, and risk of secondary stress to humanitarian workers to develop policies protecting against worker morbidity and psychological decompensation. Rather than pathologizing the work or workers, further study of secondary trauma can

hopefully improve the quality and accuracy of preventive services for service providers.

Policy implications include (a) criteria by which HAWs are recruited, (b) worker training and awareness-raising programs, (c) increased encouragement (preferably, policies) regarding rest and relaxation, and (d) planned and readily available counseling so that it is not an afterthought (Downie, 2002). Team leaders, managers, and agencies can integrate into their work culture the significance of work stress, ways to identify and alleviate stress, and resources for professional help.

This study was meant to encourage the identification of those who suffer emotional difficulties and, as such, would benefit from treatment. Healthy environments and appropriate treatment ensure that workers can continue to make significant contributions while maintaining high job satisfaction and quality of life, for as many years as desired.

### Appendix Secondary Traumatic Stress Scale

	Never	Rarely	Occasionally	Often	Very Often
1. I felt emotionally numb.....	1	2	3	4	5
2. My heart started pounding when I thought about my work with clients.....	1	2	3	4	5
3. It seemed as if I was reliving the trauma(s) experienced by my client(s).....	1	2	3	4	5
4. I had trouble sleeping.....	1	2	3	4	5
5. I felt discouraged about the future.....	1	2	3	4	5
6. Reminders of my work with clients upset me.....	1	2	3	4	5
7. I had little interest in being around others.....	1	2	3	4	5
8. I felt jumpy.....	1	2	3	4	5
9. I was less active than usual.....	1	2	3	4	5
10. I thought about my work with clients when I didn't intend to.....	1	2	3	4	5
11. I had trouble concentrating.....	1	2	3	4	5
12. I avoided people, places, or things that reminded me of my work with clients.....	1	2	3	4	5
13. I had disturbing dreams about my work with clients.....	1	2	3	4	5
14. I wanted to avoid working with some clients.....	1	2	3	4	5
15. I was easily annoyed.....	1	2	3	4	5
16. I expected something bad to happen.....	1	2	3	4	5
17. I noticed gaps in my memory about client sessions.....	1	2	3	4	5

SOURCE: Copyright © 1999 Brian E. Bride. Reprinted with permission from author.

NOTE: Above is a list of statements made by persons who have been impacted by their work with traumatized clients. Read each statement then indicate how frequently the statement was true for you in the past seven (7) days by circling the corresponding number next to the statement. "Client" is used to indicate persons with whom you have been engaged in a helping relationship. You may substitute another noun that better represents your work such as consumer, patient, recipient, etc.

## References

- Alexander, D. A., & Atcheson, S. F. (1998). Psychiatric aspects of trauma care: Survey of nurses and doctors. *Psychiatric Bulletin*, 22, 132-136.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed., rev., pp. 467-468). Washington, DC: Author.
- Baird, S., & Jenkins, S. R. (2003). Vicarious traumatization, secondary traumatic stress, and burnout in sexual assault and domestic violence agency volunteer and paid staff. *Violence and Victims*, 18, 71-86.
- Brady, J. L., Guy, J. D., Poelstra, P. L., & Brokaw, B. F. (1999). Vicarious traumatization, spirituality and the treatment of sexual abuse survivors: A national survey of women psychotherapists. *Professional Psychology, Research and Practice*, 30, 386-393.
- Bride, B. E., Robinson, M. M., Yegidis, B., & Figley, C. R. (2004). Development and validation of the Secondary Traumatic Stress Scale. *Research on Social Work Practice*, 14, 27-35.
- Britt, T. W., & Adler, A. B. (1999). Stress and health during medical humanitarian assistance missions. *Military Medicine*, 164, 275-279.
- Carbonell, J. L., & Figley, C. R. (1996). When trauma hits home: Personal trauma and the family therapist. *Journal of Marital and Family Therapy*, 22, 53-58.
- Carson, J., Leary, J., de Villiers, N., Fagin, L., & Radmall, J. (1995). Stress in mental health nurses: Comparison of ward and community staff. *British Journal of Nursing*, 4, 579-582.
- Chrestman, K. R. (1995). Secondary exposure to trauma and self-reported distress among therapists. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self care issues for clinicians, researchers, and educators* (pp. 29-36). Lutherville, MD: Sidran Press.
- Collins, S., & Long, A. (2003). Too tired to care? The psychological effects of working with trauma. *Journal of Psychiatric and Mental Health Nursing*, 10, 17-27.
- Danieli, Y. (1996). Who takes care of the caregiver? In R. J. Apfel & B. Simon (Eds.), *Minefields in their hearts* (pp. 189-205). New Haven, CT: Yale University Press.
- Diamond, M. (2002). What aid workers and frogs have in common. In Y. Danieli (Ed.), *Sharing the front line and the back hills* (pp. 102-103). Amityville, NY: Baywood.
- Downie, S. (2002). Peacekeepers and peace-builders under stress. In Y. Danieli (Ed.), *Sharing the front line and the back hills* (pp. 9-20). Amityville, NY: Baywood.
- Feinstein, A., & Owen, J. (2002). Journalists, war, and post traumatic stress disorder. In Y. Danieli (Ed.), *Sharing the front line and the back hills* (pp. 305-315). Amityville, NY: Baywood.
- Figley, C. R. (1995). Compassion fatigue as secondary traumatic stress disorder: An overview. In C. R. Figley (Ed.), *Compassion fatigue: Coping with secondary traumatic stress disorder* (pp. 1-20). New York: Brunner/Mazel.
- Figley, C. R. (1999). 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* (2nd ed., pp. 3-28). Lutherville, MD: Sidran Press.
- Ghahramanlou, M., & Brodbeck, C. (2000). Predictors of secondary trauma in sexual assault trauma counselors. *International Journal of Emergency Mental Health*, 2, 229-240.
- Hodgkinson, P. E., & Stewart, M. (1991). *Coping with catastrophe: A handbook of disaster management*. London: Routledge.
- Human Rights Watch. (1999). *Broken people: Caste violence against India's "untouchables."* New York: Author.
- Human Rights Watch. (2002). *We have no orders to save you* (Vol. 14: 3C). New York: Author.
- Human Rights Watch. (2003, February 27). *India: Carnage in Gujarat unpunished* [Press release]. New York: Author.
- Johnson, C. N. E., & Hunter, M. (1997). Vicarious traumatization in counselors working in the New South Wales Sexual Assault Service: An exploratory study. *Work and Stress*, 11, 319-328.
- Kassam-Adams, N. (1995). The risks of treating sexual trauma: Stress and secondary trauma in psychotherapists. In B. H. Stamm (Ed.), *Secondary traumatic stress: Self care issues for clinicians, researchers, and educators* (pp. 37-47). Lutherville, MD: Sidran Press.
- Laungani, P. (1993). Cultural differences in stress: India and England. *Counselling Psychology Review*, 9(4), 25-37.
- Laungani, P. (1994). Cultural differences in stress and its management. *Stress Medicine*, 9, 37-43.
- Maslach, C. (1982). *Burnout: The cost of caring*. Englewood Cliffs, NJ: Prentice Hall.
- Maslach, C., & Jackson, S. (1986). *Maslach Burnout Inventory* (2nd ed.). Palo Alto, CA: Consulting Psychologists Press.
- McCann, I. L., & Pearlman, L. A. (1990). Vicarious traumatization: A framework for understanding the psychological effects of working with victims. *Journal of Traumatic Stress*, 3, 131-149.
- Medico Friend Circle. (2002). *Carnage in Gujarat—A public health crisis*. Retrieved February 9, 2007, from <http://www.mfcindia.org/mainrep.html>
- Mehrotra, S., Rao, K., & Subbakrishna, D. K. (2000). Factor structure of the Mental Health Professionals Stress Scale (MHPSS) among clinical psychologists in India. *International Journal of Social Psychiatry*, 46, 142-150.
- Melchior, M. E. W., Bours, G. J. J. W., Schmitz, P., & Wittich, Y. (1997). Burnout in psychiatric nursing: A meta-analysis of related variables. *Journal of Psychiatric and Mental Health Nursing*, 4, 193-201.
- Morisset, J. (2002). Handle with care: A view from the staff counsellor's office. In Y. Danieli (Ed.), *Sharing the front line and the back hills* (pp. 128-133). Amityville, NY: Baywood.
- Norris, F. H., Byrne, C. M., & Diaz, E. (2001). *50,000 disaster victims speak: An empirical review of the empirical*

- literature, 1981-2001*. National Center for PTSD and the Center for Mental Health Services (SAMHSA).
- Pearlman, L. A., & Mac Ian, P. S. (1995). Vicarious traumatization: An empirical study of the effects of trauma work on trauma therapists. *Professional Psychology: Research and Practice, 26*, 558-563.
- Pearlman, L. A., & Saakvitne, K. W. (1995). *Trauma and the therapist: Countertransference and vicarious traumatization in psychotherapy with incest survivors*. London: W. W. Norton.
- Pines, A., Aronson, E., & Kafry, D. (1981). *Burnout: From tedium to personal growth*. New York: Free Press.
- Roberts, S. B., Flannelly, K. J., Weaver, A. J., & Figley, C. R. (2003). Compassion fatigue among chaplains, clergy, and other respondents after September 11th. *Journal of Nervous and Mental Disease, 191*, 756-758.
- Saakvitne, K. W., & Pearlman, L. A. (1996). *Transforming the pain: A workbook on vicarious traumatization*. London: W. W. Norton.
- Salston, M., & Figley, C. R. (2003). Secondary traumatic stress effects of working with survivors of criminal victimization. *Journal of Traumatic Stress, 16*, 167-174.
- Shah, S. A. (2006). Resistance to cross-cultural psychosocial efforts in disaster and trauma: Recommendations for ethnomedical competence. *The Australasian Journal of Disaster and Trauma Studies*. Retrieved February 9, 2007, from <http://www.massey.ac.nz/~trauma/issues/20062/shah.htm>
- Shah, S. A. (in press). An ethnomedical framework for psychosocial intervention in cases of international disaster and trauma. In E. Tang & J. Wilson (Eds.), *The cross cultural assessment of psychosocial trauma and PTSD*. New York: Springer-Verlag.
- Stamm, B. H. (2002). Measuring compassion satisfaction as well as fatigue: Developmental history of compassion fatigue and satisfaction test. In C. R. Figley (Ed.), *Treating compassion fatigue* (pp. 107-119). New York: Brunner/Routledge.
- Wall, T. D., Bolden, R. I., Borrill, C. S., Carter, A. J., Golya, D. A., Hardy, G. E., et al. (1997). Minor psychiatric disorder in NHS trust staff: Occupational and gender differences. *British Journal of Psychiatry, 171*, 519-523.
- Wee, D., & Meyers, D. (2002). Response of mental health workers following disaster: The Oklahoma City bombing. In C. R. Figley (Ed.), *Treating compassion fatigue*. New York: Brunner/Routledge.
- Zimering, R., Munroe, J., & Gulliver, S. B. (2003). Secondary traumatization in mental health care providers. *Psychiatric Times, 20*(4), 43-47. Retrieved February 9, 2007, from [www.psychiatrictimes.com/p030443.html](http://www.psychiatrictimes.com/p030443.html).