The Remedial Effect of Humanitarian Relief Services on Post-Traumatic Stress in Post-Disaster Situation

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ABSTRACT

The present research was designed to study post-disaster stress in population affected by earthquake in Pakistan with the remedial effect of humanitarian relief services provided by different organizations. A sample of N=197 adults residing in different villages of Manshera District of NWFP, Pakistan was taken. It was hypothesized that the level of post-traumatic stress would reduce in a year’s time by the humanitarian relief provided to the affected population. The data was collected in two different temporal conditions i.e. just after the earthquake and after one year of earthquake. Impact of Event Scale (Horowitz et al., 1979) was administered both the times. The results verified the hypothesis and it was found that the level of post-traumatic stress was reduced from a severe range on Impact of Event Scale to a moderate range.

Introduction

Psychological research has shown that disasters can cause serious mental health consequences for victims. These consequences take the form of Posttraumatic Stress Disorder and a variety of other disorders and symptoms which have been less investigated. The more stress, defined in a variety of ways, within the disaster, the more likely there are to be emotional consequences. Vulnerability factors within the victim operate in complex ways, but seem related to the extent of stress experienced by the victim and the available resources, broadly defined, with which to deal with it. The mental health profession has developed a variety of strategies with which ameliorate the effect of disaster.

Unlike other disciplines, which have come more recently to the study of disasters, psychology has concerned itself with disasters' impacts on victims for much of its own short history. As long ago as 1944, Lindemann published an observation of the psychological aftermath of the Coconut Grove nightclub fire in Boston. Besides the obvious involvement psychologists have in attempting to relieve distress of victims, disasters have a relationship to several important psychological constructs. Disasters allow psychologists to perceive the operation of trauma on emotional functioning, an operation which mental health practitioners as far back as Freud have been interested in understanding. Stress research is a central and crucial explanatory factor in many fields of psychology, especially community psychology, which considers stress the central ingredient in the formation of psychopathology (Albee, 1997; Dohrenwend, 1998). There is an ethical limit to the extent that stress can be manipulated in the laboratory, and disasters allow psychologists the opportunity to observe how extreme stress impacts individuals and groups.

Because of psychology's interest in trauma and stress, its definition of disaster has differed somewhat from that employed in other fields. In the 1970's, after the Vietnam War and the discovery of its impact on veterans, and after the discovery of the long-term effects of child sexual abuse, the mental health field conceptualized a disorder specifically related to the consequences of trauma, Post Traumatic Stress Disorder (PTSD) (American Psychiatric Association, 2000).

In spite of many differences in opinion (Quarantelli, 1998), the definition of disaster in use in this paper agrees with that of most psychologists (Hershey, 1969; Norris, Friedman, Watson, Byrne, Diaz & Kaniyat, 2002) who regard disasters as involving an unexpected or uncontrollable event rather than a long-term experience. That is, a disaster is something that could happen within a war (e.g., My Lai, or many other less well-known examples) rather than the war itself, or Three Mile Island rather than Love Canal. These examples illustrate the difficulty with the distinction, and some researchers think that our concept of disaster should include chronic disaster (Couch & Kroll-Smith, 1985). Dynes (2004) has argued that social scientists need to expand their definition of disaster to encompass events like war, genocide, and refugee experiences that are critical in third world countries.
Disasters are also usually viewed as a collective experience, excluding personal disasters like sexual abuse or automobile accidents, unless these involve a large number of people. Again, the dividing line can be unclear. The type of event, with its various dimensions, can affect our perceptions. We might consider an automobile accident that killed 13 people to be a disaster, even if many others were involved or witnessed it, but the killing of 13 in the shootings at Columbine certainly qualifies.

With the passage of time, study of disasters has become less descriptive and more quantitative. The focus has moved from the question of whether there are significant long-term psychological impacts of disasters to studying the types of impact that occur and what factors in the disaster and in the individual increase the likelihood of emotional damage. Interventions to assist victims have been developed. Most recently, there has been more focus on the effectiveness of these interventions.

The objective of the current study was to explore the level of post-traumatic stress and to measure the effect of humanitarian relief services on it. The hypothesis formulated for this study was "the level of post-traumatic stress would reduce in a year's time by the humanitarian relief provided to the affected population".

**METHOD**

**Sample**

The sample consisted of N=197 adults residing in different villages of Mansehra District of NWFP, Pakistan. These included one hundred and one females (N=101) and ninety-six males (N=96) affected by the earthquake. Due to the non-availability or unwillingness from the population to respond to the questionnaire, purposive sampling technique was used and Impact of Event Scale was administered on individuals who willingly participated in the research process.

**Instruments**

**Impact of Event Scale (IES) (Horowitz et al., 1979)**

The IES was developed by Mardi Horowitz, Nancy Wilner, and William Alvarez to measure current subjective distress related to a specific event. Horowitz observed that the most commonly reported responses to traumatic stressors fell into 2 major response sets: intrusion and avoidance (Horowitz, et al. 1979; Weiss & Marmar, 1994). Measurements of responses to traumatic events at the time were confined to physiological measures such as galvanic skin responses or self-reports on more general measures of anxiety, neither of which provided a measure of the current degree of subjective impact experienced following a specific traumatic event.

(Weiss & Marmar, 1997). The IES is considered one of the earliest self-report measures of posttraumatic disturbance (Briere, 1997). The IES is a broadly applicable self-report measure designed to assess current subjective distress for any specific life event (Horowitz, et al 1979; Corcoran & Fischer, 1994). It is an instrument that can be used for repeated measurement over a period of time. Its sensitivity to change renders it useful for monitoring the client's progress in therapy (Corcoran & Fischer, 1994).

The IES scale consists of 15 items, 7 of which measure intrusive symptoms (intrusive thoughts, nightmares, intrusive feelings and imagery). 8 tap avoidance symptoms (numbing of responsiveness, avoidance of feelings, situations, ideas), and combined, provide a total subjective stress score. All items of the IES are anchored to a specific stressor (Horowitz, et al., 1979; Briere, 1997). Respondents are asked to rate the items on a 4-point scale according to how often each has occurred in the past 7 days. The 4 point on the scale are: 0 (not at all), 1 (rarely), 3 (sometimes), and 5 (often).

Wayne Cornell, Director of Employee Assistance for the Department of Health and Welfare, Canada; Randall Beaton, PhD, Professor of Psychological Nursing at the University of Washington; and Roger Solomon, PhD, Department Psychologist for the Washington State Patrol, suggest that the IES can be interpreted according to the following dimensions:

0 - 8 Subclinical range
9 - 25 Mild range
26 - 43 Moderate range
44 + Severe range

**Personal Information Schedule**

This was designed to obtain demographic information including age, gender, marital status, educational level, employment status and number of family loss.

**Procedure**

The data was collected in two different temporal conditions i.e. the first data was collected just after the earthquake and the second data was gathered after one year of the earthquake. The participants were individually approached by the researcher. They were residing in different Villages of Tehsil Balakot, District Mansehra of NWFP, Pakistan and were taking benefits from the relief services of different national and international organizations in different sectors such as protection, water & sanitation, health, shelter, food and non-food items, etc. Each respondent was interviewed individually to build a satisfactory level of rapport and to make him/her understand about the purpose of research. The Impact of Event Scale was administered to the respondents individually after collecting the demographic information. The instructions which were already mentioned in the instrument were made clear to them and data was taken in a
question-answer session. Both the subjects and the facilitators were thanked a lot for their cooperation.

RESULTS

Table 1

Mean difference, SD and t-value of the scores of victims of earthquake on Impact of Event Scale (N=197)

<table>
<thead>
<tr>
<th>Scores</th>
<th>N</th>
<th>X</th>
<th>SD</th>
<th>t-value</th>
<th>p-value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soon after the earthquake</td>
<td>90</td>
<td>47.54</td>
<td>13.125</td>
<td>7.003</td>
<td>.000</td>
</tr>
<tr>
<td>One year later</td>
<td>107</td>
<td>32.23</td>
<td>16.887</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

df = 195

Table 1 shows mean difference and t-value of Post traumatic stress disorder of the victims of earthquake with the help of Impact of Event Scale. Results are highly significant at .001 level with mean difference of 15.311

DISCUSSION

The results demonstrate that the sample had a mean score of 47.54 on Impact of Event Scale which shows a severe range of post-traumatic stress. Moreover, after one year from the collection of the first data, the sample showed a reduced mean score of 32.23 on Impact of Event Scale which represents a moderate range of post-traumatic stress. This was due to the humanitarian relief services provided to the sample that had a remedial effect.

On October 8, 2005, a 7.6 magnitude earthquake struck northern Pakistan causing serious damage in the North West Frontier (NWFP) and Azad Jammu and Kashmir (AJK) provinces. Over 4000 villages were affected, 73,000 people killed, 79,000 injured and 3.3 million people rendered homeless. Over 470,000 houses were completely destroyed, nearly 65% of the hospitals in the area were destroyed or badly damaged and an estimated 10,000 school buildings were affected. As in many emergencies, the most vulnerable segment of the population was among the hardest hit: the elderly, women whose husbands were killed or disabled, and an estimated 1.6-2.2 million children. Compounding the destruction of the initial earthquake were a series of strong aftershocks that continued for weeks. In addition to the estimated $5 billion in property damage, there was significant loss of livelihoods through destruction of arable land, crops and livestock, businesses, and jobs. Despite the resilience of the population, the impact of the disaster was overwhelming and devastating. The timing and geography of the earthquake – which occurred at the onset of the harsh winter and in remote, mountainous terrain – caused serious concern about the vulnerability of the affected populations and their ability to survive.

The local, regional and international aid communities mobilized immediately, and supplies began to pour into the region. As in previous disasters of this scale, the relief effort was fragmented, with many different players providing a myriad of services. The Government of Pakistan established the Federal Relief Commission (FRC) and the Earthquake Rehabilitation and Reconstruction Authority (ERRA) to serve as a liaison between the government, international and national organizations involved in relief and rehabilitation. Relief and recovery committees were formulated as focal points at the district level.

CONCLUSION

The present study revealed that the population which received humanitarian assistance significantly showed a reduced level of post-traumatic stress from severe to moderate. Further research is needed to explore more facts after assessing the population which did not receive humanitarian assistance. It can be concluded from the above literature and study that social support and humanitarian assistance plays a critical role in bringing back a hope and happiness in the lives of bereaved or victims of trauma.

REFERENCES