The Level of Distress Among the Victims of War and Terrorism and the Role of Psychological Interventions in their Rehabilitation

Hayat Mohammad Bangash, Mohammad Jehanzeb Khan & Summiya Ahmad

Abstract

The present study was carried out to investigate the psychological effects of war and terrorism and the role of psychological interventions in the rehabilitation of affectees. The sample included two hundred participants (N=200) from two districts of Khyber Pakhtunkhwa i.e. Swat and Buner based, by using convenient sampling technique. It was further divided into two subgroups, males (n=100) and females (n=100). Pre and posttest design was used for the study because it was carried out in two phases. Demographic Information Sheet and Impact of Event Scale (IES) (Horowitz, Wilner, & Alvarez, 1979) were administered for the assessment. It was hypothesized that the Victims of war and terrorism will score high on Impact of Event Scale (IES) and the prevalence distress will be high among females as compared to males. It was also assumed that males will show improvement in decreasing symptoms of distress, than females after receiving psychological interventions. The results supported the hypotheses. Results of the research explored (p<0.05) that people who are the direct victim and those who are eyewitness of the traumatic event (war between army and militants) suffered from distress. In the second phase of study, results indicated that psychological interventions play a pivotal role in the rehabilitation of affectees.

Keywords

War and Terrorism, Stress, Male, Female, Psychological Interventions and Rehabilitation.

Introduction

Since time immemorial, especially the twentieth century, the world has experienced terrorism in different forms, faces and with varying different expressions. Therefore, we know that terrorism is not a modern trend. Undoubtedly, a terrorism disaster (whether an attack like that of 9/11 in 2001 or a natural event such as Hurricane Katrina in 2005, earthquake of Pakistan in 2005) have caused tremendous damage to individuals (e.g., buildings, roads, factories) and humans (e.g., injuries, deaths). The twentieth century seems to be the century of massive sufferings in human history, manifests a persistent increase in malicious and destructive activities. Yet, this was not the main challenge for the international community, until the hijack of aeroplanes and the attacks of 9/11 on the towers of World Trade Center and the Pentagon, the main symbols of American economic and military supremacy (Musarrat, 2009).
Method

Participants

The targeted sample for the present study was drawn from the two medium-sized districts of Khyber Pakhtunkhwa province. Khyber Pakhtunkhwa province is divided into 24 districts. The study included sample from District Buner and District Swat. Convenient sampling technique was used. The sample consisted of 200 adults (N=200), with the representation of both men and women from all walks of life. Further, two hundred sample (N=200) was divided into two groups. One hundred (n=100) were male respondents and one hundred (n=100) were female respondents from Swat and Buner. 100 respondents each from the two districts further equally divided between male respondents and female respondents. Average age of the sample was 40 years.

Instruments

For this research one information sheet and instrument were used namely Data Information Sheet (DIS) and The Impact of Event Scale (IES)

1. **Demographic Information Sheet (DIS)**

   Demographic Information sheet was used to get information from the participants. Demographic Information sheet included Name, Gender, Area, Address and Date.

2. **Impact of Event Scale (IES)**

   The Impact of Event Scale was used to measure the current subjective distress related to a specific event (Horowitz, Wilner, & Alvarez, 1979). The Impact of Event Scale (IES) consists of 15 items. The Impact of Event Scale (IES) 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 combining provide a total subjective stress score. Corcoran and Fisher (1994) found that the sub scales of the IES show very good internal consistency based on 2 separate sample groups. The coefficients ranged from .79 to .92, with an average of .86 for the intrusive sub scale and .90 for the avoidance subscale.

   Horowitz' Impact of Event Scale (IES; Horowitz Horowitz et al, 1979) was created for the study of bereaved individuals, but soon it was used for exploring the psychological impact of a variety of traumas. It was constructed before the diagnosis of post-traumatic stress disorder (PTSD) was entered into the DSM III (American Psychiatric Association, 1980), and although many measures of PTSD symptoms have emerged (Wilson & Keane, 1997), the IES remains widely used.
**Procedure**

The sample of two hundred (N=200) participants were selected by using conveniently sampling technique from different areas of District Swat and District Buner. The sample was divided into two groups, hundred were males (n=100) and hundred were females (n=100). Fifty male (n1=50) and fifty female (n2=50) participants from District Swat and fifty male (n3=50) and fifty females (n4=50) from District Buner were selected. Criteria for selection of sample was convenient sampling technique.

Participants were approached at different mental health team clinics run by different non-governmental organization. Rapport was developed with the subjects. Pre and post-test design was used in the study because the study was carried out in two different phases i.e. Phase I and Phase II. In Phase I, data was collected to find out the psychological consequences (prevalence of psychological distress in victims) of war and terrorism. After three months, in Phase II, the same instrument was used for collection of data to analyse the role of psychological interventions in the rehabilitation of affectees from the same sample assessed in phase I. All the participants and Organizations (both National and International) were thanked for their cooperation in this study.

**Intervention**

After the advent of war on terrorism, almost everyone in the province of Khyber Pakhtunkhwa, in general, and District Swat and Buner, in particular, were facing different kinds of psychological problems. Different international non-governmental (INGOs) and national non-governmental organizations (NGOs) started providing mental health services. For the data collection purpose, different organization's mental health services were keenly observed and those who hired professional psychologists for providing psychological interventions were selected. They handled clients in a very professional way and most of the time applied counselling strategies (cognitive behavioral technique) depending on the problems that clients faced at that time.

Data was collected from clients who were taking individual counselling. Duration for each individual session was 45 minutes according to international standard. Those who were taking individual counselling and psychotherapy got surprised in initial session because before that the attitude of general public was developed that psychological problems can only be eradicated by using medicines. But after taking sessions, they were very much satisfied that their psychological healing is increasing day by day by attending counseling and psychotherapy sessions.
Control of Extraneous Variables

Controlling of extraneous variables is important to make it sure that dependent variable is changed because of the effect of independent variable. Controlling of extraneous variables in field experiment is difficult from laboratory experiment. During the study, the clients were asked not to take any other service during counseling and psychotherapy taking duration which they were receiving from those mental health clinics established by different international and national organizations (INGOs). After a traumatic event, it is a parameter that people are naturally healed upto 6 weeks. After 6 weeks, if people still remain in the same stressful condition, then they were advised to take counselling and psychotherapy services.

Inclusion / Exclusion Criteria

People who were the victims or eye witnesses of the traumatic event during war on terror were included.

The research focussed and included elderly people both males and females.

The present research did not focus on children and adolescents because that group of the targeted area were under special consideration of security agencies due to their close exposure to suicide attack training.

Individuals who visit mental health clinics were included in the study because approaching

Result

The present study is aimed to see psychological effects of war on terrorism and the role of psychological interventions in the rehabilitation of affectees. It is further directed to explore the psychological reactions shown by male respondents and female respondents of the community and to measure its level of intensity between male respondents and female respondents by using Impact Event Scale, Civilian Mississippi Scale and Geriatric Scale. Internal consistency and reliability of the scales were determined by using Cronbach's alpha. All the scales deemed reliable for the current study with alpha reliability of .84, .83 and .79 respectively. Following tables show the results obtained from the data analysis:

Table I: Alpha Reliability of IES scale (N=200)

<table>
<thead>
<tr>
<th>Scale</th>
<th>No. of Items</th>
<th>Alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of Event Scale (IES)</td>
<td>15</td>
<td>.84</td>
</tr>
</tbody>
</table>
Table I shows the alpha reliability of IES, GDS and CMS scales. Results shows that all scales are internally consistent and can be used for present sample.

Table II

Means, standard deviations and t-value of the stress scores of the male and female affectees phase I on Impact of Event Scale (N=200)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Male (n=100)</th>
<th>Female (n=100)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>S.D</td>
<td>M</td>
</tr>
<tr>
<td>Stress</td>
<td>25.34</td>
<td>7.20</td>
<td>31.18</td>
</tr>
</tbody>
</table>

$df = 198 \quad p < .01$

Table II shows the mean, SD and $t$ values of male and female affectees on stress scale. Result shows that there is a highly statistically significance at ($p<.001, t=4.80$) which means that females score high on perceived stress scale as compared to male.

Table III:

Means, standard deviations and t-value of the stress scores of the pretest and post-test of Affectees (phase II) on Impact of Event Scale (N=200)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Stress Pretest (n=100)</th>
<th>Stress Post-test (n=100)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>S.D</td>
<td>M</td>
</tr>
<tr>
<td>Pair I</td>
<td>28.25</td>
<td>9.00</td>
<td>23.70</td>
</tr>
</tbody>
</table>

$df = 198 \quad p < .01$

The above table shows highly significant difference between the pretest and post-test of Affectees on stress scale by stress scores ($t=5.99, p<.001$). The figures show that the level of stress was high ($M=28.25, SD=9.00$) among the participants on pretest as compare to post-test ($M=23.70, SD=9.84$).
Table IV:
Means, standard deviations and t-value of the stress scores of the pretest and post-test of Male Affectees (phase II) on Impact of Event Scale (N=100)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Stress Pretest (n=50)</th>
<th>Stress Post-test (n=50)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>S.D</td>
<td>M</td>
</tr>
<tr>
<td>Male</td>
<td>25.35</td>
<td>7.20</td>
<td>20.94</td>
</tr>
</tbody>
</table>

\[ df = 198 \quad p < .01 \]

Result indicates highly significant difference between the pretest and post-test of male Affectees on stress scale (t=4.33, p<.001). The table show that the pretest males have more stress (M=25.35, SD=7.20) as compared to post-test males (M=20.94, SD=9.06).

Table V:
Means, standard deviations and t-value of the stress scores of the pretest and post-test of Female Affectees (phase II) on Impact of Event Scale (N=100)

<table>
<thead>
<tr>
<th>Scale</th>
<th>Stress Pretest (n=50)</th>
<th>Stress Post-test (n=50)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>S.D</td>
<td>M</td>
</tr>
<tr>
<td>Female</td>
<td>31.18</td>
<td>9.70</td>
<td>26.48</td>
</tr>
</tbody>
</table>

\[ df = 198 \quad p < .01 \]

The above table shows highly significant difference between the pretest and post-test of female Affectees on stress scale by stress scores (t=4.13, p<.001). The figures show that the pretest females have more stress (M=31.18, SD=9.70) as compared to post-test females (M=26.48, SD=9.86).
Discussion

The objective of this study was to examine the psychological consequences of war and terrorism among the victims in affected areas (Swat & Buner) of Pakistan and to investigate the role of psychological intervention strategies in the rehabilitation of affectees. Our findings indicate significant difference between phase I and phase II scores which shows tremendous role performed by psychological intervention in rehabilitation of affectees. In phase 1, it was hypothesized that affectees of war and terrorism will have high score on psychological distress, 2) psychological distress will be low in males than females.

These research findings are consistent with the earlier research findings (Delisi et al., 2003; Farooqi, & Tariq, 2010; Khan, Alam, Warris, & Mujtaba, 2007; Nasky, Hines, & Summer, 2009; Pat-Horenezyk et al., 2007; Pfefferbaum et al., 1999; Solomon, 2009; Solomon, Gelkopf, & Bleich, 2005; Summers & Winefield, 2009; Tolin & Foa, 2006 and Willenz, 2006) which suggest that the female victims are more prone to develop psychological stress, depression and PTSD as compared to the male victims of war and terrorism.

The psychological effects of terrorism on threatened civilians have not been extensively investigated in the literature. Descriptions of gender differences in response to terror attacks are even sparser. Gidron (2002) reported that the prevalence of PTSD after terrorist attacks worldwide is estimated to be approximately 28%. Consistent with these results, Galea and colleagues (2002), who interviewed 1008 adults in Manhattan after the September 11 terrorist attacks, showed a substantial burden of acute PTSD and depression in the population after the attacks. Experiences involving exposure to the attacks were predictors of current PTSD, and losses as a result of the events were predictors of current depression. Research findings regarding gender differences in response to traumatic events are equivocal. Several studies have not identified gender differences at all (Amirkhan, Risinger, & Swickert, 1995; Aranda et al., 2001; Lomranz et al., 1994). Many researchers, however, report a female-to-male lifetime prevalence ratio of as high as 2:1 for PTSD symptoms, even when levels of exposure are lower in females as compared to males (Ai, Peterson, & Ubelhor, 2002; Ben Zur & Zeidner, 1991; Breslau, 2001, Fullerton et al., 2001; Karanci et al., 1999; Saxe & Wolfe, 1999; Seedat & Stein, 2000). These data appear to be consistent with a review of 180 articles and chapters on 130 distinct samples involving over 50,000 individuals in 80 different traumatic events (Norris, Friedman, Watson, Byrne, Diaz & Kaniasty, 2002). There viewed data reveal that in the aftermath of disasters, women appear to be at greater risk than men for developing long-term psychological problems, especially PTSD. The effects of gender were found to be greatest in samples from traditional cultures and within the context of severe exposure.
The study reveals that 26.7% of women and 19.8% of men have scored on psychological distress on the General Health Questionnaire (GHQ). However, this difference in gender with respect to psychological disorder is much less than reported by studies conducted on civilian and military populations.

Auerbach & Kilmann (1997) psychological interventions are the interventions in which different techniques and approaches are used like initial psychological and social methods for proper assessment/diagnosis, treatment and rehabilitation of different psychological and mental disorder. Psychological interventions are comprises of different planning and activities which included psychological therapy (psychotherapy), psycho educational treatments, counseling, activities with families, rehabilitation activities (from less to more structured activities such as leisure and socializing activities, interpersonal and social skills training, occupational activities or vocational training, sheltered employment activities) and provision of social support. Intake interviews, assessments and follow up psychopharmacology are not included in initial psychological intervention services.

Individual's strength and ability that they normally use effectively to cope in the face of a perceived challenge or threat is overwhelmingly affected by stressful life event when psychological sever distress prevailed (Auerbach & Kilmann, 1997; Everly & Mitchell, 1999; Raphael, 1986; Sandoval, 1985; Schwartz, 1971; Wollman, 1993). According to Caplan and Everly & Mitchell (1964, 1999), particular or narrow down it, a crisis or stress may be taken as a reaction/response situation wherein the following important changes can take place:

- Psychological homeostasis will be disrupted;
- Individuals coping mechanisms usually failed to reestablish homeostasis; and,
- It is based on evidence that there is functional impairment caused by psychological distress engendered by the crisis.

There is a huge difference and distinction between “Critical incident” and “crisis” as it is taken normally confused and mixed with each other. Critical incident in opposition of crisis reaction consider any stressor that has the strength to lead to crisis reaction in many people. Peculiarly, crisis reaction is the ultimate result of any sort of critical event (American Psychiatric Association, 1994; Everly & Lating, 1995; Flannery, 1994, 1995). Threatening situations or real death, serious injuries or any other direct or indirect threats to the affectees physical and psychological integrity will be considered Catastrophic, traumatic events or critical incidents. People can also be victimized by eye witnessing the causalities happening in front of them (American Psychiatric Association, 1994). If there happened anything contradictory or in opposition of one's belief system can also become a cause of being traumatic (Everly & Lating, 1995).
Since long time, for victims and affectees of all kind of traumatic events (disaster and critical incidents) psychological intervention has been proved an effective, important, unavoidable and front-line intervention especially in result of severe psychological distress and trauma (Everly, Flannery, & Mitchell, 2000; Everly & Mitchell, 1999). According to the definition of psychological intervention given by Everly & Mitchell (1999), “it is the provision of emergency psychological services and care to victims as to help those victim's in returning to normal and an adaptive level of functioning and to prevent or mitigate the potential negative impact of psychological trauma.”

Conclusion

As a result of the sabotage activities carried out by terrorists, there will be large number of casualties like injuries, death, and destruction. Psychological impact is the ultimate goal i.e., create a situation of uncertainty, vulnerability and fear. Long lasting psychological reactions of terrorism, are the perpetrator's main political goals. Psychological reactions exert sever and persistent impact on human neurological system. That's because a neurological perspective is very important to develop the knowledge of terrorism and its long lasting impact on the lives of the people.

Consequently it is explained by Karanci (1999) including that all kind of terrorism activities have widespread long lasting impact on the people of the affected areas, psychological interventions will help and involves for the preparation of it, including social support and multiple levels within the community; respondents, professionals and community-based organizations. The approach is social rather than clinical, which is exploited in the natural mechanisms of community interventions for psychological support.

Limitations

Researchers face several unique challenges while conducting rigorous studies/researches and interventions based on evidence in the conflict areas. Researchers always face the problem of security and their lives are always at risk and other people working in mental health team are also at high risk because of the installation of landmines and unexploded ordinances. There is also security measure taken by peace keeping troops and restricted from general travel which creates hindrances while providing services in different sectors by organizations.

This study was limited to only two districts of Khyber Pakhtunkhwa i.e. Swat and Buner just because of security risks. General local conditions of these districts aftermath of conflict were better as compared to other areas of Khyber Pakhtunkhwa i.e. Waziristan Agency and Orakzai Agency etc.
Replication of such study is possible in other districts of Khyber Pakhtunkhwa when complete control of the areas is ensured and minimizes the risks of security.

**Recommendations**

Psychological evaluation and assessment of the people of the targets area risks and needs after the advent of a conflict or disaster must be formulated and conducted with a focus on the types and strength/levels of symptoms experienced and formal diagnosis should be avoiding until two phases of emergency situations are elapsed. After the initial phases of the emergency situations that formal assessment and diagnosis will be made legitimately by the experts, then it will be helpful in providing treatment to illnesses people will face. Population and individual's resilience assessment if the integral to assessing risks.

Mental health support should be provided with relief activities. To achieve this goal, workers who are involved in rescue activities should also be given training for emotional first aid or treatment. One of easiest ways to deal with issue of coordination through help with cultural norms after post disaster requirement that help should be taken from local volunteers or residents. Local people related to health care profession and teachers can facilitate in the management of psychological impact of disasters. It is important that mental health problems of children should be reported as soon as possible and appropriate measures should be taken at school and home accordingly. As children spend much time with their family members, they can contribute a lot to save this purpose (Wooding & Raphael, 2004).

To help and prevent people from the onset of psychological disorder/trauma related illness especially in vulnerable groups of women and children required great investment in research to identify those risks.

With the help of conducting researches, it can become easy then to determine long term effects of terrorists attacks on people mental health (brain), physical health and specially on their behavior and will help us to understand that the effects of terrorism are seriously different form the effects of other disaster especially when there is continuity in terrorists actions.

If we want to know about the needs of the people when they are exposed to emergency situations like terrorism especially in country like Pakistan, new styles, ways and abrupt research planning should be formulated otherwise will not be able to know people's need then. Along this we will never be able to discover ways and techniques to identify who is at high risk, and what kind of intervention will be needed to eradicate and prevent people from developing psychological disorders on long term basis.
Disaster planning and research findings should be incorporated more rapidly. Training in clinical and other schools and even in psychology departments, disaster preparedness programs and disaster/emergency response are not included in their syllabus which is an attention seeking situations. It is advised that such training program should be included in schools, colleges and universities syllabus for prior preparation for any sort of emergency situation.

References


The author Mr. Hayat Mohammad is a PhD scholar at the Department of Psychology, University of Peshawar. He can be reached at hayat_bangash@hotmail.com, hayat_bangash2@yahoo.com, +92-3339139020

The author Dr. Mohammad Jehanzeb Khan is the Vice Chancellor of the University of Swat. He can be reached at yosafzai@yahoo.com

The author Summiya Ahmad is an Assistant Professor at the Department of Psychology, University of Peshawar. She can be reached at summiya_ahmad@hotmail.com