

Impact of Terrorism on Mental Health

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Objective: To find out the impact of terrorism on mental health and behavioral patterns of men and women.

Place and Duration of Study: It was conducted in Islamabad (capital city of Pakistan) over a period of one month in September – October 2011.

Study Design: It was a cross sectional survey.

Materials & Methods: The main study sample comprised of equal number of male and females (25 males and 25 females). Their age ranging from 22 to 60 and their education level was Bachelors to PhD level. The target population belonged to various professions like doctors, engineers, lawyers, students (Colleges and Universities) and others. Purposive sampling technique was used and data were collected with the help of questionnaire on : Concerns and Fears about Terrorism, Thinking and Talking about Terrorism, Measuring Attitudes about Terrorism, Mental Health Impacts of Terrorism, Behavioral Impacts of Terrorism and Effectiveness of Public Institutions. Participants were approached personally and their consent was taken before administration of questionnaires. T-test was computed to see the effects of terrorism on mental health and behavior patterns.

Results: There was a significant difference shown by male and female included in the sample on Concerns about Threat of Terrorism (Mean score males = 8.00 and Mean score females = 8.48). Male and female showed a significant difference on Thinking and Talking about Terrorism. A significant difference among the attitudes of male and female was found. A non significant difference on the impacts of Terrorism on Mental Health was seen among male and female participants. Regarding Impacts of Terrorism on the behavior of males and females, a non significant difference was shown. Significant difference was seen in male and female on the Effectiveness of Public Institutions.

Conclusion: The terrorist attacks significantly affect the mental health of the individuals. They became depressed, anxious and worried. These psychological feelings also affect their behavior.

Key Words: Terrorism, Mental Health, psychological impact.

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Introduction

Terrorism has been around for as long as people can remember, but for the past ten years there's been a dramatic rise in activity. Terrorism is a kind of psychological warfare. The mechanism of action to terrorize the society may be different but their purpose remains the same. The mechanism could be in the form of blasts, suicide bombing, bio-terrorism, narco-terrorism and financial terrorism.¹

One definition that combines the key elements was developed at the George C. Marshall Center for European Security Studies by Carsten Bockstette,

"Terrorism is defined as political violence in an asymmetrical conflict that is designed to induce terror and psychic fear (sometimes indiscriminate) through the violent victimization and destruction of noncombatant targets (sometimes iconic symbols). Such acts are meant to send a message from an illicit clandestine organization. The purpose of terrorism is to exploit the media in order to achieve maximum attainable publicity as an amplifying force multiplier in order to influence the targeted audience(s) in order to reach short- and midterm political goals and/or desired long-term end states".²

Mental health describes either a level of cognitive or emotional well being or an absence of a mental disorder

³ The World health Organization defines mental health as "a state of well being in which the individual realizes his or her own abilities, can cope with the normal stresses of life, can work productively and fruitfully, and is able to make a contribution to his or her community".⁴ Psychological responses to terrorism are a mixture of reactions towards the trauma and also towards a constant fear of being a victim to a traumatic event in the future. Such reaction may vary among individuals depending upon the extent of personal damage in any form, proximity to the place where the act has been committed, brutality of the event, his or her own coping styles, likely expectation of a future repetition and the chronicity of the threat scenario.⁵ Research has shown that any form of personal threat and fear leads to a change in personal behavior designed to minimize exposure to risk^{6,7}, also referred as 'constrained behavior'.⁸ Psychological trauma not only leads to disturbance in the mental equilibrium causing maladaptive behavior but also results in diagnosable psychiatric disorders. A large number of individuals report medically unexplained physical symptoms.⁹ Widespread report of chest pain and respiratory problems following the events of September 11 were referred as 'World Trade Center syndrome'.

A survey conducted on 512 participants out of whom 84 had been directly exposed to a terrorist attack and 191 had a family member or friend exposed to such an attack revealed PTSD among 48 participants, acute stress disorder by one participant and 299 reported depressions.¹⁰

In a study among Vietnamese refugees, people who were exposed to more than three trauma events had heightened risk of mental illness after 10 years compared to people with no trauma exposure.¹¹ Results from a meta-analysis indicate that in a year following terrorist incidents, the prevalence of PTSD in directly affected populations varies between 12% and 16%.¹² A national household survey on 4,023 people revealed six-month PTSD prevalence to be 3.7% for boys and 6.3% for girls, Major Depressive Episode among boys was 7.4% and 13.9% in girls, and Substance Abuse Disorder had a six-month prevalence of 8.2% among boys and 6.2% for girls.¹³ In a study by Wanda, children's responses to terrorism include acute stress disorder, posttraumatic stress disorder, anxiety, depression, regressive behaviors, and separation problems and sleep difficulties.¹⁴ Adults, adolescents and children do get the effects from violence and terrorism depending upon the type of event and psychological endurance. However, it is important to note the fact that the experience of violence does not necessarily lead to psychiatric morbidity.¹⁵ Gautam et al in their study on the victims (n=31) of a bomb blast in a bus caused by terrorist activity reported 35.4 percent of psychiatric morbidity at day 3 and 29.3 percent after 2

weeks. After 2 weeks the most common ICD. 10 psychiatric diagnosis was PTSD (12.9 %) followed by depression (9.6 %) and dissociative amnesia (6.4 %).¹⁶ W.H.O. estimated that, in the situation of armed conflicts throughout the world "10% of the people who experience traumatic events will have serious mental health problems and another 10% will develop behavior that will hinder their ability to function effectively. The most common conditions are depression, anxiety and psychosomatic problems such as insomnia, or back and stomach aches."¹⁷

In the light of the available literature it cannot be denied that disaster in the form of terrorism leads to significant mental disequilibrium and psychiatric morbidity. It definitely represents a major challenge with regard to designing an effective strategy for coping with the aftermath of such an attack.

Materials and Methods

Sample of the study comprised of equal number of male and females (25 males and 25 females). Their age ranging from 22 to 60 and their education level was Bachelors to PhD level. It was conducted in Islamabad (capital city of Pakistan) over a period of one month in September to October 2011. The target population belonged to various professions like doctors, engineers, lawyers, students (Colleges & Universities) and others. Study design was cross sectional survey. Purposive sampling technique was used and data was collected with the help of questionnaire i.e. : Concerns and Fears about Terrorism, Thinking and Talking about Terrorism, Measuring Attitudes about Terrorism, Mental Health Impacts of Terrorism, Behavioral Impacts of Terrorism and Effectiveness of Public Institutions. Participants were approached personally and their consent was taken before administration of questionnaires. T-test was computed to see the effects of terrorism on mental health and behavior patterns.

Results

Male and female included in the sample showed a significant difference on Concerns about Threat of Terrorism, **Table 1**. Results indicate that male and female included in the sample showed a significant difference on Thinking and Talking about Terrorism. Result also depicts a significant difference among the attitudes of male and female included in the sample. A non significant difference on the impacts of Terrorism on Mental Health was shown by the participants, **Table I**. Results indicate a non significant difference regarding Impacts of Terrorism on the behavior of males and females included in the sample **Table I**. It was also depicted by the results that male and female included in the sample show a significant difference on the Effectiveness of Public Institutions **Table I**.

Table No. 1: Effect of Terrorism on various indices of Mental Health

Variables		P value (%)			
Concerns about threat of terrorism					
Groups	No. of Response	Mean	Standard Deviation	t	Sig. Level
Male	25	8.00	2.29	-.857	.047
Female	25	8.48	1.61		
Comparison on Thinking and Talking about Terrorism					
Male	25	10.40	2.80	-2.000	.008
Female	25	11.60	1.08		
Comparison of Attitudes about Terrorism					
Male	25	36.04	7.58	-2.343	.007
Female	25	39.96	3.54		
Comparison of Mental Health Impacts					
Male	25	4.32	2.38	-2.123	.633
Female	25	5.88	2.80		
Comparison of Behavioral Impacts					
Male	25	1.96	1.97	.075	.361
Female	25	1.92	1.78		
Comparison of Effectiveness of Public Institutions					
Male	25	1.20	.41	2.228	.042
Female	25	.96	.35		

Discussion

Threat of terrorism has been evident for many years, but only in recent times this threat has become fact.

In this article effect of terrorism on mental health was studied. Psychological sequelae are seen commonly after any form of mass violence. Any act of terrorism by the nature of its very purpose leaves a lingering impact on those who are either its victim or even its witness. Several of the surveys and studies worldwide have confirmed this observation.

The results of the present study showed that females are more concerned about the threat of terrorism and they think more about terrorism than men. Their major cause of worry is that the state is not prepared to deal with terrorism. Similarly, there is a significant difference among the attitudes of men and women regarding terrorism. As compared to men most of the women thought that terrorism is psychological in nature as it is meant to cause psychological suffering. It creates more fear and distress, in the public than natural disaster. The women thought that many Pakistanis are suffering from

fear and distress as a result of terrorism but that are not aware of it.

As far as the mental and behavioral impacts of terrorism are concerned the findings of the study showed that there is no significant difference among male and female. Both are equally affected by terrorism. They develop feelings of fear, distress, anxiety, worry and anger and depressed as a result of terrorism. Both men and women are upset and sad, as a result they lack their interest in daily life activities. They became more overprotected about the safety of their families. However, the terrorism couldn't bring any significant impact on public's religious faith rather it strengthen most of the women's faith on their religion.

The last part of the questionnaire was devoted to get public opinion about the effectiveness of the public institutions that are directly involved in dealing with terrorism and its impacts on mental health. The results showed that most of the people are not satisfied with the current medical and emergency response system of the country. They thought that the medical and emergency system of the country is not currently meeting the mental health needs of the public that arises as the

result of current stream terrorism. According to DiGiovanni, (1999) there are a number of key roles that the mental health professionals could be expected to fulfill: advising the authorities on how to manage anxious and distressed individuals; providing advice for surgical and medical staff about post-traumatic reactions; helping to determine that symptoms such as tachycardia, tension, nausea and tremor could be psychological reactions to stress and conducting triage to identify those in need of more specialist psychiatric care.¹⁸

Conclusion

The terrorist attacks significantly affect the mental health of the individuals. They became depressed anxious and worried. These feelings of depression also affect their behavior. They feel emotionally upset, sad, nervous, and feel stress most of the time. The current stream of terrorism made them more concerned about the safety of their families as well as their own.

There is a need to offer an empathic, non-judgmental, collaborative approach to help these ailing individuals to achieve a better level of adjustment.

References

1. Crenshaw, M. (1990) The logic of terrorism: terrorist behavior as a product of strategic choice. In *Origins of Terrorism*. Cambridge: Cambridge University press.
2. George C. Marshall European Center for security studies. ISSN 1863 – 6039 No. 20, Dec 2008. <http://www.marshallcenter.org/mcpublicweb/en/nav-security-insights.html>
3. About.com (2006, July 25). What is Mental Health? Retrieved June 1, 2007, from About.com.
4. World Health Organization (2005). Promoting Mental Health: Concepts, Emerging evidence, substance Abuse in collaboration with the Victorian Health Promotion Foundation and the University of Melbourne. World Health Organization. Geneva 19. J.K.Trivedi. *Indian Journal of Psychiatry*, 2004, 46 (1) 7-14.
5. Greenberg,J.,Simon,L., Pyszczynski,T., Solomon,S. & Chatel,D.(1 992) Terror management and tolerance: does mortality salience always intensify negative reactions to others who threaten one's world view? *Journal of Personality and Social Psychology*, 63,212-220.
6. Jacobson, D. & Bar-Tal, D. (1995) Structure of security beliefs among Israeli students. *Political Psychology*, 16,567-590.
7. Ferraro,K.A.(1 996) Women's fear of victimization: shadow of sexual assault ? *Social Forces*, 75,667-690.
8. Engel,C.C.(2001) Outbreaks of medically unexplained physical symptoms after military action, terrorist threat or technological disaster, *Military Medicine*,166 (suppl.2), 47-48.
9. Bleich A, Gelkopf M, Solomon Z. Exposure to terrorism , stress-related mental health symptoms and coping behaviors among a nationally representative sample in Israel *JAMA* ; 2003; 290. 612-20.
10. Steel Z, Silove D, Phan T, Bauman A. Long term effect of psychological trauma on the mental health of Vietnamese refugees resettled in Australia: a population – based study. *Lancet* 2009; 360: 1056-62.
11. DiMaggio C, Galea S. The behavioural consequences of terrorism: A Meta – analysis. *Acad Emerg Med* 2008; 13: 559 – 66.
12. Kilpatrick DG, Ruggiero KJ, Acierno R, Saunders BE, Resnick HS, Best CL. Violence and risk of PTSD, Major Depression, Substance Abuse/ Dependence, and Co morbidity: Results from the National Survey of Adolescents. *J Counsult Clin Psychol* 2003; 71: 692-700.
14. Wanda F. Childhood reactions to terrorism-induced trauma: A review of the past 10 years. *J Am Acad Child Adolesc Psychiatry* 2004; 43: 381-92.
15. Curran PS, Miller PW. Psychiatric implications of chronic civilian strife or war; Northern Ireland. *Adv Psychiatric Treatment* 7: 2001; 73-80.
16. Gautam, S. Gupta I.D. Batra L. Sharma, H. Khandelwal R. & Pant, A. (1998) Psychiatric morbidity among victims of bomb blast. *Indian Journal of Psychiatry*, 40(1) 41-45.
17. World Health Organization. World health report 2001- Mental health: new understanding, new hope. Geneva: Switzerland 2001;p 1-16.ADF
18. DiGiovanni, C.(1999) domestic terrorism with chemical or biological agents: psychiatric aspects. *American Journal of Psychiatry*, 10, 1500-1505.