

A Narrative Review on Psychological Consequences of Traumatic Events

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ABSTRACT

Introduction: Research suggests that there are certain geographical areas where sizably voluminous populations are consistently exposed to immensely large-scale traumatic events such as wars, organized violence, terrorism, and natural disasters. Consequently the overall exposure to trauma worldwide may exceed rates antecedent as per the reports and data.^[1]

Method: A systematic search was conducted with PRISMA guidelines. The search was completed by examining peer reviewed literature databases using PubMed, Research gate, Medline and identified potential studies for inclusion.

Results: A number of reports on psychological consequences were included in the review. Multiple disaster and traumatic studies were included in the review. The search identified 190 initial matches which were screened by inclusion and exclusion criteria. Ten full text studies in this narrative review confirm that traumatic events have a strong psychological effect on the victims.

Conclusion: The studies suggested that there is a high prevalence of PTSD after a terrorist attack or any disaster which emphasizes the need for improved health services to address the intermediate and long-term consequences of traumatic events. Besides that, the highest prevalence was found among survivors and first responders.^[1]

Keywords: Traumatic events, disaster, psychological consequences, victims/survivors

INTRODUCTION

Severe mental disorders are often being neglected following a disaster. Traumatic events are often unpredictable, uncontrolled and can provide feelings of fear and anxiety. The Diagnostic and Statistical Manual of Mental Disorders (DSM-IV) defines a traumatic event as- witnessing such an event triggers fear, helplessness, or horror in response to the perceived or actual threat of injury or death to the individual or to another. These events are usually perceived by the individual to be life-threatening, unexpected and infrequent and are characterized by high intensity. (Ursano et al, 1994). The psychiatric illnesses such as PTSD are the more astringent outcome of traumatic events. Much of the literature has focused on PTSD because it is an apperceived and well-defined result of traumatic events. The traumatic events could be terrorism, natural and manmade disasters.^[2]

There is a broad range of incidents that come in the category of traumatic events. The traumatic event is more

severe than a crisis and has most unpredictable onset. According to Meichenbaum, 1994, Type-I trauma includes rape, shocking accident, car accident or an earthquake and Type-II trauma is an incident with moderate to severe or long term characteristics and poor prognosis.

DEFINITION

According to American Psychological Association, trauma defines as a person's emotional response to an extremely negative or disturbing event.

DSM-III states trauma as a stressor that would be markedly distressing to almost anyone and is outside the range of usual human experience.

ICD-10 (WHO, 1992) PTSD arises from a delayed and or protracted response to a stressful event or situation (either short lived or long lasting) of an exceptionally threatening or catastrophic nature, which is likely to cause pervasive distress in almost anyone (e.g. natural or

manmade disaster, combat, serious accident, witnessing the violent death of others or being the victim of torture, terrorism, rape or other crime.)

Populations affected by humanitarian emergencies generally experience consequential gregarious and psychological suffering. Among the most vulnerably susceptible are people with pre-existing astringent severe mental disorders. In an emergency crisis, however, access to opportune mental health accommodations even more restricted. This is compounded by the fact that during a humanitarian emergency most agencies working for the mental health and psychosocial field fixate on endeavouring to address either the psychosocial environment or immediate traumatic responses. People more affected with these disorders are identified either by referral from medical teams or during group and individual counselling sessions.

In humanitarian emergencies, adults, adolescents and children are more prone or exposed to potentially traumatic events. These events trigger a wide range of cognitive, behavioural and somatic symptoms. Mental health disaster replication requires an understanding of the nature of the disaster and its impact on the individual. This includes the type and extent of the loss, cause and impact of the disaster.^[2]

Need for the study: Little research is available on the long-term outcome of disasters, concretely for low-income population and countries. Mental health outcome is diverse in its nature, psychosocial concerns such as parental well-being, family functioning and quality of life and psychiatric disorders as well.^[6] This information is important for directing, strengthening, and evaluating post tsunami or any traumatic event mental health needs and interventions.



Intervention pyramid for mental health and psychological support in humanitarian emergencies

Therefore, it was found essential to explore the effects of psychological consequences of traumatic events. This review is defined to summarize the report on the psychological consequences.^[3]

AIM

The aim of the review is to find out the evidence regarding the relationship between psychological consequences and traumatic events.

OBJECTIVE

To conduct a narrative review to analyze the relationship between psychological consequences and traumatic events

MATERIALS AND METHOD

An eligibility criterion of the articles was done on the basis of below mentioned criteria:

Search Strategy Method: This narrative review is consistent with the preferred reporting items for systemic review and meta-analysis (PRISMA) guidelines. The screening was performed using database such as-PubMed, Medline. All pertinent titles and abstracts were read to assess the eligibility predicted on inclusion criteria. After reading the full texts, the researcher abstracted the non- germane articles where potentially pertinent articles were evaluated by other authors to substantiate eligibility.

Initial search retrieved 190 articles and out of which 50 articles were selected for consideration. A total of 25 articles were excluded due to duplication in reviewed databases. The remaining articles were screened and 14 articles were excluded as the full text was not related to the topic. Therefore, 10 articles were screened and included in the review.

The books, non-English manuscript, conferences abstracts and non full-text articles were excluded from the review.

Diagnostic tools

- Medical Outcomes Study 36-Short- Form Health Survey
- Harvard Trauma Questionnaire

- Hopkins Checklist-25
- Secondary source of data obtained from Directorate of Health Services

Study design

- A retrospective, descriptive study design
- Cross-sectional study design
- Prospective cohort study design
- Longitudinal study design
- Epidemiological study design
- Exploratory study
- Qualitative and quantitative study

Type of participants/victims: All age group and both gender

Settings: Places of Humanitarian Emergencies

Outcome: The primary outcome is that there is a huge psychological impact of traumatic events on victims.

Publication time scale: The articles included in this narrative review are from 2000 onwards

FINDINGS

There were very inhibited studies available on the psychological effect of traumatic events. All the studies revealed that a number of psychological symptoms can be developed after witnessing a traumatic event. A detailed explication of studies is as:-

Studies by Galea, et al 2002, Schlenger et al, 2002, New York USA on Cross-sectional study design Terrorist attack focussed on adult population showed symptoms within first 12 months after these terrorist attacks. The highest prevalence was found among survivors and first responders. Socio-economic position, event exposures, social support, and peri-event emotional reactions helped explain differences in PTSD risk in various ethnicities.^[5]

The literature review by Pierre Verger, et al, 2004, France, on Epidemiological study on bombing attack, showed results of logistic regression analysis indicating that the risk of PTSD was significantly higher among women. The higher prevalence of PTSD 2.6 years on average after a terrorist attack emphasizes the need for improved health services to address the intermediate and long-term consequences of terrorism.^[12]

The authors Robert Kohn, Tamashiro, et al, 2005, Central America, have driven the development of study based on composite International Diagnostic Interview. The study identified a high impact on residential area victims with more distress, higher score on grief inventory and greater severity in PTSD symptoms. The degree of exposure was more among women.^[9]

Prior research by Van Griensven et al, 2006, Asia, Prospective cohort study design, Earthquake and tsunami, suggests that among survivors of the tsunami in southern Thailand, elevated rates of symptoms of post traumatic stress disorders, anxiety and depression were reported even 8 weeks after the event with highest rates of anxiety and depression. Nine months after the disaster, the rates of those reporting these symptoms decreased but were still elevated.^[4]

Previous studies by Azquez, et al, 2006, Madrid Spain, Exploratory study design, on terrorist attack have shown that the psychological distresses of the sample are similar to the 9-11 attack in comparable situations. The participants with higher scores in chronic thought suppression exhibited higher levels of stress disorders.^[7]

A study of Kar, Basita, et al, 2006, Orissa, India, Comparative study design, Super cyclone are well documented and acknowledges that a proportion of adolescents suffered from stress symptoms and syndromal psychiatric diagnosis after one year of event. Overlap of symptoms and co morbidity of diagnosis were high suggesting that a post-disaster presentation is often a conglomeration of PTSD.^[10]

It was reported in the literature that analyses showed significantly higher scores on all subscales of detailed assessment of post-traumatic stress symptoms. Women showed greater symptoms in a Qualitative and quantitative study design, Kausar Suhail, et al, 2009, Pakistan on Earthquake.^[11]

The literature pertaining to Retrospective review programme, Typhoon Descriptive study design, showed a significant improvement in the mental health of the victims of typhoon with a decreased number of cases in relation to the mental health activities such as psycho-education, group discussion and counselling and care. Ana Cecilia et al, 2014, Philippines,^[1]

Javeed Ahmed Rather, 2014, Srinagar, India, Literature Review and Secondary source data obtained from Directorate of Health Services, Floods. The analysis revealed that number of victims with different stress disorders increased as the time passed and majority of them were females. All survivors experienced an alarming level of mental health problems.^[6]

Siri Thoresen, Tine K. Jensen, et al, 2016, Utoya Island, Oslo, Norway, Longitudinal study design, Terrorist attack. The study reported elevated levels of PTSS and anxiety/depression four to five months after the shooting compared to Norwegian general population. A threefold excess of anxiety/ depression symptoms followed by five-fold excess of PTSS scores were found in the parents of survivors.^[7]

Summary of Findings: This narrative review was conducted to find the documentation of psychological effect of traumatic events on victims. As expressed in Table-1, there are 10 studies and the findings are quite similar. A very limited data is available on the psychological consequences and traumatic events.

The 10 reviewed studies revealed that there could be a long term psychological effect of traumatic events on the victims/survivors if not taken care in due course of time and sometimes may lead to psychiatric disorders. While concluding, the majority of the studies supported that there is a strong relationship between psychological consequences and traumatic events.

Future significance: The results of the studies denote that victims/survivors need to be inculcated in regard to the psychological avail after any traumatic event. This will avail to reduce the long term effects of psychological consequences and avert psychiatric disorders. The victims should be vigilant of help groups at an early stage and further follow-ups.

There are limited articles available on the effects of psychological consequences of any traumatic event on victims. Hence, more research should be done to explore the long term effects of the events.

Strength

- A very less narrative review is available on the psychological consequences of traumatic events.
- A systematic search consistent with PRISMA guidelines

Limitations

- The researcher excluded manuscripts of different language except English, conference abstracts and non- full texts.
- Search strategy was refined to natural disasters such as earthquakes, typhoons, hurricanes etc. and terrorist attacks.

RECOMMENDATIONS

Predicated on all the included 10 narrative studies, the long term effects were still found in the victims with an elevated level. The analysis of the included studies has found some valuable points.

- Each response to a disaster is unique and challenging as interventions take place in a social cohesion is beneficial as they provide a sense of faith, hope and social integration.
- The survivors should be enabled with an immediate aid program by humanitarian organisations. The main goal of the program should be the strengthening of the psychological support to prevent long term psychological traumas associated with psychiatric disorders.
- The psychological first aid should be provided along with the physical and medical assistance by identifying the most vulnerable and at risk.
- Mass Education should be organized in prone disaster areas to impart the knowledge to the society so that they can become aware of their interactions with environment and its after effects.

CONCLUSION

An electronic narrative review was done by the researcher and the studies which have been screened and evaluated showed a vigorous relationship between the psychological consequences and traumatic events. The studies suggested that there is a high prevalence of PTSD after a terrorist attack or any disaster which emphasizes the need for improved health services to address the intermediate and long-term consequences of traumatic events. Besides that, the highest prevalence was found among survivors and first responders. Socio-economic position, event exposures, social support, and peri-event emotional reactions helped explain differences in PTSD risk in various ethnicities.

Conflict of Interests: There was no conflict of interest in this article.

Source of Funding: It was not a funded research review

Ethical approval and consent to participate: The ethical approval and consent to participate is not applicable in this narrative review.

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