

# ↻ Türk Psikiyatri Dergisi ↻

## *Turkish Journal of Psychiatry*

### Letter to the Editor

#### THE HIDDEN TOLL OF EARTHQUAKES: ADDRESSING THE MENTAL HEALTH NEEDS OF SURVIVORS

Dear Editor,

The recent earthquakes that struck parts of Türkiye and Syria had devastating effects, resulting in more than 50000 casualties and leaving thousands of individuals displaced, affected, and injured. It is essential to recognize that earthquakes can have a significant impact on the mental health of individuals of all ages, including adults, adolescents, and children (Şalcıoğlu and Başoğlu 2008).

Earthquakes can significantly alter the mental health of the affected population, causing short-term and long-term effects. About 20-50% of individuals that have survived natural calamities like earthquakes are at increased risk of developing anxiety triggered by stress, disturbed sleep patterns, discrimination, abandonment at inconvenient places, and other health effects that impact mental health. (Valladares-Garrido et al. 2022) Children are particularly vulnerable to mental health disturbances following natural disasters due to a range of factors, including separation from parents, increased risk of abuse, exposure to child labor, and stay-at-care centers. (Seddighi et al. 2021) These stressors can lead to a variety of mental health complications in the future, with the most significant being Post Traumatic Stress Disorder (PTSD) and Major Depressive Disorder (MDD). Additionally, various forms of phobias and Obsessive-Compulsive Disorder (OCD) have been observed. (Farooqui et al. 2017)

The national and international response to earthquakes usually involves a massive inflow of funds, food, and clothes, and the attempt to reconstruct the lost infrastructure and normalize the working of the affected area, as soon as possible. However, the rehabilitation of the mental health of those affected is often overlooked. To address this, it is crucial to send trained psychologists and establish mental health centers in the affected regions of Türkiye and Syria. Group treatment is an effective strategy for individuals with PTSD and should be offered in these centers. (Martin et al. 2015)

Psychological First Aid (PFA) is a crucial and cost-effective approach, especially in developing countries. Humanitarian organizations providing supplies and medical aid can also be trained to provide PFA to the affected individuals. Educating children in appropriate ways about abuse is also an effective method to protect them. Furthermore, schools in the affected region of Türkiye and Syria can play a crucial role in providing counseling and teaching children how to cope with their emotions.

In terms of intervention, various interventional psychiatric practices can be carried out. After the 2005 earthquake in Pakistan, many national and international psychiatric programs were initiated including a team of professionals from the US to conduct trauma management workshops, which was the courtesy of IBM. (Khan Mrcpsych 2006) Among other international agencies that aided in intervention, WHO helped organize a four-day training workshop for the extensive training of the local psychiatrists. It was also the active member in the planning and management of a wider scale practical program. One of the plans was to establish five separate units for the provision of the required mental health services, in a geographical hierarchy manner: Mental Health Relief Cells (Prime Minister's Secretariat), Mental Health Relief Centers

(Tertiary Care Hospitals), Mental Health Relief Units (more affected districts like Muzzafargarh), Mental Health Relief Teams, and Community Institutions (Schools, Mosques). The Mental Health Relief Cell, having a conspicuous panel of WHO disaster management experts among others, overlooked and planned all the interventional activities being carried out. This included not only at-station PFA provision but also outreach to the nearby areas through teams. The teams consisted of the psychiatrists and associated psychosocial service staff, in the Mental Health Relief Units, and would travel to the affected areas three days of the week to provide the necessary interventions. For the purposes of communication, and management of intense cases, a link was established between the MHRUs and their teams, and the Mental Health Relief Centers. The results were promising, with a total of 1,321 people having consulted the at-station psychiatrists, while many others having benefited from outreach. In order to evaluate the effectiveness of the services, a pilot project of epidemiology of psychiatric morbidity in earthquake affected areas was launched in the three districts of Kashmir. (Rana et al. 2006) 2005 quake put forth a challenge for the whole nation. The authors describe the methods of appraisal of the situation, methods of needs assessment in emergency phase of disaster, organization of mental health relief efforts and implementation strategies of these services for the survivors, keeping in line with local cultural and social needs and consensus of world authorities on trauma psychiatry and disaster management. Needs Assessment: Three specific needs were identified, namely, need for psychosocial services for majority of the population, need for people in psychological distress requiring Psychological first aid and people with severe mental illnesses requiring long term psychiatric management. Objectives: With the objectives of ensuring availability of Psychological first aid to maximum, early detection, intervention and establishing a chain of referral for the severely affected cases, incorporating psychosocial care and rational use of psychotropic in medical and surgical care at all tiers of health services, public mental health education, community mobilization and caring for the relief workers, the Dept of Psychiatry MH Rawalpindi launched the comprehensive plan for the earthquake survivors. The outreach intervention was also the main component and was carried out in the Republic of Armenia following the earthquake of 1988. (Cohen 2002) This was known as the Psychiatric Outreach Program mainly initiated by the Armenian Relief Society of the Western US. It involved provision of the Psychological First Aid, training of the therapists and school teachers to make them able to provide psychiatric help in the earthquake-stricken areas, the establishment of two mental health clinics in those zones, and directing philanthropic and government organizations to initiate relief efforts. The interaction of therapists and head schoolteachers was carried out in order to identify any student that might require intervention. The

next step would be the direct interaction between the therapists and the students, to help point out any student that might have been missed by the teachers. The provision of PFA to the children mainly was in the form of therapeutic booklets, while sessions were also conducted for children who required further help. From the February of 1989 to the December of 1990, forty-five teams of six individuals each (20% psychiatrists, 13% psychologists, social workers, and family counsellors) were sent to the affected areas of Armenia for a period of three weeks each. On the return of the teams, they were evaluated by the central panel. The clinical follow-ups that occurred informally were used to evaluate the effectiveness of the outreach program, and revealed that the program was a building success with the symptoms of PTSD and depression having been improved in the patients. (Goenjian 1993) Similarly in Turkiye, following the August 1999 earthquake, a team of psychologists from the US initiated a multi-step interventional outreach program called the Mental Health Outreach Program (MHOP). (Kowalski, Kalayjian 2001) This outreach program greatly benefited the victims of all age groups, including school-going children, along with the families of the victims. The members spent a week in the camps, and a week in the schools, following these six steps that were the constituents of their program: Assessment, Expression of feelings, Empathy, and validation, Discovery and expression of meaning, Information dissemination, and Diaphragmatic breathing exercises. The results revealed betterment in the psychiatric state of the victims. (Kowalski and Kalayjian 2001)

In response to natural calamities, it is essential to allocate funds not only for the reconstruction of lost infrastructure and provision of physical aid but also for the development of a comprehensive strategy based on available guidelines, the establishment of mental health centers, and the recruitment of qualified medical professionals. Further, there should be a prompt understanding of the major condition of the population post-earthquake and the actions of a psychiatrist accordingly, with the controlled provision of drugs, the right way to counsel, and the proper way of dealing all age groups; especially children. (Yildiz et al. 2023) This approach is crucial for preserving the mental health of individuals affected by such disasters in the long term and as proven through previous instances, even in Turkiye itself, is sure to bring improvement in the mental state of the affected individuals.

---

## REFERENCES

- Cohen RE (2002) Mental health services for victims of disasters. *World Psychiatry* 1:149.
- Farooqui M, Quadri SA, Suriya SS et al (2017) Posttraumatic stress disorder: a serious post-earthquake complication. *Trends Psychiatry Psychother* 39:135–43.

- Goenjian A (1993) A mental health relief programme in Armenia after the 1988 earthquake. Implementation and clinical observations. *Br J Psychiatry* 163:230–9.
- Khan Mrcpsych MM (2006) Earthquake 2005: challenges for Pakistani psychiatry. *International Psychiatry* 3:21.
- Kowalski KM, Kalayjian A (2001) Responding to mass emotional trauma: A mental health outreach program for Turkey earthquake victims. *Saf Sci* 39:71–81.
- Martín JC, Garriga A, Egea C (2015) Psychological Intervention in Primary Care After Earthquakes in Lorca, Spain. *Prim Care Companion CNS Disord* 17.
- Rana M, Ali S, Yusufi B (2006) Mental Health and Psychosocial Relief of Earthquake Survivors – Activities and Interventions. *Pakistan Armed Forces Med J* 56(4 SE-Short Communication).
- Şalcıoğlu E, Başoğlu M (2008) Psychological effects of earthquakes in children: Prospects for brief behavioral treatment. *World Journal of Pediatrics* 4:165–72.
- Seddighi H, Salmani I, Javadi MH et al (2021) Child Abuse in Natural Disasters and Conflicts: A Systematic Review. *Trauma Violence Abuse* 22:176–85.
- Valladares-Garrido MJ, Zapata-Castro LE, Domínguez-Troncos H et al (2022) Mental Health Disturbance after a Major Earthquake in Northern Peru: A Preliminary, Cross-Sectional Study. *Int J Environ Res Public Health* 19.
- Yıldız Mİ, Başterzi AD, Yildirim EA et al (2023) Preventive and Therapeutic Mental Health Care after the Earthquake- Expert Opinion from the Psychiatric Association of Turkey. *Türk Psikiyatri Derg* 34:39-49.

Saim AMIR<sup>1</sup> , Momina Javaid AWAN<sup>2</sup> , Muhammad EHSAN<sup>3</sup> , Zainab MEHDI<sup>4</sup> , Haseeba JAVED<sup>5</sup> , Muhammad AYYAN<sup>6</sup> , Muhammad Youshay JAWAD<sup>7</sup> 

**Received:** 16.04.2023, **Accepted:** 17.08.2023, **Available Online Date:** 19.10.2023

<sup>1, 2, 3, 4, 5, 6, 7</sup>MBBS, Division of Psychiatry, King Edward Medical University, Lahore, Pakistan, <sup>1, 2, 3, 4, 5, 6, 7</sup>Institute for Mental Health Policy Research, Centre for Addictions and Mental Health, Toronto, Canada.

**Dr. Zainab Mehdi, e-posta:** bintemehdi12@gmail.com

<https://doi.org/10.5080/u27334>