

# Preventive and Therapeutic Mental Health Care after the Earthquake- Expert Opinion from the Psychiatric Association of Turkey



Mevhibe İrem YILDIZ<sup>1</sup>, Ayşe Devrim BAŞTERZİ<sup>2</sup>, Ejder Akgün YILDIRIM<sup>3</sup>,  
Şahika YÜKSEL<sup>4</sup>, Ahmet Tamer AKER<sup>5</sup>, Bengi SEMERCİ<sup>6</sup>, Süleyman ÇAKIROĞLU<sup>7</sup>,  
Yankı YAZGAN<sup>8</sup>, Mustafa SERCAN<sup>9</sup>, Burcu Rahşan ERİM<sup>10</sup>, İlker KÜÇÜKPARLAK<sup>11</sup>,  
Münevver HACIOĞLU YILDIRIM<sup>12</sup>

## ABSTRACT

Two major earthquakes hit Turkey at the Kahramanmaraş region on February 6th 2023. The earthquakes affected almost 15 million individuals, resulting in more than forty thousand deaths, thousands of wounded and the destruction of ancient cities of humankind. Immediately after the earthquakes, the Psychiatric Association of Turkey organized an educational event to address the needs for a guidance on how to approach a trauma of such a big scale. The experts in this educational event summarized their presentations and prepared this review to guide the mental health professionals serving victims of this disaster. The review summarizes the early symptoms of trauma, and puts a framework on the principles of psychological first aid, the approach at the initial stages of the disaster, principles of planning, triage, and psychosocial support systems and the proper use of medications. The text covers the evaluation of the impact of trauma, aligning psychiatric practice with psychosocial interventions, the improvement of counseling skills and methods to better understand the mind during the acute post trauma phase. A set of presentations highlight the challenges in child psychiatry, brings a systematic overview to the earthquake and discuss the symptomatology, first aid and intervention principles in children and adolescents. Last, the forensic psychiatric perspective is presented, followed by a piece on the essentials of delivering bad news and the review is concluded with the emphasis on burnout, a syndrome to avoid particularly for field professionals, and possible preventive measures.

**Keywords:** Disaster, trauma, psychosocial support, psychological first aid, acute stress disorder, post traumatic stress disorder

## INTRODUCTION

On February 6, we experienced a major devastation after intense earthquakes centered in Kahramanmaraş region. The disaster affected many cities housing approximately 15 million people in Turkey and Syria. There appeared a prompt need amongst mental health professionals for information, document and education regarding the challenges in the immediate aftermath of the earthquake. Institutions providing health care and psychosocial support rushed to help. Experienced in disasters and other mass traumas, the Psychiatric Association of Turkey (PAT) was one of the first institutions in Turkey to take action. Since its establishment

following the two major earthquakes that hit Marmara region at 1999, the PAT Psychological Trauma and Disaster Working Unit has developed reports and guides for mental health providers, and informative documents for those affected by the disasters all of which are released freely as of the preparation of this manuscript. The current document has been prepared as a framework summarizing key points of a training program conducted by the PAT following the earthquake on February 6, 2023. Twelve topics included were 'mental symptoms in the early period after disasters, principles of psychological first aid, duties of psychiatrists immediately after the earthquake, principles of drug treatment in the early post-disaster period, symptoms that may occur in children after

**Received:** 22.02.2023, **Accepted:** 27.02.2023, **Available Online Date:** 03.03.2023

<sup>1</sup>Assis. Prof., Hacettepe University Faculty of Medicine, Department of Psychiatry, Ankara, <sup>2</sup>Assoc. Prof., Private Practice, İstanbul, <sup>3,12</sup>Prof., Health Sciences University, Bakırköy Prof. Dr. Mazhar Osman Mental Health and Neurological Diseases Research and Training Hospital, Psychiatry Clinic, İstanbul, <sup>4</sup>Prof., Private Practice, İstanbul, <sup>5</sup>Prof., İstanbul Bilgi University, Department of Psychology, Trauma and Disaster Mental Health Master Program, İstanbul, <sup>6</sup>Prof., Bengi Semerci Institute, İstanbul, <sup>7</sup>Assoc. Prof., Altınbaş University Faculty of Medicine, Department of Child and Adolescent Psychiatry, İstanbul, <sup>8</sup>Prof., Yale Child Study Center, New Haven, USA, <sup>9</sup>Prof., Private Practice, İstanbul, <sup>10</sup>Assoc. Prof., İstanbul Gedik University, Department of Psychology, İstanbul, <sup>11</sup>Dr. Private Practice, İstanbul, Turkey.

**email:** hmunevvery@gmail.com

disasters and principles of psychological first aid in children, forensic problems that may be encountered by mental health service providers in the disaster area, giving news of death and burnout in health workers'. We hope that this article will guide the mental health professionals for difficulties that may be encountered early after the earthquake and present the principles of psychological first aid.

## **Early Symptoms After Disasters and Psychological First Aid**

**Münever Hacıoğlu Yıldırım**

The February 6 Kahramanmaraş earthquake is a mass trauma that is expected to have a high psychological impact due to the facts that the earthquake was expected yet unprepared for, it was terrifying and very destructive. Early psychological symptoms after disasters can be considered as normal reactions to an abnormal event (Ehlers and Clark 2000). It is therefore not unexpected to feel very intense negative emotions after such traumas. Initially, symptoms such as feeling as if the event is happening again, recurrent nightmares and recurrent images of the event in the form of 'flashbacks' may occur. These symptoms may be accompanied by feelings of anxiety, worry, fear and physical symptoms such as palpitations and breathing difficulties. These symptoms can exacerbate existing negative feelings and lead to concerns that there is a more serious psychological problem. Over time, avoidance symptoms may be observed; the person tries to avoid situations that remind them of the event as much as possible. Symptoms such as emotional dullness and inability to concentrate may also occur. These symptoms may be accompanied by symptoms of hyperarousal, such as startling, hypervigilance, and anger management difficulties. The pain of loss can elicit severely depressed mood. All these symptoms can emerge after a disaster.

The extent to which people are affected by the event is often in line with how close they are to the center of the event. Those who were injured in the earthquake, who lost their loved ones, whose houses collapsed, who were buried under a rubble, and whose living environment and neighborhood were destroyed may be much more severely affected in terms of emotional status (Yıldırım 2021). Disasters do not only affect those who have experienced it; it also affects the people who have witnessed it, the people whose loved ones experience it and those who will be present at the event site due to their jobs (APA 2013). In that sense, the February 6 earthquake was an event that affected almost the entire country, considering those who experienced the disaster, those who had relatives in the region, those who went to the region to help and those who witnessed all these events.

Almost everyone can be affected by disasters to a greater or a lesser extent. Although the symptoms may initially

be widespread, in the majority of people they will subside spontaneously over time. According to community-based studies, the rate of those who develop a psychiatric disorder among the people who experienced the disaster varies between 10-30%. In a study conducted 4-12 months after the Marmara earthquake (1999), the rate of post-traumatic stress disorder was found to be 25% (Tural et al. 2004). Even if a disorder develops, symptoms tend to decrease over time. If, after a few months, there are still symptoms that meet the diagnostic criteria for a mental disorder, it is unlikely that the symptoms will resolve on their own and treatment should be started. Psychotherapy is the main treatment modality for trauma-related mental disorders. Although there are studies showing positive effects of various medications, their effect is limited.

If symptoms of trauma-related disorders appear after the trauma in the early stages, psychological first aid should be applied first. Personalized therapies, structured therapy methods and medications should be avoided as much as possible (Yıldırım and İskender 2021).

The priority in psychological first aid is to ensure the safety of the person. It will not be possible to ensure the mental well-being of someone who does not feel safe. As the second step, the most important intervention is to inform the person. It is important to explain that the symptoms may be a part of a normal reaction to an abnormal event. It is important to organize the social environment, to review the relationships with relatives who can provide support to the individual, and to allow them for emotional expression (Ruzek et al. 2007).

A traumatic experience is not encoded like any random event; it is generally encoded as a more sensory-associated, fragmentary memory with no clear beginning or end. Activities which will contribute to conversion of this sensory amygdalar encoding into a cortical one might be supported (Andrewes and Jenkins 2019). Activities that increase the processing of the memory for the event, such as talking about the event, writing, making and listening to audio recordings, or drawing pictures, can be suggested. Physical activities are recommended as well as maintaining the daily routines to the possible extent.

## **What Do Psychiatrists Do Immediately After an Earthquake?**

**Ayşe Devrim Başterzi**

Earthquakes are defined as 'natural disasters' in trauma literature. In Turkey, the destruction, damages and losses brought about by 'human hand' are also experienced intensely and the earthquake becomes more than a preventable event that occur without human responsibility but God or another power where a quick psychological restoration is possible (Başterzi 2021). This human-made mass trauma, -a situation

brought about by firstly those who do not provide earthquake safety and who did not fulfill their responsibilities- give rise to an atmosphere of an intense psychological pain and anger in which affected people search for somebody to blame for potentially preventable deaths.

The February 6, 2023 Kahramanmaraş Earthquake led to the destruction or damage of hospitals; many mental health providers and their relatives were directly affected by the earthquake. Therefore, from the very first moment, it became necessary to urgently restructure psychiatric services all over the country, especially in cities close to the earthquake. It is very important that all health care workers who will be in the field are aware of psychological first aid, and especially that rescue teams realize the importance of 'connecting' those affected with their relatives, which is the basic principle of first aid. Structured recording of every person seen and identifying those with excessive stress response that might put themselves and others at risk during the emergency health care is crucial. Due to people's difficulties in coping with this devastating event and the limited access to treatment for those under treatment, mental health services need to be organized for emergency situations, particularly for acute psychotic exacerbations and mania. In order to provide these services, mental health teams that can organize emergency assessment, intervention and referral services should be established.

In Turkey's Disaster Response Plan, most of the psychosocial services are planned to be provided by the Ministry of Family, Labour and Social Services (AFAD 2022). On the other hand, mental health care services are organized by the Ministry of Health as part of health care services. Psychiatrists should take part in both organizing psychosocial services and providing psychosocial services to the community and individuals from the first moment in disasters and mass traumas in accordance with the principles of mental health and psychosocial services of the Inter-Agency Standing Committee (IASC 2007). Psychiatrists are recommended to be the team leaders of psychosocial services and to play an active role in ensuring coordination and synchronization of teams, in collaboration with communities and organizations involved. Psychiatrists should prioritize preventive mental health care services. They should be sensitive about the discrimination against sexual, ethnic, religious minorities and the refugees, and provide services with a culturally sensitive perspective.

Since the early 2000s, the fundamental paradigm of mental health services in mass trauma and disasters has been based on the establishment of security, providing grief services, and the provision of social, educational and economic repair necessary for the social structure to be functional again. Community-oriented preventive measures are taken; identification and careful monitoring of at-risk individuals in the community are emphasized. Schauer and Schauer state that the purpose of mental health services after mass traumas is to reduce mental

suffering, to mediate the return of people to their meaningful and productive lives, to reduce the angry and violent behaviors of the victims towards themselves and the others, to prevent the intergenerational transmission of mental trauma, and to break the cycle of underdevelopment and violence through all these measures (Schauer and Schauer 2010).

Psychiatrists working in the field and in emergency response settings should pay attention to the appearance, behavior and speech of the people they assess; identify people who experience severe mental symptoms other than the usual acute stress symptoms; and evaluate the individuals who have violent behaviors towards themselves or the others -while also taking into account the physical health of these individuals.

In hospital settings, psychiatrists can undertake important responsibilities in addition to their therapeutical duties. As a component of psychosocial intervention, psychiatrists should utilize the systems via which the affected people can communicate with their relatives, should be aware of basic needs of their client and treatment area such as security, shelter, facilities and clothing; and should establish contact with services which organize the transportation of people. Psychiatrists should organize the delivery of bad news in collaboration with other health care teams and physicians in treatment. They should carefully monitor patients, the relatives of the patients and even the responding health care teams, identify those who are under risk and follow up those who are significantly affected. They also should know the principles of psychological first aid and inform the community and affected individuals through psychoeducation.

### **Principles of Pharmacological Treatment in the Early Post-Earthquake Period**

**M. İrem Yıldız**

In psychological traumas caused by disasters such as earthquakes, the use of medications for acute stress response is limited (APA 2017, Martin et al. 2021). If the acute stress response is severe enough to impair the safety and self-protection of the person, or interfere with the treatment of physical injuries, medications may be used in addition to psychological first aid. In cases of agitation, severe re-experiencing of symptoms, psychosis and severe dissociation, atypical antipsychotics may be preferred at low doses (Nasrallah and Sarihan 2018). Benzodiazepines must be avoided in acute period as the acute use of benzodiazepines may interfere with the formation of a healthy grief response and may lead to a decrease in the person's ability to adapt to circumstances, self-protection skills and sense of self-control, thus exacerbating the stress response. Another risk associated with benzodiazepines is disinhibition. Benzodiazepines are also not recommended in people with traumatic brain injury or respiratory problems (Aggarwal and Tucker 2017).

A significant portion of sleep disturbances early after natural disasters may be related to the decreased sense of security, and avoidance behavior. To begin with, providing a place where the individual could feel safe, and appropriate conditions for sleep hygiene are recommended. Relaxation exercises may help. If these do not work, nonbenzodiazepine hypnotic agents might be used (Weber and Wetter 2022). In patients with post-traumatic stress disorder (PTSD), prazosin has been used for nightmares refractory to other treatments, but its efficacy for sleep disturbances in the acute post-traumatic period has not been studied. It is not safe to use prazosin in the early period in earthquake victims where musculoskeletal injuries and problems with blood circulation are frequently encountered due to hypotension, dizziness, headaches and syncope, which are common side effects of this drug (Geldenhuys et al. 2022).

In traumatic events such as earthquakes where there are secondary risk factors for PTSD development, no medication reduces the risk of PTSD with a consistently demonstrable efficacy and safety (Wright et al. 2019, Geoffrion et al. 2020). The efficacy of escitalopram, imipramine, chloral hydrate, propranolol, oxytocin, gabapentin, morphine and dexamethasone in reducing PTSD prevalence and symptom severity has been investigated in randomized controlled trials, and no difference was found between these drugs and placebo (Astill Wright et al. 2019).

Musculoskeletal injuries in victims and rescue workers are associated with severe pain. Although effective intervention can be done with opioids such as morphine early after the trauma, it is necessary to plan the transition to duloxetine, pregabalin, gabapentin, tricyclic antidepressants due to the risk of addiction to opioids when long-term pain treatment is required. Although uncontrolled studies suggest that the use of morphine for severe pain in the first 48 hours may reduce the severity of PTSD symptoms, this reduction may be associated with effective control of pain (Holbrook et al. 2010, Norman et al. 2008).

Rhabdomyolysis and renal dysfunction due to crush syndrome require careful use of all psychotropics, especially antipsychotics. It may be appropriate to adjust the doses of drugs excreted by the kidneys and, if necessary, to replace them with drugs metabolized by the liver. Cognitive impairment in hypothermia, which may occur due to prolonged exposure to cold weather and insufficient caloric intake due to thirst and hunger, may be confused with delirium. Since antipsychotics and antidepressants may disrupt temperature regulation, it is recommended to avoid the use of antipsychotics if delirium diagnosis is uncertain, and the physicians should not rush for psychotropic treatments (Aggarwal and Tucker 2017). Alcohol withdrawal should be considered in the differential diagnosis in cases of severe hyperkinetic delirium in people rescued from the rubble and withdrawal treatment should

be organized effectively; thiamine replacement should not be neglected, keeping in mind that the risk of Wernicke's encephalopathy will be increased due to starvation and dehydration.

### **Post-Disaster Assessment: Psychosocial Intervention Principles from Psychiatric Perspective**

Ejder Akgün Yıldırım

Turkey, is built on two major fault lines that produce major earthquakes; a very risky country in terms of natural disasters. Despite losing more than a hundred thousand people to earthquakes in the twentieth century, earthquake culture is yet to fully develop in both institutions and social life. In addition to the unpreparedness of the settlements, this causes people and communities to be mentally distant from the reality of an earthquake, and to perceive the earthquake as an unexpected event with significant negative effects on psychological impact and social recovery.

The destructive effect of earthquakes is not limited to buildings and bodies at the moment it occurs; the effect continues on by human hand (Yıldırım 2005). A destroyed building or a living space that has to be abandoned may hinder access to most fundamental needs and cause the individual to become entrapped in a spiral of trauma where the person feels that he/she lets down himself/herself and his/her immediate environment; causing the social roles to change (Yıldırım and Kaya 2018). Therefore, the psychiatrist should not only consider the destroyed buildings, but also those still standing.

The factors which cause difficulties in provision of vital necessities in natural disasters may also limit the application of psychosocial aid (Rao 2006, Reyes and Elhai 2004). In this respect, the February 6 Kahramanmaraş Earthquake brought together almost all the negative factors such as difficult seasonal conditions, heavy destruction, disruption of transportation, the extent of the area affected, inadequate rescue and support efforts.

Devastating and high-impact traumas such as earthquakes differ from individual traumas in the sense that the community itself becomes desperate. One of the main strategies in psychosocial intervention is the substitution of the 'group' which is the social and phylogenetic trust boundary of the individual (Yıldırım and Kaya 2018).

One of the most important endeavors of the psychosocial intervention is the establishment of security. Security first and foremost requires an environment where there is no more trauma, where the concrete threat has disappeared. The uncertainty created by trauma should rapidly be eliminated and future must be describable (Tol et al. 2011). Continued uncertainty after a disaster leads to a condition called 'psychological reaction to ongoing trauma'. This makes it

difficult to eliminate the psychological reactions to trauma and in some cases, increases them (Tol et al. 2011).

The feelings of loneliness and helplessness should be closely observed and if these feelings are present, they should rapidly be intervened. There are limits to what can be achieved against the physical destruction of a natural disaster brought at the moment it occurs. However, the secondary consequences of the disaster can be reduced through recovery, meeting the needs and restoration of life, i.e. psychosocial support (Lima et al. 1990). In other words, a natural disaster is an experience in which the individual is helpless, while post-disaster helplessness is a preventable situation. (Morganstein et al. 2016)

Psychosocial support should be arranged taking into account these three psychological variables. The support program should be planned with detailed field assessments that will determine social support systems and group harmony, covering the social fabric analysis to needs and resource analysis. For example, psychological support may include the establishment of human contact and solidarity in order to reduce loneliness, determining various support and rehabilitation roadmaps, applying psychological first aid if there are mental symptoms, and utilizing mental and social support programs that will reduce the feeling of despair while maintaining autonomy (Yıldırım and İskender 2021). Psychosocial support is intertwined with the concept of mental health (IASC 2007). A psychiatrist may be involved in all the stages of psychosocial support; provide preventive and protective mental health care and may sometimes work as the sole authority in the intervention of the most challenging cases. (Norwood et al. 2000) Instead of a disease-centred approach, the psychiatrist aims to normalize psychological reactions to extraordinary events and to regulate social and psychological functions through appropriate intervention. (Yıldırım and İskender 2021).

Part of psychosocial intervention is the assessment of shareholders. The condition of first aid teams in the field should also be addressed, and the analyses should shed light on the social organization plan of the temporary and permanent residential areas. In order to reconstruct social life, create social ties and strengthen the group, the planning process should consider the structure of the remaining population, their support systems, the condition of living spaces, and action plans specific to vulnerable groups (Yıldırım and Kaya 2018). Emphasis should be placed on protecting rescue workers from secondary trauma. The Guidelines for Mental Health and Psychosocial Supports in Emergency Settings is a guide available in Turkish, prepared by the Inter-Agency Standing Committee (IASC) under United Nations Resolution 46/182 for emergencies such as disasters, war and crisis. The core principles of these guidelines are following the motto of 'first do no harm', the participation of all stakeholders and teamwork, protecting human dignity and autonomy, and

making maximum use of those who want to help (IASC 2007). Individuals should be given the right to choose, they should feel like that they are subjects and that support services are not a favor but an obligation of the state (Yıldırım and İskender 2021).

In the absence of rapid, objective and effective interventions, groups may have irrational expectations towards recovery. Rumors can have serious negative consequences at this stage. This should be foreseen and prevented (Guerin and Miyazaki 2006).

## **Improving Counseling Skills at the Early Stage After Disasters**

**Şahika Yüksel**

In mass traumas and disasters, there are things psychiatrists can do in the first week and the first month, but these practices will be different from the usual intimate dyadic relationship. Evidence-based knowledge and experience from psychotherapy and clinical interviews should be adapted to the crisis situation. Guidance should be at the forefront of counseling in challenging conditions and the conditions should not be allowed to determine ethical principles. People who are already victims should not be treated with unproven treatments. There is consensus in the guidelines that traditional psychotherapies should not be used in the first month. In this early period of disasters, mental health workers should not apply any type of analytical therapy, prolonged exposure therapy, mental processing therapy, EMDR/reprocessing therapy (Bisson et al. 2019, Halpern and Vermeulen 2017, NICE 2018).

Fortunately, spontaneous recovery within the first week is a natural progression. It is necessary to allow and respect the natural adjustment processes of individuals. It is important to remember that we are working with people who have difficulties related to the events they have gone through, and that the goal is not to treat a pathology. In cases where there are multiple losses such as loss of home, job, loss of relatives, and where the crisis becomes perpetual despite providing basic needs and security, more intensive support may be required. In these situations, psychoeducation, Psychological Healing Skills (PHS), and Psychological First Aid (PFA) are applied as interventions to help gain skills to cope with the difficulties related to the event, to calm down the ongoing distress and to increase functioning (Başterzi et al. 2021, Yüksel 2020).

In psychological first aid, positive ways of coping are supported and negative ones are brought to the attention of the individual. The aid is provided by trained health professionals. The five basic principles of early psychological interventions are: providing safety, promoting calmness, enabling the person to connect with their relatives, supporting their self-efficacy and directing them to relevant resources according to their needs

and instilling hope. The starting point can be reorganizing one's ability to regulate negative emotions and solve practical problems. Hope is the belief that one's actions will have a positive outcome. Unrealistic promises should not be made.

Interventions involving Psychological Recovery Skills have been developed on the basis of the idea that disasters can lead to a number of physical, emotional, behavioral and mental reactions at different stages. In these interventions, the person's problems are not linked with psychopathology, rather the goal is to restore control and self-competence.

In disaster conditions, an average of three to five interviews per individual is recommended but a single interview may also be sufficient depending on the needs. In order to determine the number of interviews, it is important when the first contact with the person was made. How much time has passed since the onset of the disaster and how long after the emergence of the challenging situation the person could be interviewed affects the decision whether to conduct an interview or not. For example, one's need to avoid reminders of the event is different early in the process than later on. Therefore, in this example how much time passed since the exposure to disaster will be the decisive factor for the decision to intervene.

The skills to be taught to the person is also dependent on time. In the early phase, the objectives are limited to the ability to solve practical problems of everyday life. These objectives differ as the time goes on. For example, managing reactions, dealing with dysfunctional thoughts, clarifying needs, choosing priorities among urgent needs are also added.

Despite the challenging conditions in disasters and mass traumas, the basic medical ethical principles of beneficence and nonmaleficence of trauma victims should be carefully applied.

### **Understanding, Comprehending and Approaching the Post-Earthquake Mind**

Tamer Aker

The one thing on earth that we can trust the most is 'mother earth'. Earthquake is a phenomenon that strikes people from the mother earth. Therefore, it eradicates our knowledge, system of belief and our confidence.

As opposed to the east, disasters affecting humans occur less frequently in the west. It is easy to notice that there are relatively many experts working on disasters in the West. However, as we move Eastward, one can observe that disasters continue to haunt people, there are far fewer experts, and they may not be equipped with sufficient knowledge and skills. In conclusion, disasters are unfair phenomena, mostly caused by people, that tears down the feeling of trust.

We can visualize a simple pyramid as a metaphor for how we shape our minds when approaching either communities

or individuals. At the bottom of the pyramid, generally the argument of "mental health or psychosocial work begins only as the fundamental requirements are addressed" is present. However, a significant amount of experience shows us that such endeavors commence even before the moment the disaster occurs. The necessary preparatory work should already have been done. We must accept that the place of mental health is not the zeroth second and be ready at all times (Aker 2012).

When we look at the top of the pyramid, we will see a number of traumatic stress reactions. For instance, fears, nightmares, avoidance behaviors, depression reactions, somatization reactions, dissociative reactions, and sexual dysfunction may be encountered. Fundamentally, every known disease or disorder in psychiatry may occur. Therefore, the much acknowledged statement that the "disaster or trauma brings PTSD" is insufficient (Aker et al. 2014).

At the upper part of the pyramid, the methods that we use would be relating, connecting, providing first aid, explaining, helping them to reestablish meaning, guiding, associating, and trying to regulate emerging symptoms. It is important to make sense of these symptoms. As the victims relive the event, their minds want to talk and pour out their heart. It is necessary to somehow empty and heal that mind by talking and commiserating when it is safe. Health care professionals should try to demonstrate their skills at every stage of treatment. Psychiatrists should not give up on approaches that they are competent at, that they find useful, know to be effective and deem scientific. While doing these, they should also be careful about taking care of themselves (Aker 2012).

The psychiatrists working in a disaster zone should both normalize and acknowledge their own emerging reactions and try to control them if necessary. We should repeatedly imbue the feeling of trust and remind each other that we are side by side. It is also essential to know that fear, anxiety and despair arise from individuals' rage. It would be crucial to allow people to express themselves, and most importantly to listen to them. While we work on the top of the mind pyramid, we should always remember the deep, archaic and social characteristics of human beings.

### **A Systematic Approach to the Earthquake from the Perspective of Child Psychiatry**

Yankı Yazgan

Over the course of mass disasters, mental health services must act differently from their ordinary models. Enabling public institutions to conduct their duties regarding shelter, nutrition and security constitutes the keystone of work related to mental health. In these circumstances, mental health care involves elements that are beyond a regular interaction between a patient and a psychiatrist. Frequently, stress symptoms which are composed of normal reactions given to an abnormal

situation, are reduced on the amount of the social support and the level of solidarity. The role of psychiatrists will be more active when these support systems work well.

The most prominent risk factor is being hungry, vulnerable and shelterless in the midst of an insecure environment. Being trapped under a rubble, witnessing deaths, presence of losses and traumatic experiences in the past and previous level of functioning also affect the development of symptoms. A classification based on above-mentioned risk factors are primarily useful for predicting the occurrence of severe Post Traumatic Stress Disorder (PTSD) which has low likelihood of spontaneous remission and requires rapid intervention (Laor et al. 2002).

Emotional and behavioural regulation in children and adolescents relies on their environment. Having the basic needs, not being left alone during the post-traumatic phase, experiencing fewer losses decrease the risk of bereavement and traumatic stress turning into a mental disorder. Opening the schools and other places considered as natural environment for children is of utmost importance. Within this scope, equipping parents and teachers who have major roles in children's lives, with psychological first aid skills is a preventive mental health intervention (Wolmer et al. 2003).

### **Psychological First Aid in Children**

**Bengi Semerci**

In children, traumas may disrupt the familiar routine, shatter their trust, increase their anxiety about the future, damage the feeling of adequacy, cause feelings of guilt, deep sadness and loss of control. Early losses (of parents and others), physical problems encountered and witnessing the injured and dead can all damage children's emotional attachment. If treated incorrectly, this situation may cause both mental and social problems in the future (Terr 2003).

Children may be affected differently according to the type of traumas they are exposed to (only experiencing an earthquake, being trapped under rubble, loss of a parent or a sibling, witnessing deaths), their age and developmental period. Each affected child may react differently. Diverse interventions might be necessary.

The first step of psychological first aid for children is to meet the basic needs. Providing proper nutrition and sheltering and maintaining their sleeping pattern is the key for protecting children from the lasting effects of a trauma. Babies should continue to be breastfed if they have a mother.

The second essential step is to provide protection. Being together with the parents, primarily the mother, is crucial for the children's sense of trust. Therefore, it is necessary to unite the children with their families, relatives, and the people they know. In order to ensure this, collaboration should be built

with relevant institutions. Uniting a family is also crucial for the mental health of parents and adults. In emergent situations and crisis where no other options are available, establishing temporary protection centers might be required until a long term solution is provided. Separated children waiting to be reunited with their families can be cared for by an individual or a family who can provide appropriate care and protection. Institutionalization should be considered as a last resort, as the institutions are often unable to provide appropriate support (IASC 2007).

Explaining the symptoms that may occur in relation with the trauma, and to emphasize that these are normal reactions to those who will be taking care of the children, should be a part of psychoeducation. Reactions to trauma vary with age. Urinary incontinence, eating disorders, gastrointestinal disorders, sleep disturbances, phobias, anxiety, and bad temper are among the common problems that may occur in pre-school and school-age children. Furthermore, in school-age children, concentration problems and introversion may also be seen alongside these symptoms. In both of the mentioned periods, one of the most important issues is separation anxiety. Refusing to be separated from the mother or caregiver and asking to be together all the time are important and potentially permanent problems.

In adolescence, in addition to these findings, it is necessary to be careful in terms of risky behaviors and suicide attempts (Cohen et al. 2010, Deykin 1999). Returning children and young people to their daily routines in a brief period of time is restorative and prevents prolonged trauma effects. First aid techniques that may be utilized include listening to children's feelings about the earthquake, building relationships with children by conversing with them and if necessary via playing games together, singing songs, and having them draw pictures (Terr 2003).

It is necessary to include schooling to the routine as soon as possible. This not only alleviates worries about being excluded from education, but also acts as a group therapy by allowing children to be with their age group. The contributions of teachers who are trained on the subject can also protect children from the effects of trauma. Moreover, enabling adolescents to help and participate in some operations during the earthquake reinforces the feeling that they are in control and that they are useful.

### **Early Mental Symptoms and Intervention in Children**

**Süleyman Çakıroğlu**

The first month following natural disasters and traumas is considered as the acute post trauma period (Başterzi et al. 2017). First few days might be considered as the crisis phase. The early response in the aftermath of events is in one

sense healthy and the result of the mind and body's effort to survive. According to the ICD-11, these may be recognized as the acute stress response which has been defined as a temporary situation which subsides within two weeks after the trauma (WHO 2018a). This definition does not describe a disorder and is not a predictor of later problems. Symptoms likely to be observed during this period are: (i) avoidance of feelings, thoughts and conversations related to the incident (51%), (ii) change in perception of reality (42%), and (iii) re-experiencing disturbing memories (40%) (Kassam-Adams et al. 2012). In addition, a crucial symptom in children that is not to be overlooked in early phase of trauma is separation anxiety. In the first month, the children should be allowed to speak as much as they want or even not to speak, it is important not to force them. It is necessary to provide support in an empathic manner and to collect the essential information without triggering feelings of fear or danger. If possible, it would be appropriate not to talk about the details of the traumatic incident. Establishing the safety is crucial, therefore, attention should be given to child's surroundings. Human contact, emotional support and connecting with others constitute the first components of intervention. Children should be provided with information through a psychoeducational approach and it should be explained to the child in an appropriate language that the emotions they experience during this period are part of a normal process. It would be appropriate to re-present and describe to families the basics of what they can do in relation to their children. In case the person affected is a baby, it will be important to cuddle and hug him/her tenderly and, if possible, to maintain their feeding and sleep schedule.

It is essential to keep young children away from the media, explaining, and, if necessary, reminding them that they are not responsible for the events. A good method is to simply answer the child's questions without giving frightening details about what happened. Families are advised to be patient with children's reactions during this period; they should remain calm in cases such as bedwetting, thumb sucking, nail biting, refusal to eat etc. Older children and adolescents should be encouraged to share their feelings with peers and trusted adults (Bonanno et al. 2006, Briere and Scott 2016, De Wolfe 2000, Walsh 2007, Zara 2011).

### **Psychiatric Record Keeping and Forensic Psychiatry in Mass Trauma and Disasters**

Mustafa Sercan

From the judiciary perspective, in natural disasters there may be individuals who are accused of negligent or intentional damage. After a disaster, it may be necessary to identify and prove the damages suffered by victims and to compensate

them. When it comes to forensic psychiatry, the very core principle of record keeping is this: The mental health staff should keep the records knowing that the documents may be used in legal proceedings and that they may serve as forensic psychiatric documents in the future.

Preparatory work for health and psychosocial support services in disaster zones should include both the organization of records and a registry system (either a print notebook or a computer file) following proper standards. The records should document all stages of psychosocial support. Such documentation and records should include information and details on the planning and implementation phases of the work and also the data on those who provide and receive psychosocial support (Babalioğlu 2001).

1. It is necessary to acknowledge the social, cultural and demographic characteristics of the population served to ensure benefit and to prevent damages which may arise from the interventions.
2. Not only the patient interactions, but also all processes comprising the implementation of care should be recorded, with their positives and negatives.
3. It is necessary to train care providers in the professional and organizational sense and all relevant information regarding the training process should be recorded.
4. The coordination of care must be readily planned and its application supervised (HHS 2009, IASC 2007).
5. A system for prioritization in support should be established, through which records are to be kept.

The important points while keeping records are as follows: Examinations should be thoroughly conducted and recorded. While taking brief notes, all abilities that are intact should be recorded by name. For impaired abilities, the type of impairment should be specified. Possible or final diagnoses should be indicated in brief notes. In man-made trauma cases, it is crucial to follow the recommendations of the Istanbul Protocol for exams and record keeping (UN 2009). If the patients are examined within a permanent care provider at the region, such as a hospital, the records should be kept at the archives of that particular institution. If the exams are conducted at temporary facilities, the records should be archived in an institution (ideally a hospital) specified by the local authority (Directorate of Health).

Medical records become a piece of evidence if there is a litigation. The damage of medical records could cause loss of a right, which might harm the human rights of the individuals (Bulling and Abdel-Monem 2009). In conclusion, keeping and storing records could be a way to protect disaster victims from secondary or tertiary traumas.



## **Delivering Bad News and Informing about Death**

**Burcu Rahşan Erim**

Bad news is defined as “a message that has no sense of hope or that poses a threat to the physical and mental well-being of the individual, which has the risk of upsetting the established way of life or that has the meaning of reducing the individual’s choices in life” (Ptacek and Eberhardt 1996). In this sense, bad news causes significant emotional distress to both the informer and the informed. Bad news is the news which make the informed feel that their life has come to an end; one which destroys their hope and plans about their future (Harman and Arnold 2023, Tanrıverdi 2021). When medical and psychological effects of bad news on the recovery process are considered, the importance of the method of delivery becomes apparent.

There is a consensus that medical bad news should be given by the doctor who is responsible for the patient, who diagnoses them and who performs the medical procedure (Tanrıverdi 2021). However, due to the fact that emergency physicians or surgeons are busy with successive interventions after natural disasters and mass traumas, it may not be possible for the medically responsible team to relay the bad news. Therefore, psychiatric/psychological care personnel may bear additional responsibility during mass traumas (Başterzi et al. 2017). In such events, the duty ensuring that bad news, especially those of death are delivered in an appropriate manner to the patient and their caregivers, may befall on the psychiatrist and the psychosocial support team which he/she leads.

Concerning the medical bad news, a physician from the treatment team should inform the patient on the medical procedures, his/her role in the treatment process, what to expect, the patient’s responsibilities, and the facility and the professionals responsible for the follow-up. In this process, psychosocial support team should accompany the treatment and inform the patient that they will revisit him/her after the medical procedure and practice planned visits. These will contribute to both medical and psychological recovery process.

If possible, bad news and news concerning death should be delivered in-person. However, inevitably, there shall be cases where such news would be given via phone. In such cases, the person to be informed should be asked whether he/she is available at that moment; they should be advised to move to somewhere quiet and free of distraction. A person who could support them should be asked to accompany them; and then should the news be delivered.

The recommended procedure on delivering the news of death is summarized below (Baile 2015, Birimi 2020, Demirkol and Koç 2018, Tanrıverdi 2021, Yiğiter Şenol and Yardim 2018):

- The identity of the person whom the news shall be delivered to should be verified.
- Information regarding the death should be gathered and the person who deliver the news should be prepared for the questions
- It is necessary to address the person by their name and maintain eye contact; and adjust the tone of voice to the content of the conversation.
- First, the person should be informed that they shall receive bad news.
- If possible, it is beneficial to determine close relatives who could provide support and their contact information.
- A clear, non-technical, easily understandable and concrete language free of abstract, ambiguous and confusing idioms is appropriate.
- It is important to consider the age, sociocultural stand and faith systems of the person to be informed.
- After the delivery, it should be ensured that the person understood the news and enough time should be provided for them to comprehend and react to the news.
- Reactions such as numbness, shock, confusion, disbelief, denial, anger or pain, blame, sadness, feeling of guilt may occur.
- The process should not be rushed. The informer should be prepared to repeat information that are not-understood or not-remembered, and answer the questions thereto.
- The informer should be open about the questions which they do not have information.
- The relatives of the person who died during treatment should be informed of what to do next and should be appropriately directed to contact the hospital personnel in charge of mortuary affairs.

There is no formula or a completely successful way of delivering bad news! The main aim is to be empathetic, respect the individual’s autonomy and to deliver the news in the most appropriate way given the conditions.

## **Burn-out in Disasters**

**İlker Küçükparlak**

Burn-out is a condition which may lead to serious life-crises. According to ICD-11, burn-out occurs as a result of “chronic workplace stress that has not been successfully managed” (WHO 2018b). Within this context, certain risk factors pertaining to working conditions have been defined for burn-out. These are unclear roles, workload, employment security, perception of self-control and inconsistency between appreciation and value.

## REFERENCES

A disaster environment wherein one has to quickly adapt to a new mode of organization and deal with heavy workload involves extra risks for burn-out. Employee-side risk factors such as perfectionism, pessimism, over-controlling behavior and lack of social support may become more prominent during disasters. Secondary traumatization is another risk factor for burn-out (Küçükparlak 2021). The factors mentioned render disasters extremely risky for burn-out.

In order to protect oneself from burn-out within an organization, it is necessary to be able to follow up on the status of the work and the colleagues and relatives impacted by the disaster. Good communication is imperative. Regular multidisciplinary team meetings is also recommended to clarify the work itself and the working conditions of the individual. The “buddy system” wherein an experienced worker is matched with an inexperienced worker to supervise one another’s physical and mental wellbeing ranks among the relevant recommendations in this sense (WHO 2018b).

The most important factor to protect oneself against burn-out would be to get informed about this condition. Work related performance problems caused by burn-out may have a severely negative impact on the individual’s self representation (Maslach and Jackson 1981). It should also be considered that this condition may further exacerbate depressive symptoms. Individuals with a dominant superego may not care about burn-out when they identify themselves with the victims excessively; in fact the unconscious burn-out processes may serve to satisfy the desire for “penance” for being alive and well.

When burn-out develops, psychoeducation may be delivered to restore the disrupted self image. In addition, working conditions should be addressed through a “health-degrading environment” approach and steps should be taken to alter such working conditions. Allowing the person to take a medical leave is among the options. Sleep disorders, impulsivity, anxiety and other symptoms may be addressed with medications.

## CONCLUSION

To the utmost of their efforts, mental health professionals in Turkey set forth their knowledge and abilities in mass trauma and large-scale disasters which have been happening for years. Experience gained in natural disasters help improve the skills of the professionals. In disasters, the conditions may not be ideal most of the time; nonetheless, the priority should be to not harm the other. We hope this article will help to enable the wide use of proper psychological first aid when needed; and help to plan the regulations and practices in a manner that does not harm those affected by the disaster. We wish to develop more effective and beneficial approaches in solidarity by combining our efforts and our knowledge.

- AFAD (2022) TAMP Türkiye Afet Müdahale Planı [Türkiye Disaster Response Plan]. Ankara, Republic of Türkiye Ministry of Interior Disaster and Emergency Management Presidency.
- Aggarwal P, Tucker R (2017) Psychiatric Aspects of Medical–Surgical Disaster Care. *Textbook of Disaster Psychiatry*, R Ursano, C Fullerton, L Weisaeth et al (Ed), Cambridge University Press pp. 124-39.
- Aker T (2012) *Temel Sağlık Hizmetlerinde Ruhsal Travmaya Yaklaşım*. Ankara, Türkiye Psikiyatri Derneği Yayınları.
- Aker T, Aydın N, Beşiroğlu L et al (2014) *Van-Erciş 2011 Depremleri Tıp Etkinlikleri ve Deneyimleri*. Ankara, Türkiye Psikiyatri Derneği Yayınları.
- Andrewes DG, Jenkins LM (2019) The Role of the Amygdala and the Ventromedial Prefrontal Cortex in Emotional Regulation: Implications for Post-Traumatic Stress Disorder. *Neuropsychol Rev* 29: 220-43.
- APA (2013) *Diagnostic and Statistical Manual of Mental Disorders (DSM-5)* [Turkish Edition]. Ankara, Hekimler Yayın Birliği.
- Astill Wright L, Sijbrandij M, Sinnerton R et al (2019) Pharmacological Prevention and Early Treatment of Post-Traumatic Stress Disorder and Acute Stress Disorder: A Systematic Review and Meta-Analysis. *Trans Psychiatry* 9: 334.
- Babalıoğlu N (2001) *Afetlerde Ruhsal Yardım. Afetlerde Sağlık Hizmetleri Yönetimi [Healthcare Management in Disasters]* (24-28 October 2000-Yalova) Course Notes. Ankara, Ministry of Health Sağlık Project General Coordinatorship.
- Baile WF (2015) Giving Bad News. *Oncologist* 20: 852-3.
- Başterzi A (2021) *Kitlesel Travmalarda Akut Dönemde İl Ruhsal Değerlendirme Ve Müdahale. Kitlesel Travmalar Ve Afetlerde Ruhsal Hastalıkları Önleme, Müdahale Ve Sağlık Kılavuzu, Ş Yüksel, A Başterzi (Ed), Ankara, Türkiye Psikiyatri Derneği Yayınları.*
- Başterzi A, Yılmaz B, Yüksel Ş (2021) *Süregiden Bir Travma Olarak Covid-19 Pandemisi Sırasında Ruhsal Değerlendirme Ve Müdahale Rehberi. Kitlesel Travmalar Ve Afetlerde Ruhsal Hastalıkları Önleme, Müdahale Ve Sağlık Kılavuzu, Ş Yüksel, A Başterzi (Ed), Ankara, Türkiye Psikiyatri Derneği Yayınları.*
- Başterzi A, Yüksel S, Aker A et al (2017) *İnsan Kaynaklı Kitlesel Travmalar Sonrası Ruhsal Açidan Değerlendirme Ve İl Müdahale Rehberi. [Downloaded from <http://www.psikiyatri.org.tr/uploadFiles/2132017203938-Insan-Kaynakli-Kitlesel-Travmalar-Sonrasi-Ruhsal-Acidan-Degerlendirme-ve-Ilk-Mudahale-Rehberi-.pdf> on 30 September 2018]*
- Bisson JI, Berliner L, Cloitre M et al (2019) The International Society for Traumatic Stress Studies New Guidelines for the Prevention and Treatment of Posttraumatic Stress Disorder: Methodology and Development Process. *J Trauma Stress* 32: 475-83.
- Bonanno GA, Galea S, Bucchiarelli A et al (2006) Psychological Resilience after Disaster: New York City in the Aftermath of the September 11th Terrorist Attack. *Psychol Sci* 17: 181-6.
- Briere J, Scott C (2016) *Travma Terapisinin İlkeleri: Belirtiler, Değerlendirme Ve Tedavi İçin Bir Kılavuz - DSM-5 İçin Güncellenmiş. İstanbul, İstanbul Bilgi Üniversitesi Yayınları, pp. 89-117.*
- Bulling D, Abdel-Monem T (2009) *Disaster Mental Health. Wiley Encyclopedia of Forensic Science, 2 (C-E), A Jamieson, A Moenssens (Ed).*
- Cohen JA, Bukstein O, Walter H et al (2010) Practice Parameter for the Assessment and Treatment of Children and Adolescents with Posttraumatic Stress Disorder. *J Am Acad Child Adolesc Psychiatry* 49: 414-30.
- De Wolfe D (2000) *Field Manual for Mental Health and Human Service Workers in Major Disasters. . Washington DC, Washington Center for Mental Health Service pp. 1-28.*
- Deykin EY (1999) *Posttraumatic Stress Disorder in Childhood and Adolescence. Medscape General Medicine, 1.*
- Ehlers A, Clark DM (2000) A Cognitive Model of Posttraumatic Stress Disorder. *Behav Res Ther* 38: 319-45.
- Geldenhuys C, van den Heuvel LL, Steyn P et al (2022) Pharmacological Management of Nightmares Associated with Posttraumatic Stress Disorder. *CNS Drugs* 36: 721-37.

- Guerin B, Miyazaki Y (2006) Analyzing Rumors, Gossip, and Urban Legends through Their Conversational Properties. *The Psychological Record* 56: 23-33.
- Halpern J, Vermeulen K (2017) *Disaster Mental Health Interventions: Core Principles and Practices*. Routledge/Taylor and Francis Group.
- Harman SM, Arnold RM (2023) *Discussing Serious News*. Uptodate. SD Block (Ed).
- HHS (2009) *Practice Guidelines: Core Elements for Responding to Mental Health Crises*. Rockville, MD, Center for Mental Health Services, Substance Abuse and Mental Health Services Administration.
- Holbrook TL, Galarneau MR, Dye JL et al (2010) Morphine Use after Combat Injury in Iraq and Post-Traumatic Stress Disorder. *N Engl J Med* 362: 110-7.
- Inter-Agency Standing Committee (IASC). *IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings*. Geneva: IASC. 2007.
- Kassam-Adams N, Palmieri PA, Rork K et al (2012) Acute Stress Symptoms in Children: Results from an International Data Archive. *J Am Acad Child Adolesc Psychiatry* 51: 812-20.
- Küçükparlak İ (2021) *Kitlesel Travmalarda İkinci Travmatizasyon Ve Tükenmişlik. Kitlesel Travmalar Ve Afetlerde Ruhsal Hastalıkları Önleme, Müdahale Ve Sağlıkım Kılavuzu*, A Başterzi, Ş Yüksel (Ed), Ankara, Türkiye Psikiyatri Derneği Yayınları.
- Laor N, Wolmer L, Kora M et al (2002) Posttraumatic, Dissociative and Grief Symptoms in Turkish Children Exposed to the 1999 Earthquakes. *J Nerv Ment Dis* 190: 824-32.
- Lima BR, Pai S, Lozano J et al (1990) The Stability of Emotional Symptoms among Disaster Victims in a Developing Country. *J Trauma Stress* 3: 497-505.
- Martin A, Naunton M, Kosari S et al (2021) *Treatment Guidelines for PTSD: A Systematic Review*. *J Clin Med* 10.
- Maslach C, Jackson SE (1981) The Measurement of Experienced Burnout. *Journal of Organizational Behavior* 2: 99-113.
- Morganstein J, West J, Huff L . (2016) *Psychosocial Responses to Disaster and Exposures: Distress Reactions, Health Risk Behavior, and Mental Disorders*. J Shigemura, RK Chhem (Ed), pp. 99-118.
- Nasrallah HA, Sarihan P (2018) *The Use of Antipsychotics in Ptsd. Post-Traumatic Stress Disorder*, C Nemeroff, C Marmar (Ed), New York, Oxford University Press.
- NICE (2018) *Post-Traumatic Stress Disorder -NICE Guideline [Ng116]*.
- Norman SB, Stein MB, Dimsdale JE et al (2008) Pain in the Aftermath of Trauma Is a Risk Factor for Post-Traumatic Stress Disorder. *Psychol Med* 38: 533-42.
- Norwood AE, Ursano RJ, Fullerton CS (2000) *Disaster Psychiatry: Principles and Practice*. *Psychiatr Q* 71: 207-26.
- Pracek JT, Eberhardt TL (1996) *Breaking Bad News. A Review of the Literature*. *JAMA*, 276: 496-502.
- Rao K (2006) *Psychosocial Support in Disaster-Affected Communities*. *Int Rev Psychiatry* 18: 501-5.
- Reyes G, Elhai J (2004) *Psychosocial Interventions in the Early Phases of Disasters*. *Psychotherapy* 41: 399.
- Ruzek JI, Brymer MJ, Jacobs AK et al (2007) *Psychological First Aid*. *Journal of Mental Health Counseling* 29: 17-49.
- Schauer M, Schauer E (2010) *Trauma-Focused Public Mental-Health Interventions: A Paradigm Shift in Humanitarian Assistance and Aid Work*. *Trauma Rehabilitation after War and Conflict*, E Martz (Ed), New York, Springer.
- Tanrıverdi E (2021) *Tıpta Kötü Haber Verme Ve Hayatı Değiştiren Bilgilerin Paylaşılması. İletişimi Temel Prensipleri*, K Taştan (Ed), İstanbul, Eğitim Yayınevi, pp. 195-208.
- Terr LC (2003) *Childhood Traumas: An Outline and Overview*. *Focus* 1: 322-34.
- Tol WA, Patel V, Tomlinson M et al (2011) *Research Priorities for Mental Health and Psychosocial Support in Humanitarian Settings*. *PLoS Med* 8: e1001096.
- Tural U, Coskun B, Onder E et al (2004) *Psychological Consequences of the 1999 Earthquake in Turkey*. *J Trauma Stress* 17: 451-9.
- UN (2022) *Istanbul Protocol, Manual on the Effective Investigation and Documentation of Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment*. United Nations Publications, New York and Geneva, 2022.
- Walsh F (2007) *Traumatic Loss and Major Disasters: Strengthening Family and Community Resilience*. *Fam Process* 46: 207-27.
- Weber FC, Wetter TC (2022) *The Many Faces of Sleep Disorders in Post-Traumatic Stress Disorder: An Update on Clinical Features and Treatment*. *Neuropsychobiology* 81: 85-97.
- WHO (2018a) *Eleventh Revision of International Classification of Diseases*. Geneva
- WHO (2018b) *Occupational Safety and Health in Public Health Emergencies: A Manual for Protecting Health Workers and Responders*. Geneva.
- Wolmer L, Laor N, Yazgan Y (2003) *School Reactivation Programs after Disaster: Could Teachers Serve as Clinical Mediators?* *Child Adolesc Psychiatr Clin N Am* 12: 363-81.
- Yiğiter Şenol Y, Yardım S (2018) *Kötü Haber Vermede İletişim Becerileri*. *Tıp Eğitimi Dünyası* 17: 60-8.
- Yıldırım E (2005) *Marmara Depreminin Toplumsal, Ekonomik Sonuçları Ve Adapazarı Bir Depremden Sonra...Bir Depremden Önce*, Ş Yüksel, M Sercan, U Sezgin et al (Ed), İstanbul, İletişim Vakfı Yayınları, pp. 20-38.
- Yıldırım E, İskender G (2021) *Akut Dönemde Ruhsal Yaklaşımlar. Kitlesel Travmalar Ve Afetlerde Ruhsal Hastalıkları Önleme, Müdahale Ve Sağlıkım Kılavuzu*, Ş Yüksel, A Başterzi (Ed), Ankara, Türkiye Psikiyatri Derneği Yayınları.
- Yıldırım E, Kaya N (2018) *Kitlesel Travmada Etkilenmiş Grupların Sosyal, Psikolojik Analizi ve Psikososyal Müdahaleler*. *Psikiyatride Güncel* 8: 9-21.
- Yıldırım M (2021) *Kitlesel Travmalarda Erken Dönem Etkilenme. Kitlesel Travmalar Ve Afetlerde Ruhsal Hastalıkları Önleme, Müdahale Ve Sağlıkım Kılavuzu*, Ş Yüksel, A Başterzi (Ed), Ankara, Türkiye Psikiyatri Derneği Yayınları.
- Zara A (2011) *Yaşadıkça: Psikolojik Sorunlar Ve Başa Çıkma Yolları*. Ankara, İmge Kitabevi Yayınları pp. 101-21.

---

**Edited by:** Yavuz Ayhan and Koray Başar