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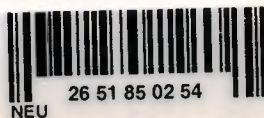
***POSTTRAUMATIC STRESS DISORDERS  
DUE TO EARTHQUAKE***

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I will deserve your works by being a good Clinic Psychologist.

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## INTRODUCTION AND AIM

Earthquake is one of the most terrible traumatic events that can take place in life. As well as threat on one's life there are usually losses within the family and friends that effects people's life. Unlike many other traumatic events the trauma caused by the earthquake is greater since it is a long process. After an earthquake, such as the one in Turkey recently, victims have to join teams to dig out the injured and death. They start the rescue operation with the closer surroundings. People lose their shelter, work and property. They have to find alternative shelter and start a new life with many problems. Secondary earthquakes keep reminding them the threat on their lives.

The earthquake in turkey was particularly traumatic since it took place in one of the most condensed areas with industrial plants, summer houses and commercial facilities containing a large part of the population. This was the area that provided relief to the disaster areas at other places. But now they were in need of help. Since the place was very large and the number of affected people were very large it was rather difficult to provide quick relief.

A 45- second earthquake of Richter magnitude 7.4 occurred in Turkey on August 17, 1999 at 3:01 a.m. local time. The epicentre was approximately 7 miles (11 km) south east of İzmit, an industrial city approximately 56 miles (90 km) east of Istanbul. The earthquake was felt over a large area, as far east as Ankara, which is about 200 miles(320 km) away. Unofficial estimates place the death toll between 30,000 and 40,000. Most of the deaths and injuries were caused by collapsed commercial and residential buildings, typically 4 to 8 storeys high. (\*)

The earthquake originated at a shallow depth of about 10.5 miles (17 km) and generated strong ground motion (and moderate high accelerations) in a

\* :Hurriyet, 25<sup>th</sup> August 1999.



zone along the Gulf of Izmit of the Sea of Marmara to east of Adapazari. It occurred along the northernmost strands of the North Anatolian fault system, which has produced seven earthquakes with magnitudes greater than 7.0 since 1939. (\*)

It has been many months since the earthquake and there are still problems in the area. Secondary earthquakes keep reminding people the terrible moment of the earthquake. Although the state has done whatever they could to relieve the people there are many prefabricated buildings which are more than needed, there are still problems especially concerning the younger population.

One of the remarkable outcome of the earthquake was the great collaboration of the international organisations to bring relief. Being aware of the post traumatic stress disorders after any earthquake, the Association of the Turkish Psychologists were very active to do everything that they could do to relieve the victims from PTSD. They published and distributed many leaflets and booklets and team leaders and many social workers to help the victims.

This research study aims at evaluating the following indicators of psychological trauma. These symptoms will be analysed:

- intrusive thought
- dreams and nightmares
- flashback
- restriction in feelings
- feelings of having no future
- difficulty in concentration
- feelings of irritable anger
- hypervigilance
- exaggerated startle response
- derealisation and depersonalisation
- (\*: Hurriyet, 25<sup>th</sup> August 1999.)

## **WORKING PLAN OF THE THESIS**

### **Hypothesis of the Thesis:**

Posttraumatic stress disorders after the Earthquake disaster of 17 August 1999. Prevalence of psychological <sup>Symptoms</sup> systems in patients applying to Psychiatry Hospital after the earthquake disaster.

### **Style of the Research:**

Cross-sectional survey analysis.

### **Place of Research:**

Research was carried out in Turkey. Survey population was selected among the patients who applied to the Earthquake clinic of Bakırköy State Hospital of Psychiatric and Neurological Diseases.

### **Sample Collection:**

All patients who applied to Bakırköy State Hospital of Psychiatric and Neurological Diseases, during the period 04.09.1999- 20.09.1999, were included in the sample. Thirty participants were selected among the people applying to the services of the hospital.

## **SCOPE AND TEXT**

### **Trauma**

Many types of experiences can be traumatic. Any situation in which you are exposed to actual or threatened death or serious injury is usually very traumatic. Some traumas are a result of nature, such as floods, earthquakes, or fires. Others result from accidents, such as automobile accidents. Still

others may involve violence, such as war experiences, rape, molest, assault or robbery. Trauma can also result from prolonged exposure to serious physical injury or illness. (Kaplan and Saddock, p,617)

Witnessing pain and suffering, and often being powerless to stop it, can be very traumatising. Surviving when others didn't can also cause irrational "survivor guilt". Family members of trauma survivors also suffer and can benefit from getting help along with the victim. (Shalev et. Al. 1998)

### **Posttraumatic Stress Disorder**

Posttraumatic Stress Disorder is a term used by mental health professionals to refer to a common set of reactions which can occur after a trauma. The traumatised person feels intense fear, helplessness, or horror. In addition, they persistently re-experience the trauma in one or more ways. They will also avoid anything that reminds them of the trauma, may experience general emotional numbing, but general physical arousal.

When we experience a traumatic event that is just "too much" for us, our mind can take over and put the memory far back in the corner, away from our ready access to it. In fact, any highly threatening experience can cause an individual to react by blocking out its memory. This can happen for one event or a series of events over time. It is a defence mechanism to keep us from becoming more overwhelmed by the experience than we can stand at that moment. ( Brewin, 1998)

However, all is not well. The memory is still there, somewhere. It has gone "underground" in our psychological make-up, and it can affect us in profound ways. We may tend to avoid situations that remind us of the original event, though we may not know why. We may have nightmares. We may be unable to form romantic or sexual relationships, or be unable to



participate in activities that are important to us.

This blocking of the memory may not be complete. Small or large fragments may bubble up in our minds at times, and we may become “numbed out” or go into panic. Some people feel somewhat emotionally numb on a routine basis. Problems with alcohol or drugs may develop in an attempt to hold these disturbing memories at a distance. (Pope et al, 1998)

As well as earthquakes many other incidents such as sexual abuse is an experience that can cause this phenomena to occur. Abuse like this is highly threatening experience, especially for children. Their bodies and their emotional make-ups are violated, and they have no way of coping with the feeling that result. Many children block out these memories. Though there has been much controversy in recent years about the accuracy of memories that are recalled years later, there is no doubt in the minds of the most therapists that memories have some sort of very real basis. When memories are recalled, they are often recalled as suddenly as they were put away years before. In fact, in some cases it's as if a motion picture were stopped... and then started up again, picking up the original scene as if no time has passed.

When this occurs the body often reacts by restarting its original response to the trauma also. Blood may rush to the scene of a previous wound, hot and cold sensations may occur, and physical pain may be experienced. The emotions and sensations of the original experience may be recalled in a “flashback” during which the person feels that the original event is actually happening at the moment.

Of course, no one wants to re-experience trauma such as this. However, there are ways in which the life-limiting effects of posttraumatic stress can be addressed while minimising the likelihood of excessive disturbances. The pain of not recovering from trauma can ultimately be much worse than the process of its resolution.



## Elements of Posttraumatic Stress

The following is presented to offer an understanding of the “official” diagnostic description of PTSD by the American Psychiatric Association’s Diagnostics and Statistics Manual-IV. PTSD is serious and one should receive treatment by someone trained to offer it. Here are the diagnostics criteria: (Kaplan and Saddock, p.619)

1. The person has been exposed to a trauma when:
  - the person experienced, witnessed, or was confronted with an event or events that involve actual or threatened death or serious injury, or a threat to the physical integrity of self or others, and
  - the person felt intense fear, helplessness, or horror. In children this may be expressed by disorganised or agitated behaviour.
2. the traumatic event is persistently reexperienced in at least one of the following ways:
  - repeated and intrusive distressing memories of the event, including images, thoughts, or perceptions. In young children, repetitive play may occur in which themes or aspects of the trauma are expressed.
  - repeated distressing dreams of the event. In children there may be frightened dreams without recognisable content.
  - acting or feeling as if the traumatic event were recurring (a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes – including those that occur on awakening or when intoxicated). In young children, the trauma specified reenactment may occur.
  - intense psychological distress at exposure to things that remind one of the event.
  - a psychological reaction to exposure to things that remind one of the traumatic event.

3. Persistent avoidance of things that remind one of the trauma and numbing of general responsiveness, as indicated by at least three of the following:
  - efforts to avoid thoughts, feelings, or conversations associated with the trauma
  - efforts to avoid activities, places, or people that arouse memories of the trauma
  - inability to recall an important aspect of the trauma
  - markedly diminished interest or participation in significant activities
  - feeling of detachment or estrangement from others
  - restricted range of emotion ( e.g. unable to have loving feelings).
  - sense of foreshortened future (e.g., does not expect to have a career, marriage, children, or a normal life span).
4. Persistent symptoms of increased arousal as indicated by at least two of the following:
  - difficulty falling or staying asleep
  - irritability or outbursts of anger
  - difficulty concentrating
  - hypervigilance
  - exaggerated startle response
5. duration of symptoms is more than one month

## **CAUSES OF POSTTRAUMATIC STRESS DISORDER (PTSD)**

There are many causes for PTSD. Natural disasters, physical harassment, victimisation, wars, prisoner of wars, accidents, are just some of the incidents that lead to PTSD.

There are arguments that the PTSD has a long lasting effect. Yehuda et al (

Am J Psychiatry, 155;6, June 1998) attempted to find out the relationship between PTSD characteristics of Holocaust Survivors and their adult offspring. They found that the symptoms in offspring may be related to presence and severity of symptoms in the parent. Furthermore PTSD in the parent may be a risk factor for PTSD in offspring. Further studies of Yehuda et al (September 1998), suggested that the findings demonstrate an increased vulnerability to PTSD and another psychiatric disorders among off-spring of Holocaust survivors, thus identifying adult offspring as a possible high risk group within which to explore the individual differences that constitute risk factors for PTSD.

Studies on former prisoner of wars suggest that (Engdahl et al, 1997), PTSD is a persistent, normative, and primary consequence of exposure to severe trauma.

In another study on Bosnian refugees (Weine et al, 1998), evidence was found that testimony psychotherapy may lead to improvement of functioning, in survivors of state-sponsored violence.

## **CONSEQUENCES OF TRAUMA AND PTSD**

The consequence of trauma and PTSD vary greatly depending on the age of the victim, the nature of the trauma, the response to the trauma and the support to the victim in the aftermath. In general, victims of PTSD suffer reduced quality of life due to the intrusive symptoms which restrict their ability to function. They may alternate periods of overactivity with periods of exhaustion as their bodies suffer the effects of hyperarousal. Reminders of the trauma they suffered may appear suddenly, causing instant panic, and possible flashbacks. They become fearful, not only of the trauma itself, but of their own reactions to the trauma. Body signals that were providers of essential information, become dangerous. For example, heart beat acceleration that might indicate over-exertion or excitement, becomes a danger signal in itself because it is a reminder of the trauma response, and



therefore is associated with the trauma. The ability to orient to safety and danger becomes decreased when many things, or even everything, in the environment become perceived as dangerous. When the reminders of the trauma become extreme, or dissociation can be activated, just as if the trauma was occurring in the present. It can become a terribly vicious circle. Victims of PTSD can become extremely restricted, fearing to be together with others or go out of their homes.

Child victims of trauma are a special areas for study. Robert Pynoos at the University of California at Los Angeles is a pioneer in researching the impact of trauma on children and adolescents. Psychological and motor development can be arrested in child victims of trauma, leading to increasingly negative impact on their lives if they continue to mature without intervention to restore lost or undeveloped resources and skills (Pynoos 1993).

### **DIFFERENCE OF ACUTE TRAUMA FROM PTSD**

Discussion with professionals who work both the acute and the long-term aftermath of trauma has lead me to conclude that apart from physical injury due to trauma, acute traumatic reactions may not be differentiable from PTSD in the body and behaviour of the victim. The same disorientation, fear, and indications of ANS activation's – elevations in the heart rate, blood pressure, respiration, shaking, etc. – may be present.

In the aftermath of a disaster, for example, most of those suffering from acute trauma will be easy to spot. Those who have been injured will be obvious. Among the uninjured there will also be many who look stunned, appear pale and faint, or be shaking. Some of those who appear to be suffering from trauma may not even be the actual victims of the disaster, but witnesses or rescuers who may be deeply affected by what they have or are seeing. Some may not be immediately identifiable, they may be highly active –looking for others or after others, organising help and rescue. A



percentage of these may, in the next days or weeks, develop symptoms of trauma.

Months or years later, the vast majority of the survivors, witness and rescuers will no longer be suffering psychologically from the after effects of the event. However, a minority will be suffering to an extreme degree, their lives decreased in quality, and in diagnosis of PTSD will be appropriate.

While the symptoms of acute trauma and PTSD may not differ very much, response to these must differ significantly. Response to acute trauma may include emergency medical intervention for treatment of injuries and/or medical shock. On the psychological side reassurance and comfort will be the key. Often talking about what happened will be important for the survivor in the immediate aftermath of the event. Telling and re-telling the story to caring individuals may help prevent dissociation, and aid in integrating the experience. Providing physical support – holding, an arm around the shoulders, a comforting hand- may be appropriate, especially if the survivor is hysterical or shaking violently. The victim may be cold and in need of blankets and warm beverages. The victim may need to be reminded that the event is passed and they have survived it. “You are safe now.” The more complete and appropriate the response to acute trauma. The greater the chance of preventing subsequent PTSD.(publishing TRAVMA, published by the Turkish Psychological Association, 1999, Istanbul)

Later, working with those who do develop PTSD may resemble some of the aspects of responses to acute trauma. Certainly a reassuring and comforting attitude on the part of the psychotherapist is important. But when the trauma is long past, simple comfort and reassurance will not be enough. The victim of PTSD will feel unable to contain his traumatic experience(s), will have become afraid of his body, and will have lost the sense of what was then and what is now. It is these three areas – containment, positive body awareness, dual time awareness- that must first be strengthened, before addressing the memory of a traumatic event can be done productively.

Containment of out-of-control emotions and thinking processes will help restore a feeling of control over the psychological self. Positive body-awareness will help restore a sense of the body and its sensations as friend, not foe. Dual time awareness will help to separate the trauma occurred in the past even though it feels as if it is occurring now (Rothschild 1996, Rothschild 1997).

Identification of a portion of those suffering from PTSD will be straightforward. But others may be difficult to spot owing to complicated life or defensive systems. Evaluation of the state of the ANS will assist in diagnosis and in setting treatment objectives where appropriate.

### **EARTHQUAKE RELATED PTSD**

Several researches are conducted to examine the impact of earthquake on the society. Karanci and Rustemli made extensive studies on Distress reactions and Earthquake related Cognition of parents and their adolescent children in a victimised population (1996). The study investigated distress reactions and earthquake related cognition of adolescents and their parent sixteen months after the 1992 Erzincan earthquake. Results of this survey indicated that a high degree of similarity between parents and children in cognition about potential earthquakes and initial active responses to the 1992 earthquake. The majority of parents, but only a minority of children expressed continued distress due to the disaster event. Worry about future earthquakes, phobic, somatic, depressive, and irritable/hostile reactions, and perceived lack of control were higher among parents than children.

At another study Rustemli and Karanci (1999) studied the Correlates of Earthquake Cognition and Preparedness Behaviour in a victimised Population. The survey was conducted after 16 months of the earthquake in Erzincan. Data from 461 adults representing different households indicated that earthquake expectations and preparedness could be predicted by fear,



perceived control, and educational background. Results also indicated that damage anticipation was related to height and perceived strength of residences well as to perceived control and trust in officials. Severity of past experiences did not appear to have the predicted effect on quake cognition and preparedness.

### **Impact of Earthquake on Youth**

Extensive studies are carried out after the Erzincan earthquake in 1992 and more recent earthquake in Armenia about the impact of the earthquake. There were some shared outcomes. Very often, as with falling dominoes, ripple effects occurred psychologically when the secondary effects of the quake arose. The fear continued to increase and created behavioural changes such as avoidance and refusal to attend school. (i.e., a behavioural domino). Furthermore, their behavioural disturbances adversely influence their relations with teachers, classmates, and parents, creating different kinds of antisocial actions (i.e., a social domino). These dominoes collected in their impact and burdened the children's well-being with diverse psychosomatic symptoms such as headaches, loss of appetite, and sleep disturbances (i.e., psychosomatic domino) and caused difficulties with concentration and memory with impairment in school performance exhibited (i.e., cognitive domino). ( psychological consequences of the 1992 Erzincan earthquake- by A. Nuray Karinci and Ahmet Rustemli).

The trauma field observers (Libardian, 1989; Azarian, 1990a; Giel, 1901; Grigorian 1992; Kalayjian, 1995; Verluise, 1995) noted that to better understand the particular severity of the disaster's mental morbidity, it is important to consider the impact of the earthquake stressors against the specific pre-disaster and post-disaster situations in Armenia. The inability of the local and state authorities to organise the disaster response deepened the level of stress for many quake survivors over subsequent "weeks and months" ( Comfort, 1990).

## **Posttraumatic Reactions**

The complex interaction between psychological, social, and cultural factors produced and perpetuated the long-lasting posttraumatic reactions in children and adults. Thus, Grigorian (1992), who visited Armenia within a month after the quake, observed in children considerable withdrawal, frequent nightmares, "silence" about parents who had died in the quake, and survivor's guilt. Eighty six percent of the children assessed six to eight weeks after the quake, displayed at least four out of ten of the following symptoms: separation anxiety that intensifies during the evening, school avoidance, refusal to be alone, conduct disorders, sleep disturbances, nightmares, frequent awakenings, and somatic complaints (Kalayjian, 1995). The observations that were made approximately one year after the disaster (Miller et al., 1993) showed strong persistence of affective, cognitive, and behavioural posttraumatic symptoms in the quake children. They manifested numerous quake-related fears and guilt, social withdrawal and changed attitudes about people, life, and the future (e.g., distrust, pessimism, hopelessness) as well as frequent psychosomatic complaints, high irritability, and aggression.

## **Posttraumatic Stress Disorder**

Field diagnostic assessment also showed a persistence of high rates PTSD in traumatised Armenian children. Thus, it was reported that from 179 subjects assessed within a few months after the quake, 72% received a diagnosis of PTSD, 8% conversion disorder, and 7% depression (Grigorian, 1992). Kalayjian (1995) gives numbers PTSD frequency in children at that time as 86% for children and 83% for adolescents. Goenjian (1993) writes that of 65 evaluated children (3<sup>rd</sup> month after the quake), 85.0% met criteria for PTSD and of 98 children (age 5-16) evaluated one month later in the same city of Leninakan, 61.0% met criteria for a PTSD diagnosis. According to Goenjian's (1993) information, one year after the quake in a randomly



selected group of pupils in a Leninakan school (age 15-16), 56.0% met criteria for PTSD. One and a half years after the disaster, 111 Armenian children (age 8-16) were assessed by DSM-111-R criteria for PTSD, and 78 (70.3%) were given this diagnosis (Pynoos et al., 1993).

Najarian et al., (1996) found in children a greater severity of re-experiencing symptoms than symptoms of avoidance and hyperarousal. Pynoos et al., (1993) noted that "fear of quake recurrence after reminders" was the best predictor of PTSD in Armenian children and avoidance of reminders and related loss of interest in significant activities were important indicators across all different categories of severity of children's posttraumatic response. Moreover, guilt (Pynoos et al., 1993; Azarian et al., 1994; Geonjian et al., 1995; Azarian & Skriptchenko-Gregorian, 1997) and trauma reexperiencing through disaster play and drawing (Goenjian, 1993; Kalayjian, 1995; Skriptchenko-Gregorian et al., 1996; Azarian et al., 1996b) were found as important diagnostic symptoms among young survivors of the quake. Also observed was repetitive playing of monotonous "quake" and "cemetery" plays, which lacked joy, pleasure, and creativity, and spontaneously produced similar, gloomy, black-white-red drawings of the devastating disaster. It is probable that children manifested fears, sadness, and anger related to the quake experience and compulsively, but ineffectively, tried to process the trauma.

Goenjian et al., (1995) presented important findings that indicate the existence of a high cooccurrence of PTSD and depressive disorder in young survivors of the Armenian quake. For example, in a group of 63 children examined one and a half years after the quake, 95% had PTSD, 76% depressive disorder, and 71% had both PTSD and depression. The authors consider the degree of direct exposure to the traumatic quake experience as a major contributor to the severity of PTSD, separation anxiety, and depression. Symptoms of these disorders can interact to aggravate and prolong each other. Thus, severe PTSD complicated Armenian children's grieving and as a result caused secondary depression and an increase of

depressive symptoms over time. Separation anxiety some PTSD symptoms in the children, particularly arousal symptoms (Pynoos, Steinberg & Goenjian, 1996).

## FINDINGS

- The sampling carried out consists of 28 persons of whom 5 are male (17.9%) and 23 are female (82.1%). Their average age is 35.46 plus or minus 10.19 (17-59).
- From the aspect of the level of their education, they have been enumerated as: 1. Illiterate person who does not even know how to write or read (3.6%); 2 persons who can read and write (7.1%); 10 persons with primary school education (35.7%); 6 persons with first secondary education (21.4%); 9 persons of lycee graduate (32.1%); 2 persons with university education (7.1%).
- When the marital status of the participants in the sample is evaluated, one can observe 21 married persons (75%), 4 bachelor or single persons (14.3%) and 3 widows or widowers (10.7%).
- Among the participants 27 of them experienced earthquake disaster together with their families (96.4%) while 1 person experienced disaster alone(3.6%).
- Among the participants 27 persons continued living together with their families (96.4%) and 1 kept living alone (3.6%).
- Before the earthquake took place 22 persons used to live in Istanbul (78.6%); 1 person in Duzce (3.6%); 1 person in Bolu-Sapanca (3.6%); 2 persons in Golcuk (7.1%); 1 person in Adapazari (3.6%); and 1 person in Sakarya (3.6%).
- Following the earthquake, 24 persons continued living in Istanbul (85.7%); 1 person went to Ayvalik (3.6%); 1 person stayed in Bolu-Sapanca (3.6%); 1 person had to immigrate to Adapazari (3.6%); and 1 person travelled to Sakarya (3.6%).
- Among the participants group constituting the sampling, 12 of them are house wives (42.9%); 4 of them are unemployed (14.3%); 2 of them are

- workers (7.1%); 6 of them are clerks or officials (21.4%); 3 of them are engaging in free trade (10.7%); and 1 of them is a student (3.6%).
- 10 of participants lost their job due to the occurrence of the earthquake (35.7%) while 18 of them kept their employment position (64.3%).
  - 26 persons in the sample were at their own houses (92.9%) during the earthquake while 2 of them (7.1%) were at somebody else's house at that instant.
  - During the earthquake 24 persons were staying with their families (85.7%) while 2 of them were with their friends (7.1%) and 2 of them were alone by themselves (7.1%).
  - 6 persons from the sample had their homes demolished by the earthquake (24.1%) while 22 of them did not have their home collapsed (78.6%).
  - During the earthquake 27 persons (96.4%) left homes by themselves but 1 person (3.6%) left by the help of some other people.
  - During the earthquake 27 persons (96.4%) went outside the house immediately while 1 person (3.6%) was able to come out of the house after one hour.
  - During the earthquake 7 persons (25%) stayed under the cave-in while 21 persons (75%) did not stay under the collapsed construction.
  - 28 persons (100%) participating in the sampling, do not have any physical damages in the body.
  - 3 of the participants(10.7%) stated that they had gotten medical help while 25 of them (89.3%) had not gotten any medical assistance.

<u>Indications</u>	<u>numbers</u>
1. uneasiness, fear of earthquake	in 19 persons
2. disorderedness in sleeping	in 18 persons
3. phobia of darkness and not entering house	in 11 persons
4. trembling, sweating, palpitation	in 8 persons
5. keeping away from voices and actions reminding the earthquake	in 7 persons
6. not be able to stay alone	in 6 persons
7. lack of appetite	in 6 persons



8. to feel faint
9. keep wailing

in 5 persons  
in 4 persons

- Among the people constituting our sampling, the most frequent indication was uneasiness and earthquake fear (19 persons, 67.9%). 18 patients had disorderedness in their sleeping (18 persons, 64.3%); 11 of them were not entering their homes due to darkness phobia (39.3%); 8 of the participant patients had trembling, sweating and palpitation (28.6%); 6 persons (21.4%) were not able to stay alone; 7 patients (25.5%) kept away from the voices and actions that reminded earthquake; again 6 persons (21.4%) showed lack of appetite; 5 patients (17.6%) felt faint and 4 persons kept wailing for some time.
- Among the participant patients 9 of them (32.1%) inquired for medical treatment while 19 of them (67.9%) did not have any inquiry for medical treatment.
- Among our patients, 6 of them (21.4%) use alcohol, while 22 of them (78.6%) do not use. While the 6 patients (21.4%) who use alcohol, consume daily 22 persons do not use at all (78.6%).
- There exists 1 person (3.6%) who increased the alcohol usage because of the earthquake, while 5 persons (17.9%) did not show any such increase and 22 persons (78.6%) did not use alcohol even at normal times.
- The attempts in committing suicide by the people included in the sample before the earthquake, there exist 2 people who had such attempts (7.1%) while 26 of the sample did not attempt to commit suicide (92.9%).
- After the earthquake 1 person's committing suicide has been observed while there has not been any such observation for 27 persons (96.4%).
- The 3 persons (10.7%) experienced trauma before the earthquake while 25 of them (89.3%) did not.
- During the last year the number of patients who had stressful times is 13 persons (46.4%). In the same period the number of patients who did not have any stress is 15 persons (53.6%).
- All the patients included in our sample; i.e., 28 persons (100%), still





think of that event and all of them repeat thinking and conversation about that event.

- 27 persons of our sample (96.4%) still have that fear continued while 1 person (3.6%) has no such fear anymore.
- There exist damage and cracking at 15 houses of our patients (53.5%) while no damage exists at 13 houses of our patients (46.4%).
- Among the people of our patients 7 of them (25%) lost their relatives with whom they used to live together, while 21 of them (75%) did not have any such sorrow.
- During the earthquake while there existed some injured people who had been living together with 9 of the patients (32.1%) included in the sample, for 19 patients (67.9%) no such experience took place.
- 9 of our patients witnessed people's death during the earthquake while 19 of them did not.
- During the earthquake 9 of our patients (32.1%) had destroyed or demolished in their area, but 19 of them (67.9%) there was not any house collapsed.
- 11 of our patients (39.3%) lost their relatives during the earthquake, while 17 of them (60.7%) did not have any such loss.
- Also, 10 of the patients (35.7%) are not known where they are about, while 18 of the patients (64.3%) have no such problem.
- While the 11 persons, in our sample, who faced earthquake disaster (39.3%) continued staying at the earthquake area, 17 persons of the sample who experienced the same disaster have left the earthquake area.
- Also, the number of persons who have left their places at the earthquake area is 14 (50%) while the number of people who have not left their places is again 14 (50%).
- Among the people who have left their places, 11 of them (39.3%) migrated to another city, while 3 of them have changed their places (10.7%) in the same city or town and gone to near relatives.
- 18 persons (64.3%) of our patients left the place on the same day, 4 of them (14.3%) left their places of dwelling after two days, 2 of them (17.1%) left their places after 3 days, 2 persons (17.1%) also left their

- places after seventeen days, also another 1 person (3.5%) left the place after 16 days, 1 of them left the place after five days (3.6%).
- The distribution of the number of our patients, according to the reasons of leaving their places is given as follows: 11 persons (50%) did not leave, 6 persons (21.4%) left due to collapse of their houses. 2 of them (17.1%) left because of the damage occurred in their houses. 4 people (14.3%) left because of fear, 2 of them (7.1%) left for visiting their relatives living at another places.
  - 10 people (35.7%) attended the activities of rescuing and curing while 18 people (64.3%) did not attend the said activities.
  - 26 of our patients (92.9%) found opportunity of communicating with their relatives, while 1 person of our patients (3.6%) could not communicate with their close relations, and 1 of them (3.6%) did not have any relatives at all.
  - 3 of our patients (10.7%) could communicate after 1 hour, 4 of them (14.3%) after two hours, 5 people (17.9%) after five hours, 3 persons (10.7%) after six hours, 2 patients (7.1%) after seven hours, and 1 person (3.6%) after twenty four hours.
  - 27 of our patients (96.4%) received help during the event, while 1 of them (3.6%) did not get.
  - 1 person (3.6%) did not get any help, 7 people (25%) received help from their families, 4 people (14.3%) got help from their friends and 16 people received assistance from their life saver team.

<u>Kind of fear</u>	<u>no. of patients</u>
1. earthquake will strike again	28
2. fear of loneliness	24
3. I might stay under collapsed buildings	25
4. fear of earthquake that will happen	25
5. terrible things might happen to my family	23
6. not to be able to enter the house	22
7. do not want to sleep at home	22
8. not to be able to act alone	21

9. not to be able to take a bath	20
10. not to be able to enter the house during night	18
11. looking at the sky, continually	11
12. phobia on closed places	11
13. phobia on higher floors	10
14. darkness phobia	9

All our patients i.e., 28 (100%) have the fear that the earthquake would strike again and they would stay under collapse. 24 people (85.7%) have the fear of loneliness or the fear of staying alone. 25 people, on the other hand, (89.3%) have the fear that they might have stayed under collapse and could not be rescued. Also, 25 of our patients (89.3%) have the fear that the earthquake would happen. 23 of them (82.1%) have the fear, "terrible things might happen to my family". 22 of the patients (78.6%) have the illness of not entering the house because of the re-striking of the earthquake. Also, 22 patients (78.6%) cannot sleep at their homes. 21 of them (75%) can not move alone inside the house and cannot do anything at home. 20 patients (71.4%) can not take bath because of the reason that they could be caught naked. 18 of the people (64.3%) cannot enter their houses because of darkness. 11 of the patients (39.3%) cannot look at the sky because of their belief that by looking at the sky the brilliance of stars reminded them the coming of the earthquake. Also, 11 patients (39.3%) have the phobia of closed doors and thus they cannot go neither to a cinema nor to a theatre. 10 people (35.7%) have the phobia of higher floors thinking that the laid aside buildings due to earthquake may collapse on them and they might not be able to come to the ground. Finally, 8 patients have darkness phobia thinking that they could have been caught at the earthquake and they would not be able to come out in the dark.



## CONCLUSIONS AND DISCUSSIONS

This research study has shown that another related variable for stress is the safety of people's houses and the world in general. If one's house is evaluated as unsafe to dwell in against potential earthquake, then that person would be more likely to have phobic anxiety at higher levels, beside somatization depression and hostility. According to the reported cases, the people were mostly emotionally affected during the event. The frequently seen illness was in the form of fear shock and it was observed that many people had symptoms of all kinds of emotions associated with this earthquake event. The people experienced traumatic events, though.

One of the other forms of emotion was considered to be high level of anxiety and worrying while one can say that the people continued having the fear in themselves thinking that earthquake might happen again.

<u>Indications</u>	<u>numbers</u>
1. uneasiness, fear of earthquake	in 19 persons
2. disorderedness in sleeping	in 18 persons
3. phobia of darkness and not entering house	in 11 persons
4. trembling, sweating, palpitation	in 8 persons
5. keeping away from voices and actions reminding the earthquake	in 7 persons
6. not be able to stay alone	in 6 persons
7. lack of appetite	in 6 persons
8. to feel faint	in 5 persons
9. keep wailing	in 4 persons

- Among the people constituting our sampling, the most frequent indication was uneasiness and earthquake fear (19 persons, 67.9%). 18 patients had disorderedness in their sleeping (18 persons, 64.3%); 11 of them were not entering their homes due to darkness phobia (39.3%); 8 of



the participant patients had trembling, sweating and palpitation (28.6%); 6 persons (21.4%) were not able to stay alone; 7 patients (25.5%) kept away from the voices and actions that reminded earthquake; again 6 persons (21.4%) showed lack of appetite; 5 patients (17.6%) felt faint and 4 persons kept wailing for some time.

Most of the cases appeared as sort of symptoms of anxiety, avoidance and depression.

Predisposing vulnerability factors that appear to play primary roles in determining whether the disorder develops or not include the followings:

1. the presence of childhood trauma
2. borderline, paranoid, dependent or anti-social personality disorder traits
3. inadequate support system
4. genetic constitutional vulnerability to psychiatric illnesses
5. recent stressful life changes
6. perception of external focus of control
7. recent excessive alcohol intake

In order to avoid the factors causing vulnerability, the people should be so organised to overcome psychological difficulties due to earthquakes and live together with it. However, this requires a good program of psychological briefings and training of awareness with which ultimately will the people will decrease their emotional reactions and disorderness. Automatically then the PTSD risk will decrease.

The result that extreme events can be associated with the early and simultaneous development of both PTSD and major depression or combination there of, confirms the result obtained in our research study. ( see Reference 34).

In addition to above, one of the results arisen from this research study has

been the importance of depressive symptoms in the development of PTSD. First depressive symptoms are the most insistent predictors of PTSD symptoms and PTSD status in one year. This result, though, confirms the results obtained in the study Ref. 26. Second symptoms of intrusion and peri-traumatic dissociation were better used in predicting PTSD within four months period while the symptoms of depression, avoidance and anxiety, in one year time. Therefore, our findings are consistent with these researches made.

The sooner the better, however, the Government should take necessary measures in order to reactivate the social potential in the earthquake area. Many forms of treatments, like group therapy and getting the people participated in social activities and events, should be applied.

No wonder effectively worked out psychiatric centres and psychological advisory services would be of paramount importance in the process of getting them to regain their self in confidence, and will power to contribute and participate in economic activities. Even, advisory services units at schools will do the best job, in the sense that the children are the most delicate part of a community or nation, as, these children today will normally be the future rulers of the country. In a nutshell, all the means would have to be operated towards improving the earthquake area and people; socially, economically, psychologically and in other values.

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## Appendix



## Frequencies

### Statistics

		cinsiyet	YAS	2	3	4	1	döny
N	Valid	28	28	28	28	28	28	28
	Missing	0	0	0	0	0	0	0

### Statistics

		dsny	İp	İpKAYBı	DEPSNE RE	DEPSKIML	EVYýKýL M	KENDİÇÝK
N	Valid	28	28	28	28	28	28	28
	Missing	0	0	0	0	0	0	0

### Statistics

		NEKADS ON	GÖÇÜKA LK	BEDENH AS	TIBBIYAR	RUHSOR UN	BELÝRTÝ	BEL2
N	Valid	28	28	28	28	28	5	4
	Missing	0	0	0	0	0	23	24

### Statistics

		BEL3	BEL4	BEL5	BEL6	BEL7	BEL8	BEL9
N	Valid	8	19	18	11	6	6	7
	Missing	20	9	10	17	22	22	21

### Statistics

		ILKBELIR	GEÇTEDVI	ALKOLL	DERECE SI	ARTMAV AR	INTIHAR	DEPSINT
N	Valid	28	28	28	28	28	28	28
	Missing	0	0	0	0	0	0	0

**Statistics**

		DEPÖTR AV	SON1STR S	USDEPM EP	KONUĐD ÜĐ	KORKUS UR	EVHASAR	ÖLENVAR M
N	Valid	28	28	28	28	28	28	28
	Missing	0	0	0	0	0	0	0

**Statistics**

		ENKAZKU R	ÖLÜGÖR MÜ	BÖLYYKEV	YAKYNÖLÜ	AKYBETBI	DBKALMYĐ	DBAYRYLM
N	Valid	28	28	28	28	28	28	28
	Missing	0	0	0	0	0	0	0

**Statistics**

		NEREGITI	KAÇGÜNS	NIYE	KURTAR MA	HABERLE Đ	KAÇSAATS	YARDYMA L
N	Valid	28	28	28	28	28	28	28
	Missing	0	0	0	0	0	0	0

**Statistics**

		KIMDEN	korkular	KORKU2	KORKU3	KORKU4	KORKU5	KORKU6
N	Valid	28	28	9	11	10	24	22
	Missing	0	0	19	17	18	4	6

**Statistics**

		KORKU7	KORKU8	KORKU9	KORKU10	KORKU11	KORKU12	KORKU13
N	Valid	24	23	25	21	20	23	18
	Missing	4	5	3	7	8	5	10

# Statistics

		KORKU14	KORKU15
N	Valid	13	1
	Missing	15	27

## Frequency Table

cinsiyet

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1erkek	5	17,9	17,9	17,9
	2kadın	23	82,1	82,1	100,0
	Total	28	100,0	100,0	

YAS

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	17,00	1	3,6	3,6	3,6
	18,00	1	3,6	3,6	7,1
	21,00	1	3,6	3,6	10,7
	24,00	1	3,6	3,6	14,3
	25,00	1	3,6	3,6	17,9
	26,00	2	7,1	7,1	25,0
	28,00	1	3,6	3,6	28,6
	29,00	2	7,1	7,1	35,7
	32,00	1	3,6	3,6	39,3
	33,00	1	3,6	3,6	42,9
	34,00	1	3,6	3,6	46,4
	35,00	1	3,6	3,6	50,0
	37,00	1	3,6	3,6	53,6
	40,00	2	7,1	7,1	60,7
	41,00	1	3,6	3,6	64,3
	42,00	2	7,1	7,1	71,4
	43,00	2	7,1	7,1	78,6
	44,00	1	3,6	3,6	82,1
	45,00	1	3,6	3,6	85,7
	46,00	2	7,1	7,1	92,9
	48,00	1	3,6	3,6	96,4
	59,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	

2

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	eđitim	1	3,6	3,6	3,6
	3,00	10	35,7	35,7	39,3
	4,00	6	21,4	21,4	60,7
	5,00	9	32,1	32,1	92,9
	6,00	2	7,1	7,1	100,0
	Total	28	100,0	100,0	



3

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid evli 1	21	75,0	75,0	75,0
2,00	4	14,3	14,3	89,3
3,00	3	10,7	10,7	100,0
Total	28	100,0	100,0	

4

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid d.ö. k.y. 1	27	96,4	96,4	96,4
2,00	1	3,6	3,6	100,0
Total	28	100,0	100,0	

1

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid dsky 1	27	96,4	96,4	96,4
2,00	1	3,6	3,6	100,0
Total	28	100,0	100,0	

döny

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid evde 1	22	78,6	78,6	78,6
3,00	1	3,6	3,6	82,1
5,00	1	3,6	3,6	85,7
6,00	2	7,1	7,1	92,9
7,00	1	3,6	3,6	96,4
8,00	1	3,6	3,6	100,0
Total	28	100,0	100,0	

dsny

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	24	85,7	85,7	85,7
dsny 4	1	3,6	3,6	89,3
5,00	1	3,6	3,6	92,9
7,00	1	3,6	3,6	96,4
8,00	1	3,6	3,6	100,0
Total	28	100,0	100,0	

**IP**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	12	42,9	42,9	42,9
	2,00	4	14,3	14,3	57,1
	3,00	2	7,1	7,1	64,3
	4,00	6	21,4	21,4	85,7
	5,00	3	10,7	10,7	96,4
	7,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	

**IPKAYBy**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	9	32,1	32,1	32,1
	2,00	18	64,3	64,3	96,4
	12,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	

**DEPSNERE**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	26	92,9	92,9	92,9
	3,00	2	7,1	7,1	100,0
	Total	28	100,0	100,0	

**DEPSKIML**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	24	85,7	85,7	85,7
	2,00	2	7,1	7,1	92,9
	3,00	2	7,1	7,1	100,0
	Total	28	100,0	100,0	

**EVYýKýLM**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	6	21,4	21,4	21,4
	2,00	22	78,6	78,6	100,0
	Total	28	100,0	100,0	

**KENDİÇÝK**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	27	96,4	96,4	96,4
	2,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	

**NEKADSON**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	27	96,4	96,4	96,4
2,00	1	3,6	3,6	100,0
Total	28	100,0	100,0	

**GÖÇÜKALK**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	7	25,0	25,0	25,0
2,00	21	75,0	75,0	100,0
Total	28	100,0	100,0	

**BEDENHAS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 2,00	28	100,0	100,0	100,0

**TIBBIYAR**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	3	10,7	10,7	10,7
2,00	25	89,3	89,3	100,0
Total	28	100,0	100,0	

**RUHSORUN**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	6	21,4	21,4	21,4
2,00	10	35,7	35,7	57,1
3,00	2	7,1	7,1	64,3
4,00	2	7,1	7,1	71,4
5,00	2	7,1	7,1	78,6
7,00	3	10,7	10,7	89,3
10,00	1	3,6	3,6	92,9
13,00	1	3,6	3,6	96,4
14,00	1	3,6	3,6	100,0
Total	28	100,0	100,0	

**BELÝRTÝ**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid BAYGINLIK	5	17,9	100,0	100,0
Missing System	23	82,1		
Total	28	100,0		



**BEL2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	4	14,3	100,0	100,0
Missing	System	24	85,7		
Total		28	100,0		

**BEL3**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	8	28,6	100,0	100,0
Missing	System	20	71,4		
Total		28	100,0		

**BEL4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	19	67,9	100,0	100,0
Missing	System	9	32,1		
Total		28	100,0		

**BEL5**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	18	64,3	100,0	100,0
Missing	System	10	35,7		
Total		28	100,0		

**BEL6**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	11	39,3	100,0	100,0
Missing	System	17	60,7		
Total		28	100,0		

**BEL7**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	6	21,4	100,0	100,0
Missing	System	22	78,6		
Total		28	100,0		

**BEL8**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	6	21,4	100,0	100,0
Missing	System	22	78,6		
Total		28	100,0		

**BEL9**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	7	25,0	100,0	100,0
Missing	System	21	75,0		
Total		28	100,0		

**ILKBELIR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	1	3,6	3,6	3,6
	2,00	3	10,7	10,7	14,3
	3,00	5	17,9	17,9	32,1
	4,00	8	28,6	28,6	60,7
	5,00	2	7,1	7,1	67,9
	6,00	5	17,9	17,9	85,7
	7,00	3	10,7	10,7	96,4
	9,00	1	3,6	3,6	100,0
Total		28	100,0	100,0	

**GEÇTEDVI**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	9	32,1	32,1	32,1
	2,00	19	67,9	67,9	100,0
Total		28	100,0	100,0	

**ALKOLL**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	6	21,4	21,4	21,4
	2,00	21	75,0	75,0	96,4
	21,00	1	3,6	3,6	100,0
Total		28	100,0	100,0	

**DERECESI**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	6	21,4	21,4	21,4
	2,00	22	78,6	78,6	100,0
Total		28	100,0	100,0	

**ARTMAVAR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	1	3,6	3,6	3,6
	2,00	27	96,4	96,4	100,0
Total		28	100,0	100,0	

**INTIHAR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	2	7,1	7,1	7,1
	2,00	26	92,9	92,9	100,0
	Total	28	100,0	100,0	

**DEPSINT**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	1	3,6	3,6	3,6
	2,00	27	96,4	96,4	100,0
	Total	28	100,0	100,0	

**DEPÖTRAV**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	3	10,7	10,7	10,7
	2,00	25	89,3	89,3	100,0
	Total	28	100,0	100,0	

**SON1STRS**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	13	46,4	46,4	46,4
	2,00	15	53,6	53,6	100,0
	Total	28	100,0	100,0	

**USDEPMEP**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	28	100,0	100,0	100,0

**KONUÞDÜÞ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	28	100,0	100,0	100,0

**KORKUSUR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	27	96,4	96,4	96,4
	2,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	



**EVHASAR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	13	46,4	46,4	46,4
	2,00	13	46,4	46,4	92,9
	11,00	2	7,1	7,1	100,0
	Total	28	100,0	100,0	

**ÖLENVARM**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	7	25,0	25,0	25,0
	2,00	21	75,0	75,0	100,0
	Total	28	100,0	100,0	

**ENKAZKUR**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	9	32,1	32,1	32,1
	2,00	19	67,9	67,9	100,0
	Total	28	100,0	100,0	

**ÖLÜGÖRMÜ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	9	32,1	32,1	32,1
	2,00	19	67,9	67,9	100,0
	Total	28	100,0	100,0	

**BÖLYÖKEV**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	9	32,1	32,1	32,1
	2,00	19	67,9	67,9	100,0
	Total	28	100,0	100,0	

**YAKYNÖLÜ**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	11	39,3	39,3	39,3
	2,00	17	60,7	60,7	100,0
	Total	28	100,0	100,0	

**AKÿBETBI**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	10	35,7	35,7	35,7
2,00	17	60,7	60,7	96,4
22,00	1	3,6	3,6	100,0
Total	28	100,0	100,0	

**DBKALMÿp**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	21	75,0	75,0	75,0
2,00	7	25,0	25,0	100,0
Total	28	100,0	100,0	

**DBAYRÿLM**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	14	50,0	50,0	50,0
2,00	14	50,0	50,0	100,0
Total	28	100,0	100,0	

**NEREGITI**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	15	53,6	53,6	53,6
2,00	12	42,9	42,9	96,4
3,00	1	3,6	3,6	100,0
Total	28	100,0	100,0	

**KAÇGÿNS**

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 1,00	18	64,3	64,3	64,3
2,00	4	14,3	14,3	78,6
3,00	2	7,1	7,1	85,7
5,00	1	3,6	3,6	89,3
16,00	1	3,6	3,6	92,9
17,00	2	7,1	7,1	100,0
Total	28	100,0	100,0	

**NIYE**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	15	53,6	53,6	53,6
	2,00	6	21,4	21,4	75,0
	3,00	2	7,1	7,1	82,1
	5,00	4	14,3	14,3	96,4
	6,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	

**KURTARMA**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	9	32,1	32,1	32,1
	2,00	19	67,9	67,9	100,0
	Total	28	100,0	100,0	

**HABERLEP**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	26	92,9	92,9	92,9
	2,00	1	3,6	3,6	96,4
	3,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	

**KAÇSAATS**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	3	10,7	10,7	10,7
	2,00	4	14,3	14,3	25,0
	3,00	5	17,9	17,9	42,9
	4,00	6	21,4	21,4	64,3
	5,00	2	7,1	7,1	71,4
	6,00	3	10,7	10,7	82,1
	7,00	2	7,1	7,1	89,3
	8,00	1	3,6	3,6	92,9
	10,00	1	3,6	3,6	96,4
	24,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	

**YARDYMAL**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	27	96,4	96,4	96,4
	2,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	



**KIMDEN**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1,00	3	10,7	10,7	10,7
	2,00	5	17,9	17,9	28,6
	3,00	2	7,1	7,1	35,7
	4,00	16	57,1	57,1	92,9
	5,00	1	3,6	3,6	96,4
	7,00	1	3,6	3,6	100,0
	Total	28	100,0	100,0	

**korkular**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1yinedepolacak	28	100,0	100,0	100,0

**KORKU2**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	2,00	9	32,1	100,0	100,0
Missing	System	19	67,9		
Total		28	100,0		

**KORKU3**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	3,00	11	39,3	100,0	100,0
Missing	System	17	60,7		
Total		28	100,0		

**KORKU4**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	4,00	9	32,1	90,0	90,0
	6,00	1	3,6	10,0	100,0
	Total	10	35,7	100,0	
Missing	System	18	64,3		
Total		28	100,0		

**KORKU5**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	5,00	24	85,7	100,0	100,0
Missing	System	4	14,3		
Total		28	100,0		

**KORKU6**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	6,00	21	75,0	95,5	95,5
	7,00	1	3,6	4,5	100,0
	Total	22	78,6	100,0	
Missing	System	6	21,4		
Total		28	100,0		

**KORKU7**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	7,00	24	85,7	100,0	100,0
Missing	System	4	14,3		
Total		28	100,0		

**KORKU8**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	8,00	23	82,1	100,0	100,0
Missing	System	5	17,9		
Total		28	100,0		

**KORKU9**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	9,00	25	89,3	100,0	100,0
Missing	System	3	10,7		
Total		28	100,0		

**KORKU10**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	10,00	21	75,0	100,0	100,0
Missing	System	7	25,0		
Total		28	100,0		

**KORKU11**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	11,00	20	71,4	100,0	100,0
Missing	System	8	28,6		
Total		28	100,0		

**KORKU12**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	12,00	23	82,1	100,0	100,0
Missing	System	5	17,9		
Total		28	100,0		

**KORKU13**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	13,00	18	64,3	100,0	100,0
Missing	System	10	35,7		
Total		28	100,0		

**KORKU14**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	14,00	13	46,4	100,0	100,0
Missing	System	15	53,6		
Total		28	100,0		

**KORKU15**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	15,00	1	3,6	100,0	100,0
Missing	System	27	96,4		
Total		28	100,0		



Ad ve soyad:

Yaş:

Eğitim:

Evli:

Yıl:

Varsa çocuk sayısı:

Bekar:

Dul:

Yıl:

Boşanmış:

Yıl:

Depremden önce kimlerle yaşıyor:

Depremden sonra kimlerle yaşıyor:

Depremden önce nerede yaşıyor:

Depremden sonra nerede yaşıyor:

İş:

Depreme bağlı iş kaybı varmı:

Deprem sırasında merdeydi:

Deprem sırasında kimlerle idi:

Deprem sırasında bulunduğu ev yıkılmış mı:

Deprem sırasında binadan kendisini çıkmış:

Olay anından ne kadar sonra binadan çıkabilmiş:

Göçük altında kalmış mı:

Bedensel hasarı varmı:

Nedir:

Herhangibir tıbbi yardım almış mı:

Ruhsal sorunlarını ilk olaydan kaç gün sonra fark etmiş

İlk fark ettiği belirtiler neler

Geçmişte ruhsal sorun nedeniyle tedavi başvurusu varmı

Deprem öncesi alkol madde kullanım varmı

Derecesi

Depremle beraber alkol madde kullanımında artma varmı

Deprem öncesi intihar teşebbüsü varmı

deprem sonrası intihar teşebbüsü varmı

Deprem öncesi travma öyküsü varmı

Son 1 yıl içindeki stressörler

Olayla zihniniz hala meşgul mu

Olayı tekrar tekrar düşünüyor ve konuşuyormusunuz

Olayla ilgili korkularınız hala sürüyormu



Deprem sırasında bulunduđu evde hasar ,çatlak varmı:

Deprem sırasında beraber olduđu insanlar arasında ölen varmı:

Deprem sırasında beraber olduđu insanlar arasında enkaz altından kurtulan varmı?

Deprem sırasında ölü, ceset görmüşmü:

Deprem sırasında bulunduđu bölgede yıkılan evler olmuş mu:

Yakınları arasında ölem varmı

Kim

Yakınları arasında akıbeti bilinmeyen varmı:

Kim:

Depremden sonra deprem bölgesinde bulunmayı sürdürmüşmü:

Ayrılmışsa :

Nereye gitmiş:

Kaç gün sonra :

Niye:

Kurtarma çalışmalarına katılmış mı:

Deprem sonrası yanında olmayan yakınları ile haberleşebilme olanağı bulmuş mu

Kaç saat sara.

Olay anında yaşadıkları.

Ölçek ver

Olaydan sonraki günlerde en fazla olumsuz etkisi olduğunu düşündüğü olaylar

Olay sırasında ve sonrasında yardım almış mı

Kimlerden

Hangi tip korkular var

Yine deprem olacak  
Karanlık  
Kapalı yer  
Yüksek kat  
Evde yalnız kalmak  
Yalnız yatmak  
Evde yatmak  
Deprem olacak göçük altında kalacağım  
Aileme yakınlarıma kötü bir şey olacak  
Deprem olacak bu sefer kurtulamayacağım  
Evin içinde tek başına hareket edememek  
Banyo yapamamak  
Eve girmek  
Eve gece girmek  
Gökyüzüne bakmak  
Aya bakmak

Deprem sırasında ve hemen sonrasında yaşadıklarınızı sürekli  
düşünüyorsunuz  
Nasıl

Bu olaylar gözünüzün önünde canlanıyormu