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## The Effect of Forced Migration on Mental Health in Elderly Individuals: A Struggle in the Shadow of Disasters

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### **Abstract**

Natural disasters are social crises that affect people together with their environment, which are unpredictable where and when they will occur worldwide. Natural disasters are a process that deeply affects people's lives, often necessitating relocation. Natural disasters affecting individuals from all age groups significantly affect elderly individuals, who are a vulnerable and fragile group due to physical limitations, chronic diseases and other age-related factors. Uncertainty and anxiety together with difficult experiences and change of location after the disaster is a traumatic process that especially affects elderly individuals. The fact that elderly individuals constitute the majority of the increasing population on a global scale and the increasing number of natural disasters today makes it a priority to address the mental health of elderly individuals and to carry out more studies on survival strategies. From this point of view, this review study aims to provide strategies for the protection, development and rehabilitation of the mental health of elderly individuals by focusing on the mental health problems and coping methods of elderly individuals who try to establish a new life by having to relocate due to natural disasters and natural disasters. Pre-disaster preparation and post-disaster intervention programs should be prepared specifically for elderly individuals and should be structured taking into account cultural/geographical differences.

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#### 1. Introduction

Natural disasters are a worldwide reality and are important events that deeply affect people's lives, societies and the environment (Bayraktar & Dal Yılmaz, 2018). These disasters can cause people to leave their homes, communities, and familiar living spaces by forcing displacement (Cofini et al., 2015; Şengül & Turan 2013; Yıldız et al., 2018). Due to the nature of natural disasters, the unpredictability of when and where they may occur further increases their destructiveness. It is a fact that natural disasters always pose a threat worldwide, and the simultaneous fires, floods and the recent earthquake in Turkey in recent years have once again revealed this fact (T.C. İçişleri Bakanlığı Afet ve Acil Durum Yönetimi Başkanlığı, 2023). According to the data of the Disaster and Emergency Management Presidency of the Ministry of Interior of the Republic of Turkey (T.C. İçişleri Bakanlığı Afet ve Acil Durum Yönetimi Başkanlığı), the impact area of the 6 February 2023 earthquake was quite large and spread over an area of 108,812 square kilometers covering 11 provinces, and the settlements and rural areas within this area were largely affected, and according to the June report, 50,783 people lost their lives, 115,353 people were injured and 37,984 buildings were destroyed due to the earthquake. Furthermore, according to the Turkish Statistical Institute (Türkiye İstatistik Kurumu) (2022), an estimated 14.013.196 people were affected as a result of this earthquake, which revealed a serious housing problem. According to the report published by the International Organization for Migration, an estimated 2.7 million people, including migrants, needed to relocate due to the need for forced shelter (IOM, 2023).

Natural disasters that cause forced displacement cause serious physical, emotional and spiritual traumas to elderly individuals, as in all age groups. Although these traumas sometimes have different effects on individuals, older individuals are more sensitive to traumatic experiences than young people and their reactions to trauma may also differ (Şevik, 2023). However, there are not enough studies to reveal these differences, especially in elderly individuals who have had to relocate or migrate. For this reason, studies on this subject are needed to guide future planning and research.

# 2. Compulsory Relocation After Natural Disasters and Its Impact on Elderly Individuals

### 2.1. Compulsory Relocation After Natural Disaster

Natural disasters are events that deeply affect people's lives and social structures (Mayer et al., 2020). The massive destruction caused by these disasters can cause people to lose their living spaces, homes and communities they belong to, leading to forced displacement (Cofini et al., 2015; Şengül & Turan, 2013; Yıldız et al., 2018). Such displacement can be temporary, long-term or permanent and can take place both in the same geography and in different geographies. This situation can seriously affect the social structure and solidarity of local communities and result in economic-psychological difficulties.

## 2.2. The Effect of Forced Relocation on Elderly Individuals

Natural disasters cause many people to lose their lives, but they can also cause forced displacement by destroying people's living spaces, homes and communities they belong to. This displacement may be temporary in terms of duration, long-term or permanent, or it may be in the same geography or another geography (Cofini et al., 2015; Şengül & Turan 2013; Yıldız et al., 2018). Disasters cause individuals of all age groups to leave their homes and the environment they live in due to the chaos, uncertainty and anxiety environment it causes, and have a deep impact on their lives as a result of leaving their roots and leaving their familiar surroundings behind. Especially elderly individuals, who are among the vulnerable groups against the negative effects of natural disasters, are negatively affected by the experience of forced displacement (Bayraktar & Dal Yılmaz 2018; Donatelli & Somes 2012; Claver et al.,2013). In addition to the biological progression of old age, physical limitations in the aging process and diseases, changes in cognitive functions, perception, decreased attention and concentration, memory weakness, difficulty in adapting to the new, withdrawal from life due to loss of role, status and income, loneliness, fragility, inability to use technology and the fear of novelty caused by all these reasons cause them not to want to move away from the environment they are accustomed to and to show avoidance behavior to avoid relocation under any circumstances (Kalınkaya, 2021; Kart & Kinney 2001). Chronic diseases of elderly individuals, which increase with age, further increase their vulnerability and fragility. The difficulties experienced by elderly people who have to relocate due to natural disasters

due to chronic diseases are very important and this issue should be taken into consideration for the planning of disaster management health services. Access to medication, access to medical care and difficulties in controlling chronic diseases due to stress and anxiety are challenging for elderly people with chronic diseases. In addition, it should not be ignored that the caregiving conditions of elderly individuals who need continuous care due to their chronic diseases change and become more difficult for their caregivers. Approximately 80% of the elderly affected by disasters have at least one chronic disease and 50% have at least two chronic diseases (Centers for Disease Control and Prevention, 2011). It has been reported that the majority of deaths during and after the earthquake, tsunami and nuclear disaster that occurred in Japan in 2011 were elderly individuals (Help Age, 2013). Studies have emphasized the vulnerability and vulnerability of elderly individuals with chronic diseases. (Yerli, 2017; Küçük & Karadeniz, 2021) In addition to all these, the increase in studies on elderly individuals who need continuous care and their caregivers will provide a different perspective in disaster management. All these factors show the impact of natural disasters on older persons and the difficulties of forced displacement on older persons.

## 3. Post Traumatic Stress And Recovery Process in Elderly People After Natural Disasters

Individuals affected by disasters may have negative feelings about their lives in addition to the pathological problems they experience, have difficulty in fulfilling their roles and responsibilities in daily life in the changing environment after disasters and experience coping difficulties. Although it is accepted as a social reality that survivors recover after natural disasters such as earthquakes and recover after a while, it should be noted that elderly individuals, who are considered as a vulnerable group in natural disasters, may be exposed to longer-term psychological disorders following the end of the acute period after a disaster (Şevik, 2023). Mental health problems are observed in individuals who have experienced losses and witnessed these losses (Kim et al., 2022). As a traumatic life event, natural disasters are potentially serious sources of vital, existential stress. Especially post-traumatic stress disorder emerges after disasters as a common mental health problem (Adhikari Baral & KC., 2019). In DSM-IV-TR, Posttraumatic Stress Disorder (PTSD) is defined as a psychiatric disorder lasting more than one month after the event, characterized by specific symptoms such as hyperarousal, re-experiencing, avoidance, decreased interest in the outside world, slowed reactions and alienation, causing clinically significant distress and impairment in social, occupational or other areas of functioning and other areas (Battal & Özmenler, 1997). Many studies have been conducted to investigate mental disorders that may occur after natural disasters, which are a source of great existential stress. In a study conducted after the earthquake in Nepal in 2015, it was emphasized that PTSD was significantly related to the age of adult survivors of the earthquake, and PTSD was detected in more than half (62.7%) of the elderly survivors (Adhikari Baral & KC., 2019). Some studies conducted in China and Italy also revealed similar findings (Jia et al., 2010). As a result of the studies, the increased risk of PTSD with age has been attributed to vulnerability, physical frailty in older

individuals, chronic diseases, low coping levels and decreased adaptation to stress (Blevins et al., 2015). After natural disasters, it is accepted as a social expectation that individuals exposed to the disaster will recover and hold on to life after a short period of time. However, variables such as the magnitude of the disaster, losses experienced, individual differences, age, gender, social roles, etc. should be taken into consideration in the aftermath of the acute period and mental health disorders that may occur in the long term (Şevik, 2023). Although definitions such as getting used to the new normal, continuation of life or the effort to hold on to life are created, the loss and deaths of families, close relatives who have witnessed the destructiveness of natural disasters, destroyed houses and neighborhoods, and on top of all these, having to migrate to other places from the living spaces they know where they live is an experience that challenges all individuals, even if it changes in proportion to the losses experienced. Especially for elderly individuals with high vulnerability and fragility in natural disasters, coping methods for holding on to life and getting used to the new may vary individually and socially. In a cross-sectional descriptive study on PTSD and coping strategies, it was found that individuals with PTSD affected by the earthquake had significantly higher scores of religious coping, passive coping, self-distraction coping and substance use coping, while those without PTSD had significantly higher scores of active coping (Adhikari Baral & KC., 2019). In addition, studies have also shown that they resort to religious coping methods such as praying, worshiping, believing in the help of the creator, and doing charity work as coping strategies (Adhikari Baral & KC., 2019); Ali et al.,2012; Hollifield,2008; Feder et al.,2013). In a similar result, it was determined that 76% of individuals used religious coping methods during the 1999 Kocaeli and Düzce earthquakes (Kula, 2002). In another study, emphasizing the importance of cultural context in the recovery process after disasters in Myanmar and Taiwan, it was concluded that disaster victims with strong social networks and a good social life were more resilient (James & Paton,2015). In a study conducted after the Italian earthquake, it was determined that increasing age did not have a linear relationship with coping scores, but acceptance affected coping mechanisms, especially religious coping and behavioral distancing increased with age (Cofini et al., 2015).

### 4. Conclusion and Recommendations

This review study aimed to provide strategies for the protection, promotion and rehabilitation of mental health of older adults by focusing on the effects of natural disasters on older adults and the mental health problems and coping methods of forced displacement. As a result, natural disasters cause serious traumas on elderly individuals both physically and emotionally. Especially when elderly individuals have to relocate after a disaster, they face physical limitations, social isolation and emotional difficulties brought about by this process. In addition, elderly individuals have a high risk of PTSD and this risk increases with age. It is thought that the evaluation of psychological problems that may arise after natural disasters and holding on to life in the case of elderly individuals will contribute to the literature, especially the studies examining religious coping methods in the spiritual dimension, which enables to see cultural, social and individual differences in a wider range. Considering that elderly individuals are more sensitive to traumatic

experiences and react differently to these experiences, post-disaster support and rehabilitation programs should specifically address the elderly population. In addition, it should not be forgotten that cultural and social factors also play an important role in this process. This study aims to contribute to the development of further research and interventions to help older adults better prepare for the effects of natural disasters.

#### **Ethical Statement**

There is no need to obtain ethics committee permission for this study due to the use of open access sources. However, the study was conducted in accordance with ethical principles.

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### **Presentation Information**

The findings of this study have not been presented at any conference or journal.

### **Conflicts of Interest**

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### **Author Contributions**

The entirety of the writing process of the article belongs to the author.

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