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#### Informing the Public on Disaster Management: Evaluation of the Disaster and Emergency Management Presidency (AFAD) Press Releases

Afet Yönetiminde Kamuoyunun Bilgilendirilmesi: Afet ve Acil Durum Yönetimi Başkanlığı (AFAD) Basın Bültenlerinin Değerlendirilmesi

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**Abstract:** It is aimed to evaluate the data in the press releases published by AFAD in order for the public to reach transparent and accurate information after the Kahramanmaraş-centered earthquakes in Türkiye. AFAD press releases shared with the public between 06.02.2023 and 02.03.2023 formed the data of the study. In the study, evaluations were made on search and rescue, health, shelter, burial and identification, number of injured and deceased. It has been determined that information is provided regularly in the press releases, from the number of search-and-rescue personnel sent to the region, to meeting the shelter needs, from the number of deaths to the number of injured. Based on the findings, it is concluded that the press releases issued by the Disaster and Emergency Management Presidency have a critical importance in informing the public, but there are aspects that can be improved in terms of continuity and inclusiveness.

Keywords: Earthquake, AFAD Press Release, Information Sharing, Public Disclosure

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Öz: Türkiye'de meydana gelen Kahramanmaraş merkezli depremler sonrasında kamuoyunun şeffaf ve doğru bilgiye ulaşması için AFAD tarafından yayımlanan basın bültenlerindeki verilerin değerlendirilmesi amaçlanmaktadır. 06.02.2023 - 02.03.2023 tarihleri arasında kamuoyu ile paylaşılan AFAD basın bültenleri çalışmanın verilerini oluşturmuştur. Çalışmada arama kurtarma, sağlık, barınma, defin ve kimlik tespiti, yaralı ve ölü sayısı ile ilgili değerlendirmeler yapılmıştır. Basın açıklamalarında bölgeye gönderilen arama-kurtarma personeli sayısından barınma ihtiyacının karşılanmasına, ölü sayısından yaralı sayısına kadar bilgilere düzenli olarak yer verildiği belirlenmiştir. Elde edilen bulgulara dayanarak, Afet ve Acil Durum Yönetimi Başkanlığı tarafından yayımlanan basın bültenlerinin kamuoyunu bilgilendirmede kritik öneme sahip olduğu, ancak süreklilik ve kapsayıcılık açısından geliştirilebilecek yönler bulunduğu sonucuna varılmıştır.

Anahtar Kelimeler: Deprem, AFAD Basın Bülteni, Bilgi Paylaşımı, Kamuoyu Bilgilendirmesi

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## 1. Introduction

Disasters cause deaths, injuries, economic and environmental losses by disrupting the functioning of society. Considering the negative effects of disasters on human life and all assets (flora and fauna), it can be considered that the establishment of a comprehensive and sustainable disaster management strategy is one of the world's most pressing needs (Broby et al., 2018; Kreimer, 2010; Toprak Karaman, 2018).

Administratively, a disaster is defined as "A natural, technological or human-induced event that causes physical, economic and social losses for all or certain segments of the society, stops or interrupts normal life and human activities, and where the coping capacity of the affected society is inadequate. Disaster is not an event itself, but its consequences" (AFAD, 2014). On a global scale, each geographical region faces with different types of disasters (Buszta et al., 2023; Suppasri et al., 2024). Disasters can be classified as acute and chronic according to the way they occur (Glade and Alexander, 2013; Caldera and Wirasinghe, 2022). Acute disasters are abrupt events that can be predicted but the exact time and date are not known. Earthquakes, floods, volcanic eruptions and fires are examples of this group. Chronic disasters, on the other hand, are disasters that cause losses over time. Desertification, climate change, deforestation, air pollution and genetic change in species can be given as examples of this group (EM-DAT, 2023). In the 2022 EMDAT World Disasters Report, it was recorded that there were 387 disasters, 30,704 people lost their lives, 185 million people were affected and there was an economic loss of 223.8 billion USD (CRED, 2022). According to the specified database, in order for an event to be considered a disaster, at least one of the following criteria must be met: at least 10 people must die, at least 100 people must be affected by the event, a state of emergency must be declared, and an international call for help must be fulfilled (EM-DAT, 2023).

Türkiye, where the study was conducted, is a country where natural disasters are frequently experienced (Güner, 2020; Akdemir and Günaydın, 2024). Because Türkiye is located in a region where such events occur frequently due to its location and characteristics. Türkiye is located on the Alpine-Himalayan belt, one of the most significant seismic zones in the world (Pampal and Özmen, 2009). In Türkiye, on February 6, 2023, at 04.17, two earthquakes with a magnitude of 7.7 occurred in Kahramanmaraş / Pazarcık center and at 13.24 on the same date, two earthquakes with a magnitude of 7.6 in the center of Kahramanmaraş / Elbistan (AFAD, 2023a). After the earthquake, thousands of aftershocks occurred, the largest of which was 6.7 magnitude. After the earthquakes, on 07.02.2023, a state of emergency was declared in 10 provinces. On 16.02.2023, the province of Elazig was included in the State of Emergency (AFAD, 2023a).

It is evident that various plans have been developed to respond to disasters of any scale that may occur in Türkiye. The most specific example of this is in the Turkish Disaster Response Plan (TAMP). The roles and responsibilities of all stakeholders who will take part in TAMP, disaster and emergency response studies have been determined. Informing the public in case of a disaster and keeping the communication about the process alive is one of the objectives of TAMP. The duties of the disaster communication group are explained in this plan. The Communication Group is responsible for the coordination of relations with print, visual and digital media elements and ensuring healthy information flow in order to inform the public accurately about disasters and emergencies. It is responsible for realizing information sharing from a reliable, single source and ensuring accurate, effective, fast and coordinated information flow to the public regarding disasters and emergencies. It is also responsible for reducing misinformation and misinterpretations in the public opinion, eliminating chaos and panic, and calming the public through onsite and timely press releases regarding the problems that may arise from disasters and emergencies (TAMP, 2022: 49).

In the same plan, the stages and levels of intervention are explained in detail. After the Kahramanmaraş earthquake, the intervention level was announced as Level 4, as specified in the TAMP framework (AFAD, 2023b). In the event of a level 4 decision, all national capacity is involved in the response and international assistance is called for (TAMP, 2022: 19). With the definition of the earthquake as level 4 by the Minister of Interior of the Republic of Türkiye, an international call for help was made (AFAD, 2023c).

The aim of this study is to evaluate the data in the press releases created by AFAD within the framework of TAMP in order to ensure that the public has access to transparent and accurate information after the Kahramanmaraş-centered earthquakes in Türkiye. In this context, after the earthquakes in Türkiye on February 6, 2023, the answer to the question of which data were primarily included in AFAD press releases and how these data and the information series contributed to disaster management was sought.

### 2. Materials and Methods

## 2.1. Sample of the Study

Since it was aimed to evaluate the data in the press releases created by AFAD after the Kahramanmaraşcentered earthquakes in Türkiye within the framework of TAMP, AFAD press releases were created regarding the earthquake as the population and sample. A total of 37 press releases were issued by AFAD on the Earthquake in Kahramanmaraş-Pazarcık. No sample selection was made, and all press releases were included in the study.

## 2.2. Data Collection and Analysis

AFAD press releases (37) shared with the public between the dates of 06.02.2023 and 02.03.2023 constituted the data of the study. The data of the study was obtained from the publicly accessible address <u>https://www.afad.gov.tr/duyurular</u>. On February 6, the first day of the earthquake, 8 press releases were published. On February 7, 4 press releases were published. In the following days, the daily publication rate gradually decreased. The last press release was published on 02.03.2023.

Press releases were evaluated in detail by researchers. In order to prevent data loss, press releases were analyzed bidirectionally by the researchers. Then, the numerical data obtained were processed into the Microsoft Excel program, tables were created and the findings were evaluated. In the analysis of 37 press releases, "document analysis" and "content analysis" were preferred among the qualitative research methods. Document analysis is a qualitative research method used to systematically analyze documents and evaluate their content (Wach and Ward, 2013; Kıral, 2020). Content analysis is a qualitative research technique that supports the scope of inferences by determining the desired information of opposing sections in an objective and systematic manner (Olgun, 2008).

In this context, the research questions are:

- On what issues has AFAD informed the public since the date it started publishing press releases?
- What issues does AFAD focus on in the information given to the public in press releases?
- Are the topics shared in AFAD press releases different every day or in each press release?

In this context, 37 open access press releases shared with the public were evaluated. Press releases were exported to Microsoft Word. The resulting Microsoft Word files were transferred to the licensed MAXQDA 2020 program for content analysis. Codings were made within this framework. Codes created categories, categories created themes. As a result of the analysis, five themes; It was created as search-rescue, injured-death numbers, health presentation, identification-burial and shelter services. In evaluating the numerical data in the press release, tables were created by the authors using Microsoft Excel.

## 2.3. Validity and Reliability

The data used in this research were collected from official sources related to the subject. The accuracy and reliability of the data were evaluated by considering the quality of the sources and data collection methods. Therefore, the validity and reliability of the obtained results can be considered high.

## 2.4. Limitations of the Research

It is limited to the data contained in the AFAD press release shared with the public. In this context, the number of personnel (national and international) involved in search and rescue efforts, the number of dead and injured, and the number of tents directed and set up for shelter services were examined from the shared

data. According to the Türkiye Disaster Response Plan, all working groups are involved in earthquake disasters, as determined by the event type and disaster working groups. As there is no information in the press release for all working groups, the evaluations are limited.

# 2.5. Ethical Dimension of the Study

Since the data used in the study were publicly available, did not contain personal information, and did not constitute the data set to be evaluated within the scope of the law on privacy and personal data protection, the permission of the ethics committee was not required.

## 3. Results

In the press release published by AFAD, data on response activities carried out in case of disaster were shared with the public. These data include the number of personnel, the number of dead and injured, the number of tents and other materials set up for shelter services. These data provide crucial information in terms of disaster management and development of response strategies. In this context, four service groups, namely search and rescue, health, identification-burial and shelter services, were analysed by inference from the information in the press releases within the scope of TAMP.

# 3.1. Findings on Search and Rescue Services

The most needed service from the first moment in disasters is to carry out search and rescue operations and to rescue the people who are left in the wreckage. In this context, it is essential to carry out search and rescue operations in disasters in an efficient manner. In the Disaster Response Plan of Türkiye, the Disaster Search and Rescue Group has duties and responsibilities in many areas such as reconnaissance, logistics, search and rescue, and coordination with other relevant stakeholders (AFAD, 2023d). While the tasks specified in the plan are coordinated by AFAD, which is the principal solution partner of the Disaster Search and Rescue Group, other ministries, institutions, Non-Governmental Organizations (NGOs) and the private sector also carry out their activities as solution partners. The data showing the number of national and international search and rescue personnel and field personnel created according to the statements in the press release of AFAD are given in Graph 1.



Graphic 1: Number of Search and Rescue and Field Personnel

Source: Created by the authors using AFAD press releases.

According to the end-of-day report dated 06.02.2023, the number of search and rescue personnel assigned to the region was 9698, while the number of personnel consisting of AFAD Volunteers and Support Teams was 9876. As of 08.02.2023, the number of personnel working in the field was 98.153. As of 01.03.2023, a total of 6.368 search and rescue personnel were on duty. Since no press release was published on 12.02.2023, 15.02.2023, 17.02.2023, 18.02.2023, 20.02.2023, 22.02.2023, 23.02.2023, 25.02.2023, 26.02.2023, 27.02.2023, 28.02.2023, the number of national and international search and rescue personnel could not be examined (AFAD, 2023d). In the press release published on the 11<sup>th</sup> day of the earthquake, the number of international search and rescue personnel was at its highest level with 11,488 people. However, no information on international search and rescue personnel was shared in the press releases issued on the following days.

The number of personnel involved in the conduct of search and rescue operations in the earthquake area has been evaluated. In this context, it has been observed that the number of search and rescue personnel has increased gradually since the first day of the earthquake. Moreover, it is seen that the number of search and rescue teams from the countries that responded to the international call has increased gradually since the 3<sup>rd</sup> day of the earthquake. As of the 10th day of the earthquake, it is seen that the number of search and rescue personnel has decreased. Therefore, it can be stated that, following the earthquake, search and rescue operations proceeded with great vigor for the first few days, but were gradually supplanted by damage assessment and recovery efforts. This demonstrates that the emergency rescue operations have concluded, the damaged areas have been identified, and the repair and reconstruction processes have been initiated.

## 3.2. Findings Regarding the Number of Injured and Death

It is seen that the data on the number of injured and dead in the press release are shared with the public on a daily basis in line with the information received from the Health Disaster Coordination Center (SAKOM). (Graph 2).



#### Graph 2: Number of Injured and Death

Source: Created by the authors using AFAD press releases

It was determined that a total of 1.651 people lost their lives on 06.02.2023, 11.119 people were injured, and 45.089 people lost their lives on 01.03.2023. No press release was published on 12.03.2023, 15.02.2023, 17.02.2023, 18.02.2023, 20.02.2023, 23.02.2023, 25.02.2023, 26.02.2023, 27.02.2023, 28.02.2023 (AFAD, 2023d). It was seen that the highest number of deaths per day was reported in the press releases on 13.02.2023.

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Considering the direct effects and consequences of the earthquake, the loss of life and injuries caused by physical destruction are unquestionably the worst outcomes. From the first moment of the earthquake, besides the support of the search and rescue personnel, it is evident that the people got out of the collapsed buildings or damaged structures by their own means. The people who are under the collapsed and damaged structures are being pulled out of the rubble by their relatives and the public. When the data are examined, it is seen that the number of injured and the number of casualties have increased since the first moment of the earthquake.

## 3.3. Findings on Health Presentation

According to the Türkiye Disaster Response Plan, the main solution partner of the Disaster Health Service Group is the Ministry of Health. In this context, the Ministry of Health is responsible for the coordination of the first medical response at the scene of disasters and emergencies, meeting the needs of public health and medical care, and ensuring that environmental health services return to normal as quickly as possible. It is known that the Disaster Health Service Group has duties and responsibilities in many areas such as preparation of mobile hospitals, personnel support, logistics, triage, injured evacuation and treatment, combating epidemics, determining the official number of casualties, water sanitation, which will be carried out together with other stakeholders (TAMP, 2022). In this context, when the health service group was evaluated, it was shared with the public that health teams were assigned to the earthquake region from the very first moment. Simultaneously, field hospitals were set up in suitable locations of the earthquake zone and treatment of the injured began. Nearly every debris area in the earthquake area had ambulance teams assigned to them. Referral and transfer procedures were made to hospitals in various provinces based on the condition of the injured patients who receive emergency care in the field hospitals established in the region or in the hospitals that continue to serve. These referrals are made via land, air, and sea, as observed. A large number of ground ambulances, air ambulances, and health helicopters were assigned to the dispatch process, it was determined. The public was informed of the precautions taken and shared information about epidemic maladies in the earthquake area. According to the AFAD's press release, the formal number of injured has been reported. In addition, it was stated that the call center line numbered 184 could be used to find out the whereabouts of the injured people, and the necessary information could be accessed through the e-nabiz system of the first-degree relatives of the injured people (AFAD, 2023d).

## 3.4. Findings Regarding Burial and Identification Services

According to the Türkiye Disaster Response Plan, the primary solution partner of the Disaster Identification and Burial Group is the Republic of Türkiye Ministry of Environment, Urbanization and Climate Change. In this framework, the Republic of Türkiye Ministry of Environment, Urbanization and Climate Change is responsible for the coordination of the burial of the deceased in disasters and emergencies. It has been seen that the Disaster Identification and Burial Group has duties and responsibilities in many areas such as identifying the deceased, transmitting death reports to the necessary units, ensuring the protection of the corpses, and taking the necessary measures to identify the deceased, which will be carried out in collaboration with other stakeholders (TAMP, 2022). In this context, when identification and burial services are evaluated, direct identification studies could not be carried out effectively because the earthquake affected a very large area and the number of deaths increased day by day. Those who were removed from the wreckage as deceased were handed over directly to their relatives if they were identified by their relatives. Those who were unable to be identified were detained in designated areas. Burial locations were determined in the earthquake zone and mass burial procedures were carried out. Studies on taking Deoxyribose Nucleic Acid (DNA) samples and making relevant matches are also continuing. Funeral vehicles, shrouds and funeral bags were especially needed in burial procedures. Due to the problems in the supply of these materials, the bodies were buried with blankets, covers, etc. The official death toll was announced by AFAD in press releases (AFAD, 2023d).

## 3.5. Evaluation of Findings Regarding Shelter Services

Shelter is one of the essential services that must be provided to disaster victims in order to ensure their survival. Shelter services require the necessary planning and organization to be made in order to meet the shelter needs of the disaster victims by providing safe areas to reside. In this process, appropriate shelter solutions are rapidly determined and implemented, taking into consideration climate, geographical characteristics and the type of disaster in the disaster area. In this way, the lives of the disaster victims are saved and the first step is taken towards restoring them to routine life (AFAD, 2023d).





According to the press release published on 06.02.2023, a total of 300,000 blankets, 21,996 AFAD family living tents, 26,659 beds, 47,176 pillow sheets, 1,605 kitchen sets, 2,761 heaters and 4,452 stove heads for heating were sent to the region. According to the press release published on 01.03.2023, 358,037 tents have been set up. Tent cities have been established at 332 points in 11 provinces. Container city installations continue in 10 provinces and 162 points. In the disaster area and outside the disaster area; 1,915,687 people were provided with shelter in tents, containers, dormitories, hotels, public guesthouses and other facilities. It has been evaluated that many press releases contain satisfactory information in terms of shelter services (AFAD, 2023d).

According to the Türkiye Disaster Response Plan, the primary solution partner of the Disaster Shelter Service Group is AFAD. In this framework, the AFAD is responsible for the coordination of emergency and temporary shelter services of the disaster victims in the disaster area. It is seen that the Disaster Shelter Service Group has many duties and responsibilities such as providing shelter services to the working groups and Non-Governmental Organizations (NGOs) in the disaster area, particularly the victims. In this context, when the shelter services are evaluated, it is stated in TAMP that especially the teams assigned to the region should prepare their equipment to be sufficient for a "minimum of 72 hours" (TAMP, 2022).

These needs include shelter, food, and personal hygiene products. It is seen that tents and containers were sent to earthquake zones by different solution partners for the emergency shelter needs of disaster victims. However, considering the extent of the earthquake area and the number of people affected, it was also reflected to the public that the need for tents could not be fully met. On the other hand, it is seen that the aid for shelter services is included in the press releases specific to 10 provinces. It has been evaluated that

Source: Created by the authors using AFAD press releases

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the shortage of tents for the urgent need of shelter in the region continues. On the other hand, it has been observed that the need for shelter for people who have been evacuated from the region has been tried to be solved with public institutions and organizations. It has been evaluated that many public and private sectors carry out studies for the need for shelter. In this context, it was observed that the dormitories of the Republic of Türkiye Ministry of Youth and Sports were allocated to earthquake victims. In short, many stakeholders have organized various campaigns for the solution of the need for shelter and the needs have been tried to be met.

When AFAD data were examined, it was reported that tents were sent to earthquake region as of 06.02.2023. While the number of tents sent to the region is increasing day by day, the number of tents set up has increased as well. However, it is seen that there are differences between the number of tents shipped and the number of tents set up. For example, on the 11<sup>th</sup> day of the earthquake, 386,874 tents were delivered, of which 172,265 were set up. As of 13.02.2023, it is seen that the Republic of Türkiye Ministry of National Defence as well as international countries and organizations have been added to the institutions and organizations that have sent aid for shelter. As of 14.02.2023, it is seen that the containers started to be sent to the region. It was stated that the containers were set up in the region on 21.02.2023. As of 01.03.2023, it was emphasized for the first time that tent cities were established at 332 points in 11 provinces. It has been stated that the installation of containers continues in 10 provinces and at 162 points. As well as the number of people evacuated from the disaster area is increasing, the people who reach living areas meet their shelter needs by the dormitories of the Republic of Türkiye Ministry of Youth and Sports, hotels, public guests, the facilities of the Republic of Türkiye Ministry of National Education and various campaigns (AFAD, 2023c).

In the 4<sup>th</sup> press release of AFAD (06.02.2023), situational assessment information regarding the Disaster Energy Group, Disaster Correspondence Group, Disaster Agriculture, Forestry, Food, Water and Livestock Group, Disaster Search and Rescue Group, Disaster Shelter Group, Disaster Nutrition Group, Disaster Psychosocial Support Group, and Disaster Transportation Infrastructure Group has been given. It is seen that briefings regarding the emergency working groups and pre-recovery working groups have been made. In the 5th press release, in addition to this groups, information was given about the Disaster Communication group, which is affiliated with the information and planning service. In the 12th Press Release (07.02.2023), information was given on the Disaster Shelter Group, the Disaster Nutrition Group, the Disaster Psychosocial Support Group and the Disaster Communication on the Disaster Shelter Group, the Disaster Shelter Shelter Group, the Disaster Shelter Group, the Disaster Shelter Shelter Group and the Disaster Shelter Group. From the 13th Press Release (08.02.2023) to the 36th Press Release (01.03.2023), it is seen that information on the Disaster Shelter Group, the Disaster Nutrition Group and the Disaster Psychosocial Support Group were made (AFAD, 2023d).

## 4. Discussion

As of 6 February, the number of personnel in charge of carrying out search and rescue activities in the earthquake region was shared with the public. Although the number of both national and international search and rescue personnel was shared in the press release, the information on how many personnel were employed in which province was not shared. When the data is examined, the number of personnel increased from the 3<sup>rd</sup> day of the earthquake, but the number of search and rescue personnel decreased from the 10<sup>th</sup> day of the earthquake. In a study, it was stated that at the end of the first day of the Marmara earthquake (1999), approximately 15,000 military personnel, 90 professional search and rescue personnel, 40 of whom were Search and Rescue Association (AKUT) members, and 148 miners were working in the earthquake region. On the second day, it was stated that health teams (880 Ministry of Health personnel and 113 ambulances) and 20 international search and rescue teams (with search and rescue dogs and equipment) consisting of approximately 700 people started working in the earthquake region. In the research, it was determined that the coordination was partially achieved and the search and rescue, health and aid teams started to work effectively on the second day (Genç, 2013). In the study of Gök et al. it was

stated that after the Aşkale earthquakes (2004), 90 people and 10 vehicles started search and rescue activities, and on the other hand, military units also participated in search and rescue activities (Gök et al., 2011). In the Izmir earthquake (2020), it was seen that social media was effective in supporting the search and rescue efforts and providing information flow. It was evaluated that as of November 2, the search and rescue activities continued in the wreckage and as of November 3, the last person was removed from the wreckage, and the search and rescue activities were terminated as of November 4<sup>th</sup> (Mavi, 2020). It has been determined that the search and rescue efforts in the Izmir earthquake were presented to the public with all their clarity and reality, but ethically problematic news content and sharing of the search and rescue and aid activities on both social media and national media organizations were determined (Usta and Yükseler, 2021). In this context, it can be said that the sharing of search and rescue activities to the public through AFAD plays an important role in preventing information pollution, ensuring social trust and the effectiveness of crisis communication. In the press release shared with the public in the Elazığ earthquake (2020), it was reported that a total of 418 search and rescue personnel were assigned to the region (As of January 24, 23.00, 2<sup>nd</sup> Press Release) (AFAD, 2020). In the shared press releases, it was seen that the number of search and rescue personnel increased day by day. It has been shared with the public that the search and rescue activities have been completed as of January 28, 2020 (AFAD 24. Press Release, 2023) (AFAD, 2023d). In his research, Usta (2021) determined that in his evaluations of search and rescue activities in Van and Elazig provinces, it was taken late in the first place and the teams were insufficient. On the other hand, the researcher evaluated that most of the participants stated that "the teams were sufficient and support teams from the surrounding provinces came to the field" (Usta, 2021). In the same study, it was determined that the search and rescue activities in the Marmara earthquake were insufficient in terms of personnel and team numbers. In due diligence assessments were made as to the extent of the impact area and the damage, taking late action/lack of team and unpreparedness (Usta, 2021). Gündüz (2022) stated in her research that search and rescue activities (Marmara, Van, Bingöl, Elazığ earthquakes) were carried out by spontaneous volunteers with the available resources from the first moment (Gündüz, 2022). In the data sharing to public regarding the Van earthquake, AFAD sent 903 search and rescue personnel, 9 search dogs, 192 construction equipment and vehicles in the first 6 hours, 2,522 search and rescue personnel, 12 search dogs, 384 construction equipment and vehicles in the first 24 hours, and a total of 5,267 search and rescue personnel, 34 search dogs, 732 heavy equipment and vehicles (AFAD, n.d.). It is observed that the number of personnel and equipment sent to the earthquake zone is gradually increasing. The data shared by AFAD supports other research. In the study by Usta et al. it was stated that the number of professional search and rescue personnel was insufficient and that most of the participants in search and rescue operations were spontaneous volunteers (Usta et al., 2023). Ibiş and Kesgin (2014) emphasized the development of search and rescue services after the earthquakes (Ibiş and Kesgin, 2014: 231).

The need for shelter is important for every individual. It is a necessity to meet the need for temporary and permanent shelter, in a manner befitting human dignity. When the AFAD data were examined, it was determined that the necessary materials for shelter services (family life tent, container, blanket, bed, pillow, sheet, kitchen set, heater, tube cap for heating) were sent to the region. At the same time, efforts have been made to provide shelter services for earthquake survivors who were evacuated from the region. This has been facilitated through the utilization of public dormitories, hotels, public guests, public facilities, nongovernmental organizations and municipalities. It was also observed that the tents and containers shipped to the region could not be set up immediately. It can be said that temporary accommodation conditions should be improved especially for earthquake survivors in the disaster area. During the Izmir earthquake, problems related to the preference of accommodation areas, accessibility of sheltering areas, and the supply of toilets, bathrooms, water, and electricity in the sheltering areas, especially for people with disabilities, were discussed. It has been stated that the accommodation areas should be created in a structure that is accessible to each individual, facilitating their vital activities, and does not contain secondary risks (Aslan and Şahinöz, 2023). In the research of Çınar et al. (2018) it is mentioned that the accommodation areas should comply with national and international standards. In this context, according to the AFAD Directive on the Establishment, Management and Operation of Temporary Accommodation Centers, it is considered a necessity to create temporary accommodation areas in accordance with the site selection, accommodation center, capacity and infrastructure standards (AFAD, 2015). The literature emphasizes the importance of

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tent cities in meeting the need for shelter after disasters (Arslan, 2007; Özdemir, 2011). In disasters, relief tents not only meet the temporary shelter needs of people but are also considered important in initiating their medical and rehabilitation processes (Bashawri et al., 2014). Considering this aspect of the subject, other alternative accommodation conditions should be created both for the maintenance of social life and for the fulfillment of a physiological need in a manner befitting human dignity. In the research of Şengül and Turan (2012), it was determined that after the Van earthquake, there were difficulties in tent organization related to temporary shelter areas, late arrival of tents to the earthquake area, security problems and uncertainties of the needy. In the same study, it was observed that cold weather conditions negatively affected the life in the tent. It has also been evaluated that researches on the death of individuals in tent fires (especially children, individuals with chronic diseases and the elderly) who are not resistant to living in tent conditions. Ekşi (2016) emphasized environmental risks, malnutrition and inadequate hygiene conditions in temporary accommodation areas. Considering this aspect, it is necessary to accept the fact that many parameters are evaluated together in the organization of the shelter aid sent to the region. On the other hand, sharing all risks and measures to be taken with the public can play an important role in ensuring public order.

When the direct effects of the earthquake are examined, the most negative result is undoubtedly mass casualties and injuries. When the AFAD data are examined, the number of casualties and injuries shared from the first moment has increased gradually. Although it is important to provide first aid and emergency medical care after the earthquake, the work of health professionals and health volunteers in the region was reflected to the public. Due to the wideness and size of the earthquake's impact area, it is seen that all relevant people are in the earthquake zone in meeting the increasing need in health services. Health services should be evaluated in terms of both human resources and equipment/material needs. There are many applications such as field hospitals established with national and international support for the increasing need for health services after the earthquake, the creation of a referral chain with helicopter and airplane ambulances to meet the advanced care needs of the patients, and the land ambulances taking part in the field 24/7. On the other hand, it is seen that there were services such as warning the public against the risk of epidemic and reaching the information of the injured people with 184 call centers. In the study of Dursun et al. (2012), it was determined that after the Van earthquake, there was an increase in hospital admissions, triage and registration problems, insufficient intervention areas in the hospital, communication problems and difficulties in patient transfer (in the first 24-48 hours). In the study of Kurt et al. (2001), it was emphasized that the most important problem in health services in the Marmara earthquake was the organizational problem experienced in the earthquake area, within the hospital and between hospitals. It can be said that the Marmara earthquake, which took place in our recent history and caused the death of 17,480 people and the injury of 43,953 people is a milestone that includes pioneering approaches in the preparation of health services for disasters (Eyler et al., 2022). Health infrastructure has a critical importance in minimizing the negative effects of disasters (Avila et al., 2021). In the study conducted by Torpuş and Bostan (2022), it was mentioned that the health team was numerically sufficient and there was no need for medical equipment after a flood event (Torpuş and Bostan, 2022). In the days after the earthquake, WHO sent mobile health teams to the region for the affected population and strengthened the equipment structure to combat the epidemic (WHO, 2024). Orak et al. stated in their study that intensive efforts were initiated to meet the health care, medicine, sanitation and other needs of earthquake victims (Orak et al., 2023). The resilience of the health system is important in order to minimize the negative effects of disasters.

It is seen that the earthquake affected a very large area and the death tool increased day by day. If the deceased were found by their relatives, they were handed over directly to their relatives. Persons who could not be identified were kept in designated areas. Burial places were determined in the earthquake zone and mass burials were carried out. Studies on taking DNA samples and making related matches are still being carried out. The official death toll was announced by AFAD in press releases. In his research,

Usta (2021) determined that the identification of the people who lost their lives was done primarily with their family relatives and acquaintances. Again, in identification and burial services, evaluations were made regarding DNA analysis, funeral services, loss/uncertainty, preservation of bodies, mass graves and residence information. Işık (2007), stated in his research that the identification staff should be activated in case of a disaster, which should be established in the first reflex or in case of existing disaster victim identification teams should work in coordination. In the study conducted by Kuloğlu (2023), it was seen that the importance of the disaster victim tracking system in identification in disasters was emphasized (Kuloğlu, 2023). In the study by Ibrion et al. (2015). it is stated that the identification of people who died in disasters was carried out by surviving family members or relatives and some identification was done in hospitals (Ibrion et al., 2015). Many studies in the literature have emphasized the importance of DNA, anthropological and odontological records in the identification of disasters, it is important that the deceased are properly and safely identified.

#### 5. Conclusion and Recommendation

This study examined the press releases published by AFAD and evaluated the information provided in these releases in terms of quantity, quality, and timing. The findings indicated that while certain data were consistently presented in the announcements, interruptions were observed in the availability of other information. Consistency and continuity in sharing releases and data with the public are crucial in combating disinformation. It is believed that this consistency and continuity also play a significant role in increasing trust in institutions. Based on the findings, it was concluded that the currently published announcements are of critical importance in informing the public, but there are aspects that could be improved in terms of continuity and inclusivity.

The results of the research suggest that similar studies can evaluate the information sharing strategies of other disaster management organizations. For example, by employing a similar method, the information sharing practices of disaster management organizations in other countries can be examined. These studies can contribute to a broader understanding of improving information sharing in disaster management.

#### 6. Declarations

Conflict of interest There are no known conflicts of interest associated with the conduct and reporting of this study.

Contribution rates of authors: F. G. (%30); E. A. (%25); R. A. (%25); G. U. (%20).

Since the data used in the study were publicly available, did not contain personal information, and did not constitute the data set to be evaluated within the scope of the law on privacy and personal data protection, the permission of the ethics committee was not required.

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Conceiving the Study: Author-1 (%30), Author-2 (%20), Author-3 (%20), Author-4 (%30)

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