

THE IMPORTANCE OF 112 EMERGENCY CALL CENTRES IN THE 'DISASTER OF THE CENTURY': THE CASE OF OSMANİYE

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Abstract

Collecting the National Emergency Call Numbers in a single number and knowing this as '112' has enabled timely intervention to many emergencies that occur in our country. After its establishment, the worldwide virus epidemic and the undesirable returns of this epidemic increased the awareness of the 112 Emergency Call Centre (112 ECC). Likewise, the earthquake disaster that occurred in February 2023 and called the "disaster of the century" once again revealed the necessity of the 112 ECC. In this study, after the earthquake, which is called the disaster of the century, the increase in the workload of the call responders working in the 112 ECC Directorate and the necessity of Call Centres were evaluated. The impact of the disaster, which affected ten provinces of our country, on the city of Osmaniye and the performance of the Osmaniye 112 ECC Directorate form the basis of this study. After the disaster, the number of calls for help to all aid units increased considerably. This total increase in the number of calls determines the workload of the callers. In the event of a natural disaster, in addition to all the above-mentioned aid units, it becomes clear that 112 ECCs should exist in order to ensure coordination. For this reason, it is necessary to improve the personal and financial rights of the personnel working in this public institution, which takes great responsibility compared to all aid units, and to increase the attractiveness of this institution for those who want to take part in the public sector.

Keywords: 112 Emergency Call Centres, Disaster of the Century, Earthquake.

Jel Codes: L32, L38, O32, O33, O36, O38.

ASRIN FELAKETİNDE 112 ACİL ÇAĞRI MERKEZİNİN ÖNEMİ: OSMANİYE ÖRNEĞİ

Özet

Ulusal Acil Çağrı Numaralarının tek numarada toplanması ve bunun '112' olarak bilinmesi, ülkemizde meydana gelen birçok acil duruma zamanında müdahale edilebilmesine imkan sağlamıştır. Kurulduktan sonra dünya çapında yaşanan virüs salgını ve bu salgının istenmeyen getirileri 112 Acil Çağrı Merkezi (112 AÇM)'nin bilinirliğini artırdı. Aynı şekilde 2023 yılı Şubat ayında meydana gelen ve "Asrın Felaketi" olarak adlandırılan deprem felaketi, 112 AÇM'nin gerekliliğini bir kez daha ortaya koydu. Bu çalışmada asrın felaketi olarak adlandırılan deprem sonrasında 112 AÇM Müdürlüğü'nde görev yapan çağrı karşılama memurlarının iş yükünün artması ve Çağrı Merkezlerinin gerekliliği değerlendirilmiştir. Ülkemizin on ilini etkisi altına alan afetin Osmaniye kentine etkisi ve Osmaniye 112 AÇM Müdürlüğü'nün performansı bu çalışmanın temelini oluşturmaktadır. Yaşanan afetin ardından tüm

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yardım birimlerine yapılan yardım çağrılarının sayısı oldukça artmıştır. Çağrı sayısındaki bu toplam artış, çağrı karşılama memurlarının iş yükünü belirlemektedir. Doğal afet durumunda, yukarıda belirtilen tüm yardım birimlerine ek olarak koordinasyonu sağlamak için 112 AÇM'lerin var olması gerektiği ortaya çıkmaktadır. Bu nedenle tüm yardım birimlerine göre büyük sorumluluk alan bu kamu kurumunda çalışan personelin özlük ve mali haklarının iyileştirilmesi ve kamuda görev almak isteyenler için bu kurumun cazibesinin artırılması gerekmektedir.

Anahtar Kelimeler: 112 Acil Çağrı Merkezi, Asrın felaketi, Deprem.

Jel Kodları: L32, L38, O32, O33, O36, O38.

1. INTRODUCTION

The sustainability of emergency services offered to communities depends on the effective use of technological innovations (Kaya & Öcal, 2023, p.15; Memiş & Babaoğlu, 2020, p.777). The innovations of the age depend on the use of new technology in public services and the ability of the public sector to follow it. In order to continue their activities by following the developing technology and using information-based resources without interruption, they need to have a network infrastructure where they can continuously produce new information. This network structure ensures the correct routing of resources. Although it provides transportation and emergency assistance in the fastest way, interruptions may occur in regions due to time and location-based differences. The most important way to prevent these disruptions is to provide services in cooperation with stakeholder institutions or organizations (Aydamak, 2021, p.15-18).

The advanced network structure of information technologies can eliminate the obstacles that may arise in the common network. Integrating the services offered by 112 Emergency Call Centres leads to the emergence of a virtual structuring by enabling stakeholder institutions or organizations to integrate with each other in a common network system and provide coordinated services over the internet, mobile communication, and telephone (Eksi & Torlak, 2011, p.149-154).

Due to the increase in population, the increase in calls requiring emergency help in cases such as epidemics and natural disasters makes it necessary to gather emergency aid under a common roof in our country as well as all over the world (Caro, 2016, p.30; Çelik, Atak Çobanoğlu, & Görün, 2022, p.1471). Evaluation of all kinds of emergency calls over the common channel and providing rapid feedback paves the way for the fastest and coordinated action of different types of service providers. Depending on the development of technology, the search for new technologies, virtual management and security systems has begun so that the virtual organization can be used for the benefit of society (Mocanu et al., 2022, p.5-11; Mysirlaki & Paraskeva, 2020, p.551; Çakmak, 2016, p.35-39).

There are many emergency numbers in Turkey such as Police (155), Gendarmerie (156), Coast Guard (158), Fire Warning (110), Emergency Health Services (112), Forest Fire Warning (177) and AFAD (122) (İçişleri Bakanlığı, 2023a). In order to eliminate the confusion in the need for emergency aid and to reach the emergency aid faster, the number '112' was chosen on a country basis and all emergency aids were gathered under a single number. In our country, with the 112 Emergency Call Centre project carried out by the Ministry of Interior, it is aimed to reach the scene as soon as possible (İçişleri Bakanlığı, 2023b).

Within the scope of this project, the personnel to be employed in the 112 Emergency Call Centre are required to have process management skills, panic and anxiety, psychological relief for those who need help, understanding all necessary information about the event as soon as possible, and having the experience and training to obtain location-based address and contact

information. In addition, it is expected that the call answering personnel will be able to provide all necessary information to the stakeholder institution personnel working together in the same environment and thus reach the area where the incident took place as soon as possible. Thanks to this project, the number of false notifications was reduced by filtering and turned into a more efficient system.

The establishment of 112 Emergency Call Centres is based on some laws, regulations, and decrees. The establishment was realized with the regulation published in the Official Gazette dated 16.05.2014 and numbered 29002, in which the "working procedures and principles of the 112 emergency call centre directorates and the staff working" were determined (ReGa, 2023a). With the support of the Provincial Administration Law No. 5442(Mevzuat.gov.tr, 2023) and the Information Technologies and Communications Authority; For calls made to 112 Emergency Call Centres, in order to reach the callers, it has been arranged to establish an access system within the determined procedures and principles to the telephone subscriber and location information needed by the 112 Emergency Call Centres or the relevant governorship, limited to the call time. In addition, with the Decree Law No. 703 (ReGa, 2023b), the Law on Misdemeanors dated March 30, 2005, and numbered 5326 was amended, and an administrative fine of 250 lira was imposed by the governors on those who engage in unfounded notifications to the 112 Emergency Call Centres. In case of repetition, it has been determined that this penalty will be doubled.

The establishment of the 112 Emergency Call Centre was a very difficult process. While the number "112" is used in the European Union countries, the number "911" is used as the Emergency Helpline in the United States. With the Council Decision dated 29 July 1991 and numbered 91/396, it was deemed appropriate to recognize the "112" line as the "European Single Emergency Call Number" in order to bring the member states of the European Union together on a single number. On the other hand, the Telecommunications Board determined a timetable for harmonization with the European Union acquis with the decree dated 11.03.2002 and numbered 2002/103. Accordingly, it has been decided to use the "112" number, which is used for emergency assistance in the field of health, as the "Single Emergency Call Number" on a national basis. Thus, all necessary public institutions and organizations began to be included in this scope under the coordination of the Ministry of Interior (AB, 2023).

Within the scope of harmonization with the European Union, a project specification was signed between the Netherlands and Turkey in 2003. Within the scope of this project, Antalya was designated as a "Pilot Province" on 06 April 2005 for the use of "Single Emergency Call Number" and the project was started (Bahadır, 2020; Biçer & Kızmaz, 2014, p.232).

In the project, 112 Emergency Call Centre building was built between 2005-2020 and its active commissioning was accelerated. In this period, 22 provinces in our country were commissioned with the software prepared by ASELSAN, and 59 provinces with the New Generation 112 software. Later, the old software was updated in the provinces and the new generation 112 software was brought together in a single denominator (İçişleri Bakanlığı, 2023b).

Immediately after the 112 Emergency Call Centre was commissioned in Turkey, there was a virus epidemic that affected the whole world. In order to minimize the effect of this disaster, a curfew was imposed in our country. During the implementation of the bans, he assumed great responsibilities on the 112 Emergency Call Centre and tried to respond to all needs on a local basis. Then there was a big earthquake that affected 10 provinces in our country and many people were seriously affected. After this natural disaster, the 112 Emergency Call Centre continued to serve actively in order to respond to all needs in a coordinated manner.

In this study, the effect of the Kahramanmaraş centred earthquake, which is called the "disaster of the century", on Osmaniye and the effectiveness of the 112 Emergency Call Centre against this event were examined. After the earthquake, the increase in the workload of the call responders working in the 112 Emergency Call Centre Directorate and the necessity of Call Centres were evaluated. All original or non-original calls to all other aid units are selected by the personnel of the 112 Emergency Call Centre and transferred to the relevant units. This institution, which provides continuous service all day (7/24 working basis), reduces the workload of other institutions.

After the disaster, the number of calls for help to the Disaster and Emergency Directorate (AFAD), Health Directorate, Police Department, Gendarmerie and Fire Brigade teams increased considerably. This total increase in the number of calls determines the workload of the callers. In the event of a natural disaster, in addition to all the above-mentioned aid units, it becomes clear that 112 Emergency Call Centres should exist in order to ensure coordination. The task of collecting all emergency calls under one roof and selecting the incoming calls according to the reality increases the responsibility of the 112 Emergency Call Centre (Çelik, Atak Çobanoğlu, & Görün, 2022, p.1471).. For this reason, it is necessary to improve the personal and financial rights of the personnel working in this public institution, which takes great responsibility compared to all aid units, and to increase the attractiveness of this institution for those who want to take part in the public sector.

2. MATERIAL AND METHOD

The effect of the great earthquake that occurred on February 06, 2023 on the workload of the 112 Emergency Call Centre and its increase scale were examined. According to TUIK data, the general population of Osmaniye city is 559,405 people (TÜİK, 2023). Regardless of age distribution, almost all of this population has the potential to call 112. Within the scope of the study, the call density and call type were evaluated in the period starting from the earthquake to June 2023 in the city of Osmaniye. By looking at the types of calls that came to the call centre since the earthquake, the effect of the most demanded one on the call centre business was discussed. Among the stakeholder institutions in the call centre, the Disaster and Emergencies Directorate, the Police Department, the Gendarmerie Command and the Health Directorate determined the most requested call density and call types within the specified time period; the effect of the increase in the workload on the employees was examined. The data used were obtained through the new generation software with the permission of Osmaniye 112 Emergency Call Centre Directorate.

3. RESULTS AND DISCUSSION

When the distribution of actual calls and false calls in Osmaniye emergency call centre between January and May in 2023 is analysed, the decrease in the actual call rate in February, when the earthquake occurred, is striking. The reason for this is the indecision of people about where and from whom to seek help after the earthquake occurred on the night of February 06. In addition, there is a time period lost in order to solve the systemic problems experienced by the 112-emergency call centre. Looking at the data in **Table 1** and the graph in **Figure 1**, it is seen that the highest number of false calls were received in February, when the earthquake occurred. The basis for this is to receive more than one similar call for the same subject and to allow these calls to be included in the duplicate calls without creating a case record. For example, numerous calls are received from the same area for a destroyed building in a neighbourhood. These calls are accepted as the original call and no case record is created. Those who make such calls are informed by using the phrase "record has been created on the subject". Similar situations to February are observed in March, when the earthquake's debris removal

and relocation of earthquake victims to safe areas gained momentum. While the number of duplicate records increased the false call rate, making calls for similar issues resulted in a low actual call rate. In April and May, due to the decrease in the effects of the earthquake, a balance started to occur in the ratio of false and original calls.

Table 1. Proportional distribution of actual or hoax calls between January and May 2023.

| January-May 2023 Call Rate Distribution | | |
|---|------------------|----------------|
| | Actual Call Rate | Hoax Call Rate |
| January | 32.34 | 67.66 |
| February | 22.68 | 77.32 |
| March | 23.97 | 76.03 |
| April | 29.99 | 70.01 |
| May | 30.63 | 69.37 |
| Average Value | 27.15% | 72.85% |

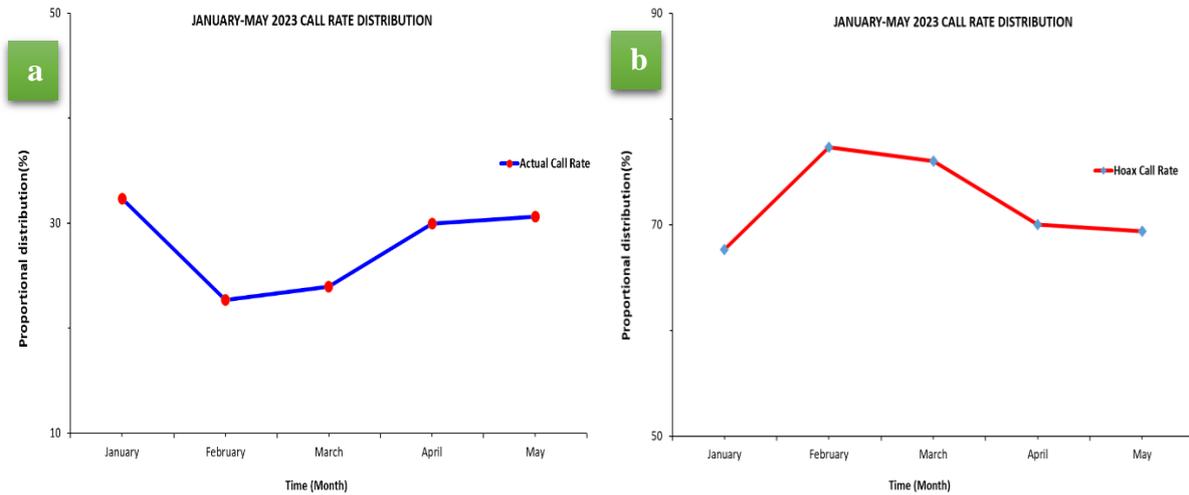
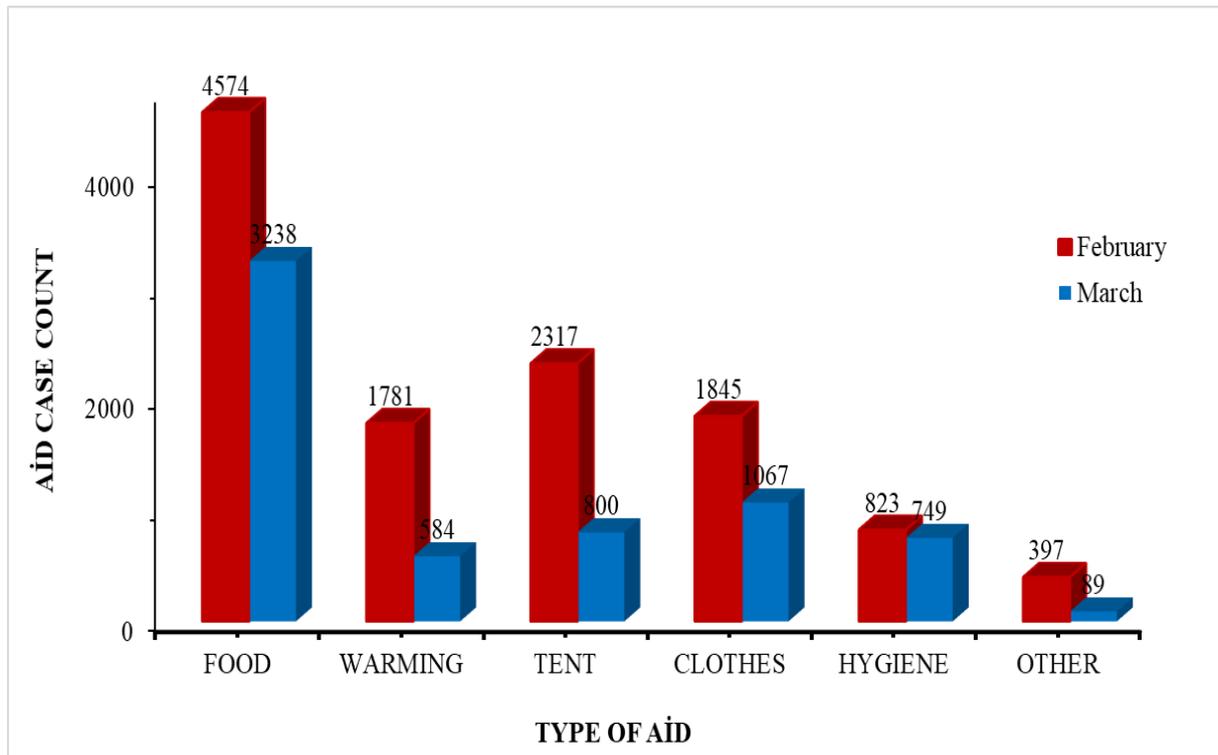


Figure 1. Proportional distribution of a) actual or b) hoax calls between January and May 2023.

From the moment of the earthquake, the biggest workload was left to the Disaster and Emergency Situations Directorate (AFAD). When calls started to come to the 112 Emergency Call Centre regarding the consequences of the earthquake, the call response personnel directed the call to AFAD as soon as possible. AFAD department started to provide uninterrupted service by establishing a crisis centre to provide all kinds of support to earthquake victims. Due to the intensity of the calls coming to the call centre, they directed all calls directly to the AFAD department instead of creating a case record. When Table 2 and Figure 2 are examined, it is seen that food, clothing, tents, warming, and hygiene aids are provided to the earthquake survivors. According to the table, in February, when the earthquake occurred, tents and food aid were the most, while heating demands were quite high due to the winter conditions. On the other hand, the decrease in aid in March shows that the aid reached most earthquake victims. There are many lost records, unregistered and repeated calls because of the earthquake. After the earthquake in February, urgent renovation works yielded results and a more organized working environment was established in March.

Table 2. Distribution of the type and count of aid provided to earthquake survivors by AFAD crisis centre in February and March.

| | Food | Warming | Tent | Clothes | Hygiene | Other | Total Aid Count |
|-----------------|-------------|-------------|-------------|-------------|-------------|------------|-----------------|
| February | 4574 | 1781 | 2317 | 1845 | 823 | 397 | 11737 |
| March | 3238 | 584 | 800 | 1067 | 749 | 89 | 6527 |
| Total | 7812 | 2365 | 3117 | 2912 | 1572 | 486 | 18264 |

**Figure 2.** Distribution of the type and count of aid provided to earthquake survivors by AFAD crisis centre in February and March.

When Table 3 and figure 3 are examined, it is seen that AFAD department concentrates on a few types of calls between January and June. A helping hand was extended to every citizen who was damaged by the earthquake during this period, and food aid was given to the majority. It is seen that the number of "other aids" in the table is quite high. In cases where the demands of earthquake survivors could not be determined exactly, more than one type of assistance was provided, and this type of support was recorded under the title of "other".

Table 3. Disaster and emergency directorate- incident type report between 01 January 2023 - 06 June 2023

| Event type | Case count |
|----------------|------------|
| Other | 3772 |
| Food Demand | 7943 |
| Housing Demand | 49 |
| Car Accident | 7 |
| Flood | 6 |
| Collapse | 5 |
| Hoax Call | 4 |

| | |
|----------------------------------|--------------|
| Damage Assessment Request | 4 |
| Stuck | 4 |
| Consultation/Information request | 3 |
| Clothing demand | 2 |
| Landslide | 2 |
| Fire | 2 |
| Rock fall | 1 |
| Loss | 1 |
| Repeated Events | 1 |
| Work accident | 1 |
| Warming | 2365 |
| Tent demand | 3117 |
| Clothing demand | 2912 |
| Hygiene | 1572 |
| Total | 21773 |

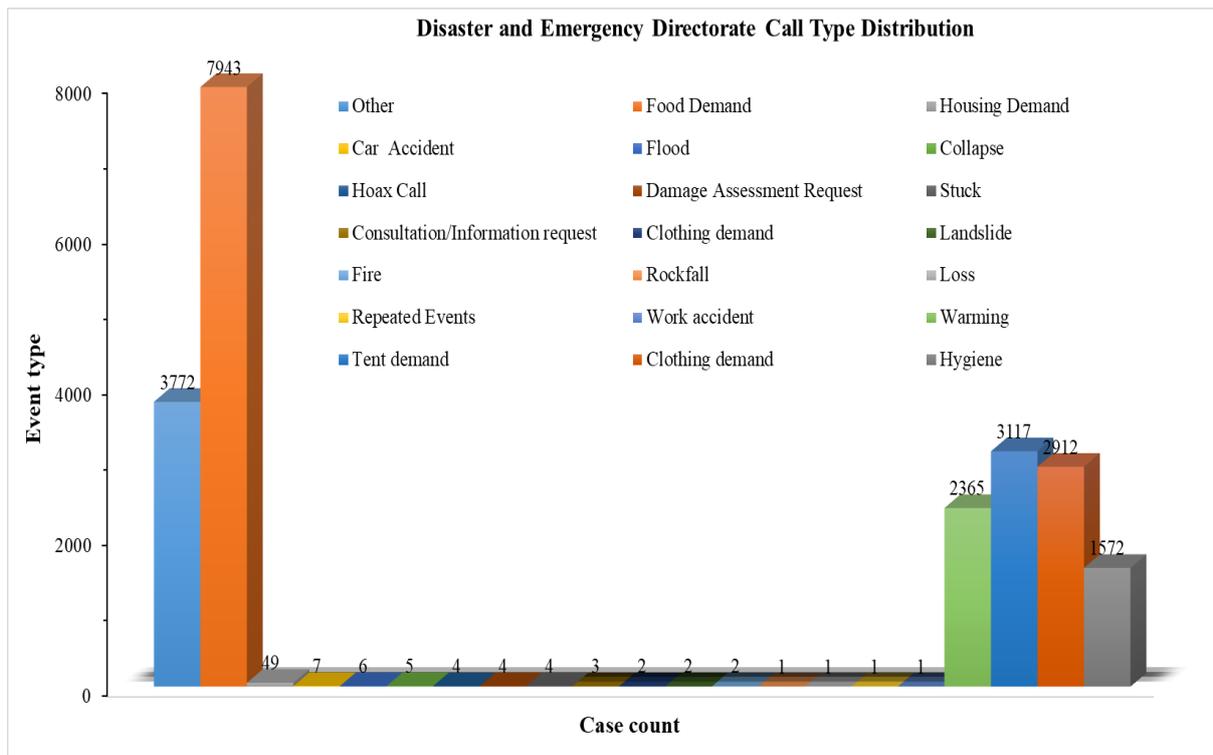


Figure 3. Disaster and emergency directorate- incident type report between 01 January 2023 - 06 June 2023.

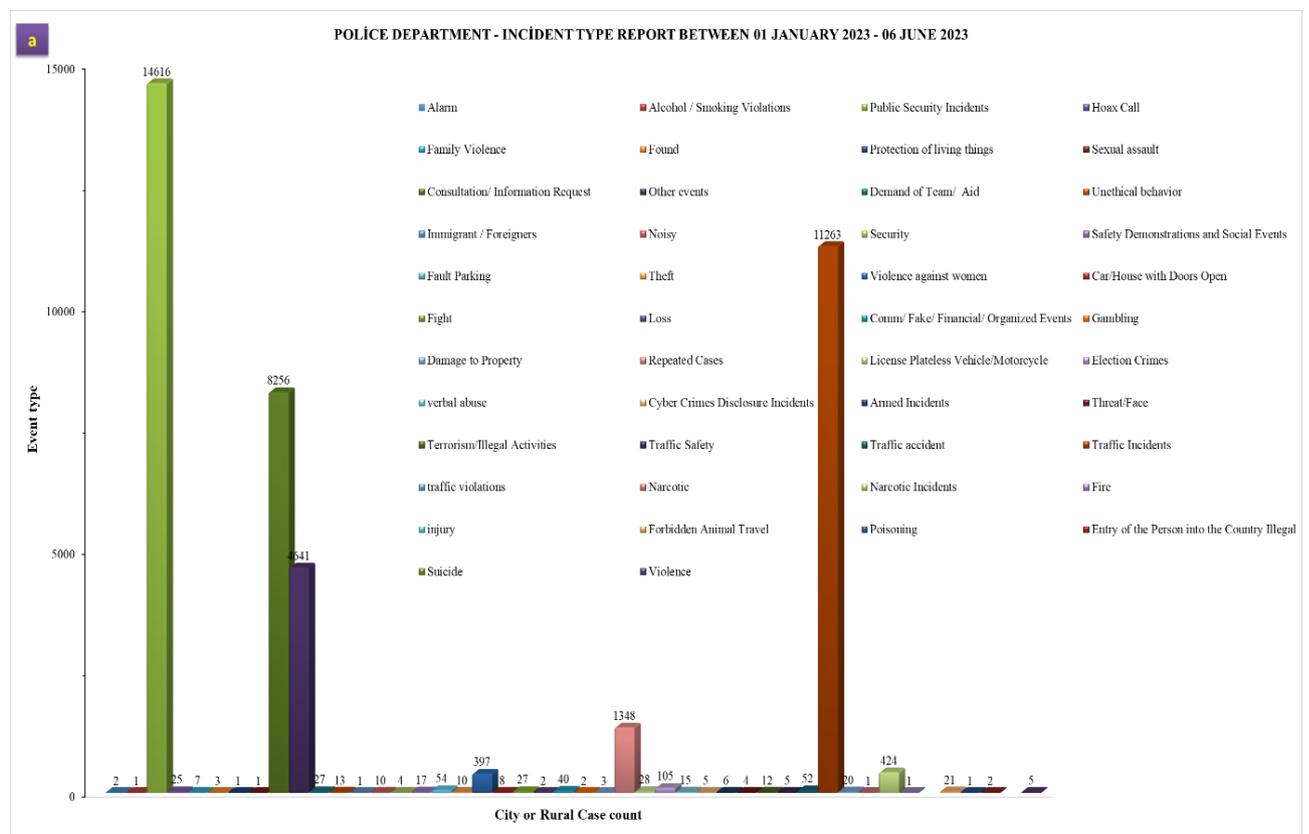
One of the departments with increased workload in the cities where the earthquake occurred is the police department. They provided general security and theft events that may occur in buildings damaged by the earthquake. After the earthquake victims were provided with shelter by the AFAD crisis centre, many police officers were assigned to ensure security and peace in the communal living areas. The 112 Emergency Call Centre received the highest number of calls for the security department under the heading of security, information, and traffic incidents.

Table 4. Police department - incident type report between 01 January 2023 - 06 June 2023.

| Event type | City or Rural Case Count | City Case Count | Rural Case Count | Total Case Count |
|---|--------------------------|-----------------|------------------|------------------|
| Alarm | 2 | | | 2 |
| Alcohol / Smoking Violations | 1 | | | 1 |
| Public Security Incidents | 14616 | 551 | 18 | 15185 |
| Hoax Call | 25 | 2 | 1 | 28 |
| Family Violence | 7 | | | 7 |
| Found | 3 | | | 3 |
| Protection of living things | 1 | | | 1 |
| Sexual assault | 1 | | | 1 |
| Consultation/ Information demand | 8256 | 90 | 39 | 8385 |
| Other events | 4641 | 328 | 16 | 4985 |
| Demand of Team/ Aid | 27 | 3 | | 30 |
| Unethical behaviour | 13 | | | 13 |
| Immigrant / Foreigners | 1 | | | 1 |
| Noisy | 10 | | | 10 |
| Security | 4 | | | 4 |
| Safety Demonstrations and Social Events | 17 | 1 | | 18 |
| Fault Parking | 54 | | | 54 |
| Theft | 10 | | | 10 |
| Violence against women | 397 | 13 | | 410 |
| Car/House with Doors Open | 8 | | | 8 |
| Fight | 27 | 1 | | 28 |
| Loss | 2 | | | 2 |
| Comm/ Fake/ Financial/ Organized Events | 40 | | | 40 |
| Gambling | 2 | | | 2 |
| Damage to Property | 3 | | | 3 |
| Repeated Cases | 1348 | 67 | 6 | 1421 |
| License Plateless Vehicle/Motorcycle | 28 | | | 28 |
| Election Crimes | 105 | | | 105 |
| Verbal abuse | 15 | | | 15 |
| Cyber Crimes Disclosure Incidents | 5 | | | 5 |
| Armed Incidents | 6 | | | 6 |
| Threat/Face | 4 | | | 4 |
| Terrorism/Illegal Activities | 12 | | | 12 |
| Traffic Safety | 5 | | | 5 |
| Traffic accident | 52 | 15 | 4 | 71 |
| Traffic Incidents | 11263 | 701 | 116 | 12080 |
| traffic violations | 20 | | | 20 |
| Narcotic | 1 | | | 1 |
| Narcotic Incidents | 424 | 1 | | 425 |
| Fire | 1 | | | 1 |

| | | | | |
|---|--------------|-------------|------------|--------------|
| Injury | | 1 | | 1 |
| Forbidden Animal Travel | 21 | | | 21 |
| Poisoning | 1 | | | 1 |
| Entry of the Person into the Country Illegal | 2 | | | 2 |
| Suicide | | 1 | | 1 |
| Violence | 5 | 2 | | 7 |
| Total | 41486 | 1777 | 200 | 43463 |

The calls evaluated by the security department were recorded under three headings. These are City Rural and City/Rural. When **Table 4** is examined, it is seen that the call density is under the title of City or Rural. The reason for this is that the earthquake survivor is located outside the areas they know after the earthquake, and they cannot convey the spatial information fully while describing their demands.



which includes the calls from the city centre, is examined, it is seen that the highest demand is for traffic accidents. According to Figure 4(c), which includes calls from rural areas, it is seen that the highest number of calls are recorded for traffic events, while incoming calls for informational purposes are also high.

The gendarmerie department, which provides the security and peace of the rural area, started to show a superior performance due to the increase in the workload in the region with the occurrence of the earthquake. They took part in the distribution and installation of tents for earthquake survivors in the countryside and in the centre. When **Table 5** and **Figure 5** are examined, the requests for information and consultation are the highest among the calls received by the gendarmerie department. This is followed by the number of calls related to public order incidents.

Table 5. Gendarmerie command - incident type report between 01 January 2023- 06 June 2023.

| Event type | Case Count |
|--|------------|
| Offenses against the Passport Law | 5 |
| Using Explosives | 0 |
| Election Crimes | 5 |
| Armed Assault | 0 |
| Other Events to Follow | 321 |
| Threats/Insults | 3 |
| Other Crimes Against Society | 23 |
| Terrorist Acts Appearing to be Social Events | 1 |
| Traffic Safety | 1 |
| Traffic accidents | 1 |
| Drug Use | 1 |
| Drugs | 1 |
| Drug manufacturing | 1 |
| Injury | 1 |
| Illegal Entry (For Foreigners) | 1 |
| Illegal Exit (For Foreigners) | 1 |
| Spoil | 1 |
| Looting | 17 |
| Roadblock | 5 |
| Environmental Crimes | 1 |
| Offenses Against the Environment | 109 |
| Notification to Relevant Institution/Organization | 20 |
| Human Trafficking | 2 |
| Objection to Petroleum Market Law No. 5015 | 3 |
| Objection to the Liquefied Petroleum Gas (Lpg) Market Law No. 5307 | 1 |
| Kidnapping | 1 |
| Offenses Against the Courthouse | 1 |
| Public Security Incidents | 919 |
| Hoax call | 2 |
| Offenses Against Family Order | 156 |
| family violence | 3 |
| Cybercrimes | 3 |
| Offenses Against Sexual Immunity | 5 |
| Consultation/ Information Request | 1097 |
| Fraud | 2 |
| Natural disasters | 31 |
| Misdemeanors with Direct Administrative Sanctions | 169 |
| Wedding Complaints | 1 |
| Offenses in Other Laws | 1 |

| | |
|---|-------------|
| Other events | 36 |
| Team/aid demand | 1 |
| Offenses Against Public Morality | 10 |
| General Dangerous Offenses | 455 |
| Migrant smuggling | 3 |
| Noisy | 2 |
| Offenses Against Life and Body Immunity | 382 |
| Theft | 147 |
| Committed Crimes Against Freedom and Dignity | 261 |
| Offenses Against Public Trust | 1 |
| Offenses Against the Credibility and Functioning of the Public Administration | 4 |
| Fight | 1 |
| Accidents | 233 |
| Opposition to Anti-Smuggling Law | 2 |
| Opposition to the Law of Culture and Nature | 6 |
| Other Offenses Against Persons | 4 |
| Don't Take A Person From Their Freedom | 2 |
| Offenses Against Assets | 5 |
| Property damage | 173 |
| Other Offenses Against Property | 142 |
| Offenses Committed by the Officer | 1 |
| Repeated Case | 302 |
| Misdemeanors Implemented Administrative Sanctions by the Civil Chief | 48 |
| Total | 5137 |

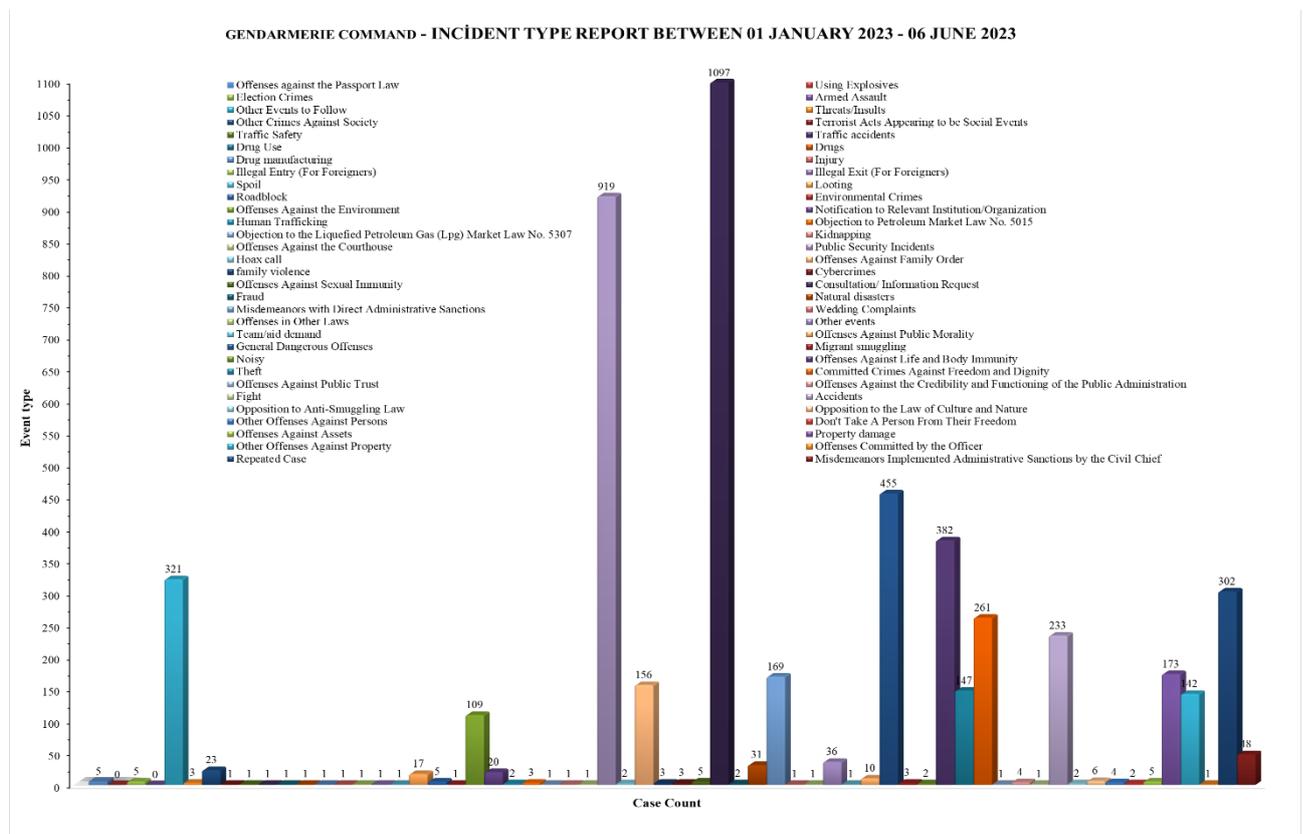


Figure 5. Gendarmerie command- incident type report between 01January 2023-06 June 2023.

The number of rescue incidents increased as well as the fire incidents caused by the devastating effect of the earthquake. Another institution whose workload increased in the earthquake was the fire department. They excelled in the task of removing the wounded and dead from the rubble and rescuing people from heavily damaged high-rise buildings. When we look at the call types and numbers between January and June, we can see that the fire department lists the call types under three different headings. These are City or Rural Case count, City Case count and Rural Case count. The fire department provided support to earthquake victims in rural and city centres on different issues. When Table 6 and Figure 6 are examined, obtaining information from the types of calls coming to the fire brigade department is in the first place, while the number of calls related to the fire event is in the second place. The number of calls related to the incidents of being stuck in the debris at the time of the earthquake is also quite high. According to the table and graphic information, it could not be determined whether most of the calls to the fire department were urban or rural. Since it is aimed to arrive at the scene of the incident as soon as possible after receiving the call, it is seen that not much detail has been given in keeping the records.

Table 6. Fire department - incident type report between 01 January 2023 - 06 June 2023.

| Event type | City or Rural Case count | City Case count | Rural Case count | Total Case count |
|---------------------------------------|--------------------------|-----------------|------------------|------------------|
| Vehicle Towing | 1 | | | 1 |
| Origin call | 25 | | 1 | 26 |
| Tree felling | 7 | | | 7 |
| Consultation/ Information Request | 755 | 15 | 10 | 780 |
| Support/Action Request | 39 | 1 | | 40 |
| Natural disasters | 413 | 23 | | 436 |
| Gas leak | 2 | | | 2 |
| Mission Cancellation | 247 | 11 | 12 | 270 |
| Getting Stuck in the Pit | 486 | 22 | 2 | 510 |
| Patient Transport (Bedridden / Obese) | 4 | | | 4 |
| Animal rescue | 197 | | | 197 |
| Sewage | 1 | | | 1 |
| Door Opening | 32 | 9 | 1 | 42 |
| Recovery | 30 | 3 | | 33 |
| don't get stranded | 148 | 9 | 2 | 159 |
| Repeated Case | 482 | 39 | 3 | 524 |
| Scheduled Mission | 168 | 7 | 2 | 177 |
| Jamming | 1 | 1 | 1 | 3 |
| Congested Traffic Accident | 8 | 19 | 31 | 58 |
| Flooding | 50 | | | 50 |
| Falling into the Irrigation Canal | 1 | | | 1 |
| Danger Supply | 39 | 1 | 1 | 41 |
| Traffic accident | 7 | 6 | 8 | 21 |
| Fire | 555 | 18 | 2 | 575 |
| Ring Cutting | 1 | | | 1 |
| Roof/Sign Fly | 25 | | | 25 |
| suicide attempt | 7 | 14 | | 21 |
| Total | 3731 | 198 | 76 | 4005 |

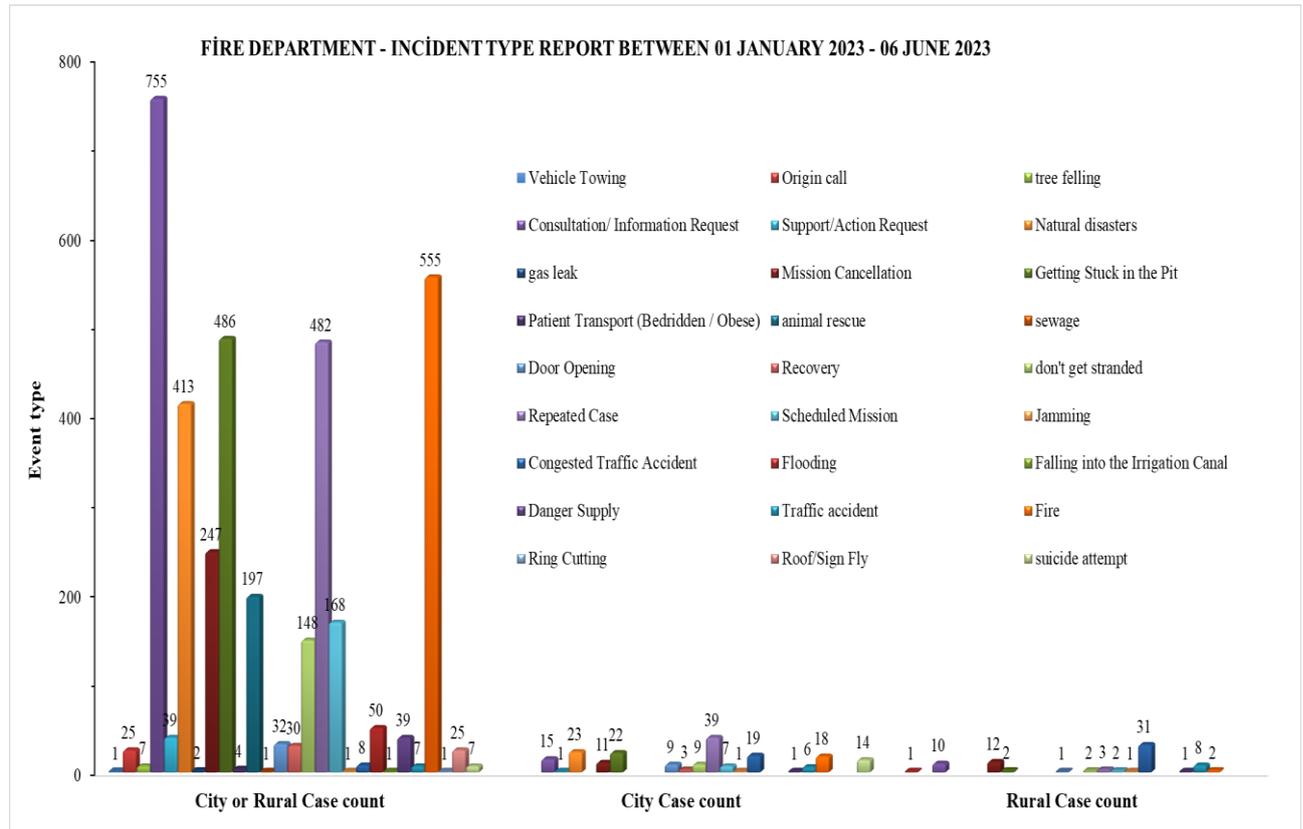


Figure 6. Fire department- incident type report between 01 January 2023- 06 June 2023.

The health directorate, which did not slowdown in service before and after the earthquake, showed superior performance in order to intervene in the dead and injured due to the effect of the earthquake. Health-related calls to the 112 emergency call centre were recorded under three different headings, rural, city centre and rural/urban fish. When **Table 7** and **Figure 7** are examined, according to the call for help data from rural areas, the highest demand was for health issues, while the highest number of calls was for health assistance and patient transport requests in the city centre. The workload of the health directorate, which has a high workload in normal times, has increased even more due to the earthquake. As can be seen in the table and figure, emergency medical intervention from the calls received from the city centre, traffic accidents with injuries, patient transfer to other cities, and various injuries are the types that increase the call density. In addition, in the period between January and June, it is seen that suicide cases are quite high compared to a small-scale city. This situation can be attributed to post-earthquake traumas, psychological wear, and material and moral collapse. Apart from these, as seen in the Table, it is seen that the most striking of the calls that are not known to be rural or city centre are the calls for information or consultation.

Table 7. Health department- incident type report between 01 January 2023- 06 June 2023.

| Event type | Rural Case Count | City Case Count | City or Rural Case Count | Total Case Count |
|-----------------------------------|------------------|-----------------|--------------------------|------------------|
| Hoax Call | | 1 | 6 | 7 |
| Consultation/ Information Request | 22 | 212 | 2382 | 2616 |
| Other | 43 | 209 | 1 | 253 |
| Other Accidents | 232 | 1449 | 9 | 1690 |
| Medical | 2220 | 9529 | 15 | 11764 |
| Repeated Case | 12 | 169 | 1260 | 1441 |

| | | | | |
|---------------------------|-------------|--------------|-------------|--------------|
| Transport | 173 | 1945 | 9 | 2127 |
| Protocol | | 4 | | 4 |
| Health Precautions | 26 | 93 | | 119 |
| Traffic accident | 287 | 812 | 3 | 1102 |
| Fire | 3 | 19 | | 22 |
| Injury | 42 | 345 | 1 | 388 |
| Suicide | 14 | 104 | | 118 |
| Work accident | 14 | 52 | | 66 |
| Total | 3088 | 14943 | 3686 | 21717 |

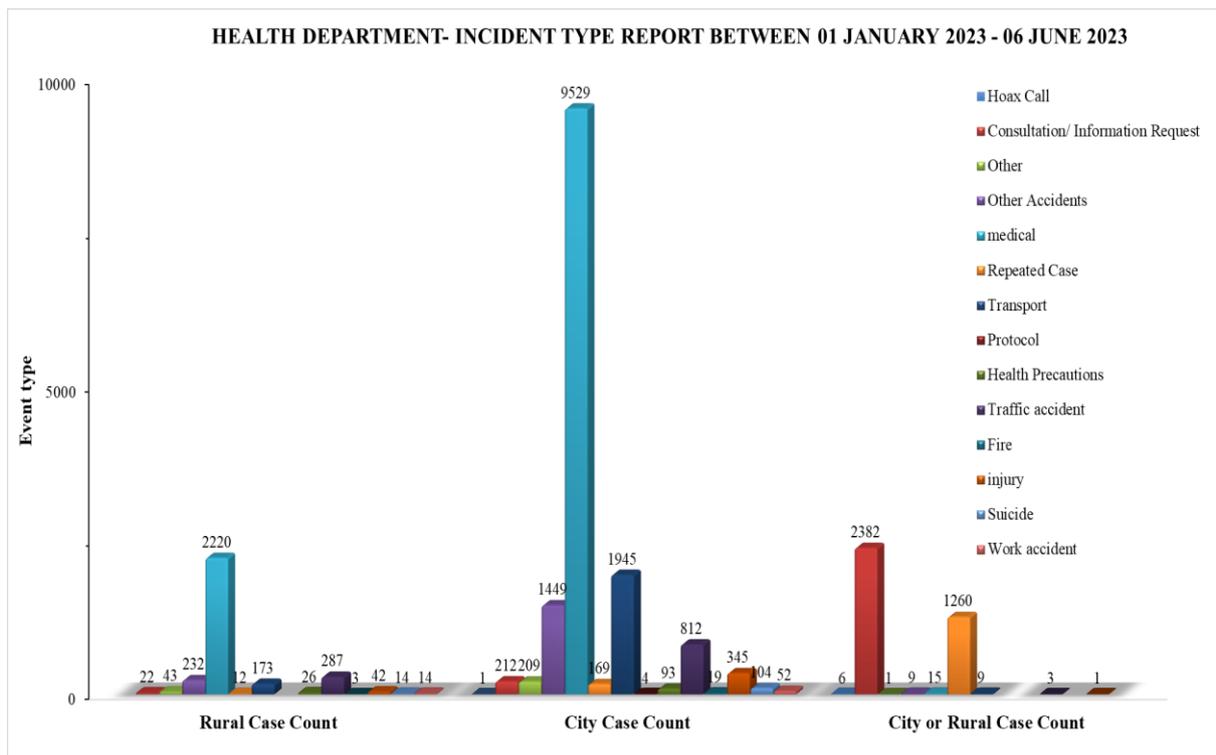


Figure 7. Health department- incident type report between 01 January 2023- 06 June 2023.

5. CONCLUSION AND SUGGESTION

The resulting 112 Emergency Call Centres caused the confusion between the short numbers defined for emergency assistance to disappear. He does not hide the information that the citizen should call when he is under the influence of the event and which institution or monster needs urgent intervention from him. When he made any decision, he learned that he had either contacted the wrong agency or learned that he had to intervene at some other stage. The pressure and fear, confusion and difficulties that arise from the bad conditions he is in also prevent him from thinking comfortably by addressing his decision-making ability. It was ensured that all emergency aid teams were structured under a single roof, eliminating this confusion and instead establishing a system that makes decisions by thinking faster.

While our country is trying to cope with some disasters, 112 has been started to be used actively as the odd number at the same time. While these disasters put the country in trouble, it indirectly increased the recognition of 112. The case of the virus caused the disappearance of the different odd numbers, which are the habits of the society, and they quickly adapted to the odd number 112. When the effects of the virus case were on the verge of disappearing, there was a devastating earthquake, known as the "disaster of the century". With the disaster, People

started to call 112 for almost any subject. This call density sometimes exceeded the capacity of the institution. For every citizen who called 112 but could not reach, a call back was made by the relevant personnel and their request was recorded. The increase in the workload caused the personnel in the 112 Emergency Call Centre to wear out more. All incoming calls for the service provided by AFAD, Health department, Police department, Gendarmerie department and Fire Brigade departments were received by 112 Emergency Call Centre personnel, filtered and transferred to the relevant department.

The total workload of all stakeholders during the earthquake actually determines the workload of the call answering personnel. This fact is proof that those who perform this task are more worn out than any other official. Continuous exposure of 112 Emergency Call Centre personnel to the same tone may cause permanent hearing and ear health loss. Therefore, constantly listening to negativities and quickly evaluating and directing them can cause them to wear out psychologically. Constantly confronting these negativities may cause this mood to be reflected in their family and social lives. In order to prevent these permanent damages that 112 Emergency Call Centre employees are exposed to; hearing test and ear health should be applied in certain periods. In addition, sessions with expert psychologists should be done regularly and psychological wear should be minimized. Personnel should always maintain a similar sitting position throughout their duties. This can cause orthopaedic posture disorders over time. In order to prevent this, the personnel should be examined by an orthopaedic specialist at regular intervals. In order to prevent physical deterioration, the personnel should be given the habit of sports. For this, institutions must have comprehensive gyms. The physical and mental health of the personnel should be monitored periodically by the institution due to the difficulty of the job and the effect of this work on the physical and mental health. In addition, the attractiveness of the institution should be increased for those who work in 112 Emergency Call Centres and those who want to work. For this, the financial and personal rights of the personnel should be improved and rewarded at certain times.

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