polish sociological review 4(232)'25
ISSN 1231 – 1413
DOI:10.26412/psr232.05

AHMET YASUNTIMUR
İnönü University

ERSAN ERSOY
İnönü University

VEHBI BAYHAN
Bandırma Onyedi Eylül University

HATICE BIRGÜL CUMURCU
İnönü University

MARIA STOJKOW
AGH University of Science and Technology

AHMET ÇETINTAŞ
Malatya Turgut Özal University

ALEYNA YÜKSEL
İnönü University

The Misuse of Prescription Drugs after the 2023 Earthquake in Türkiye: Insights from Pharmacy Workers

Abstract: The misuse of prescription drugs among individuals with substance use disorder (SUD) is a growing public health concern, particularly after disasters. However, there is limited research on the experiences of pharmacy workers in such contexts. This qualitative phenomenological study explored the post-earthquake experiences of 30 pharmacy workers (19 male, 11 female) regarding prescription drug misuse by individuals with SUD. Data was collected via semi-structured interviews and analyzed thematically. Six themes emerged: the impact of the 2023 earthquake in Türkiye; misused medications and user characteristics; methods of identifying individuals with SUD; strategies to combat misuse; violence and security concerns; and Ministry of Health regulations. Pharmacy workers pointed to an increased misuse of prescription drugs after the earthquake, with young adults (18–30) being a key risk group. It is recommended that such medications be dispensed only through hospital pharmacies, under strict control, to reduce misuse and enhance staff safety.

Keywords: addiction, prescription drugs, pharmacy, earthquake, synthetic pharmaceuticals

Introduction

In recent years, the misuse of synthetic pharmaceuticals has significantly increased (Chan et al. 2023). While 12,607,432 units of synthetic drugs were seized across Türkiye in 2022, this number increased to 28,870,284 units in 2023, representing a 129% rise in the number of seized units (Emniyet Genel Müdürlüğü Narkotik Suçlarla Mücadele Başkanlığı 2023, 2024). This rapid rise clearly indicates that the misuse of prescription medications has become an increasingly serious public health threat. Synthetic drugs are often used in an off-label manner to induce a sense of well-being, enhance alertness, or suppress physical discomfort, and they carry the risk of addiction (Bayhan & Yasuntimur 2024a; Substance Abuse and Mental Health Services Administration 2017). The easy accessibility of these substances facilitates their misuse by individuals from various age and social groups. The literature points to several concerning patterns, including suicide attempts among elderly

individuals (Ford et al. 2018), misuse tendencies among people with disabilities (West et al. 2015), and university students turning to these substances due to anxiety over their academic performance (Arria et al. 2017; Fadhel 2022). Furthermore, motivations such as weight loss, the need to work longer hours with less sleep, or the desire for a general sense of well-being also contribute to the misuse of such substances (Bennett & Holloway 2017). However, the inclination of individuals to use these drugs is shaped not only by personal factors but also by environmental factors such as social surroundings, stress levels, and traumatic experiences (Evoy et al. 2017; Hägg et al. 2020; Servais et al. 2023).

At this point, it is important to note that the misuse of pharmaceuticals should not be examined merely as an individual health issue but within the broader perspective of the sociology of pharmaceuticals, which analyzes how medicines acquire social meaning and become embedded in everyday life (Williams et al. 2008). Similarly, substance use is closely linked to wider social structures and drug policies that influence legality, control, and access (Stevens 2011). From this perspective, the misuse of prescription drugs emerges as a medical, social, and political phenomenon rather than a purely clinical problem.

In addition, disaster sociology highlights that natural disasters not only damage physical and social infrastructures but also transform patterns of vulnerability, coping, and deviant behaviors, including substance use (Fischer 2003). Thus, the sociology of pharmaceuticals, drug policy research, and disaster sociology together provide a more robust conceptual framework for analyzing prescription drug misuse, especially in post-disaster contexts.

After large-scale traumas such as natural disasters, individuals experience heightened psychological vulnerability, reduced coping abilities, and an increased risk of turning to psychoactive substances (Alexander & Ward 2018; Çıtak & Dadandı 2024). Factors such as post-traumatic stress disorder (PTSD), depression, perceived uncertainty, and loss of social support can lead individuals toward drug use (Amiri et al. 2022; Basedow et al. 2020; Coşkunol, 2023). Indeed, significant increases have been observed in the use of substances such as tobacco, alcohol, and cannabis following disasters (Amiri et al. 2022; Robinson et al. 2009). However, research based on the observations of pharmacy workers regarding the misuse of prescription drugs remains quite limited.

Pharmacy workers are key health professionals who interact directly with substance users and have the opportunity to closely observe their attitudes, behaviors, and demands. In this regard, pharmacists are not only part of the process of dispensing medication but also serve as frontline observers of addiction-related trends (Fatani et al. 2019; Mikhael et al. 2024; Murphy et al. 2016; Tommasello 2004). Nevertheless, existing studies mostly focus on the experiences of individuals with substance use disorders (Nalbantoğlu & Tuncay 2023; Sevin & Erbay 2019), while the testimonies of pharmacy workers have not been sufficiently and scientifically explored. The consequence is a significant gap in the literature, especially regarding the period after a disaster.

The earthquakes that struck southeastern Türkiye on February 6, 2023 are commonly referred to in the country as the “disaster of the century.” They resulted in massive destruction across eleven provinces, with over 50,000 lives lost and hundreds of thousands of people left homeless (AFAD 2023; Anadolu Agency 2023). This catastrophe not only caused enormous human and material losses but also reshaped the region’s social fabric,

economic dynamics, and mental health landscape (Bayhan & Yasuntimur 2024b). From the perspective of disaster sociology, such events increase psychiatric morbidity (e.g., PTSD, depression, anxiety) and create fertile ground for the misuse of psychoactive substances (İspir et al. 2023; Tunçel 2023).

In this context, the present study seeks to explore the experiences of pharmacy workers in connection with the misuse of prescription drugs in the aftermath of the earthquake.

Method

Research Design

In this study, a qualitative research method was employed to develop an in-depth understanding of the phenomenon under investigation. Qualitative methods, which are known for their exploratory and interpretive nature, were preferred for their usefulness in a holistic examination of the lived experiences of individuals and for revealing patterns that are not easily captured through quantitative methods (Neuman 2012). Accordingly, a phenomenological research design was adopted. This design is particularly well-suited for exploring phenomena that are socially significant and require detailed, experience-based analysis (Patton 2002). The data collection process commenced after receiving ethical approval from the Scientific Research and Publication Ethics Committee of İnönü University (Session Date: 13.11.2024; Session Number: 18; Decision Number: 3).

Study Group

The study group consisted of pharmacy workers in Malatya, Türkiye. The participants were selected using the snowball sampling technique, which is especially effective in studies requiring access to individuals with specific characteristics or experiences (Patton 2002). Initially, individuals who met the inclusion criteria were interviewed, and they were then asked to recommend other potential participants with similar characteristics. Inclusion criteria included having worked in a pharmacy for at least the past three years, being over the age of 18, and voluntarily consenting to participate in the research. All the participants were thoroughly informed about the purpose, scope, and procedures of the study, and they provided written consent by signing a participant information form. To ensure participant anonymity, each individual was assigned a code (e.g., E1, E2, E3).

Among the 30 participants, 19 were male and 11 were female. 26 participants were married, while four were single. The participants' ages ranged from 24 to 64. In terms of education, 14 had a high school degree, 11 held a bachelor's degree, 2 had an associate degree, and 3 had completed secondary education. Their professional experience varied from 3 to 49 years, with an average of approximately 20 years. 13 participants had over 20 years of experience. The study group was thus composed primarily of married individuals with a tertiary education and substantial professional experience.

Table 1

The demographic characteristics of the participants

No	Sex	Age	Marital Status	Education Level	Work Experience (Years)
E1	Male	35	Married	High school degree	10
E2	Male	42	Married	High school degree	25
E3	Male	35	Married	Bachelor's degree	10
E4	Female	37	Married	High school degree	19
E5	Male	33	Married	Bachelor's degree	9
E6	Male	47	Married	High school degree	28
E7	Male	40	Married	High school degree	20
E8	Male	45	Married	High school degree	25
E9	Male	40	Married	High school degree	21
E10	Male	51	Married	High school degree	35
E11	Male	53	Married	High school degree	33
E12	Male	33	Married	Bachelor's degree	7
E13	Male	47	Married	High school degree	30
E14	Male	25	Single	Secondary school degree	9
E15	Male	33	Married	Bachelor's degree	10
E16	Male	33	Married	Bachelor's degree	9
E17	Male	32	Married	Bachelor's degree	6
E18	Female	38	Married	Bachelor's degree	10
E19	Female	24	Single	Associate degree	3
E20	Male	44	Married	Secondary school degree	30
E21	Male	39	Married	High school degree	28
E22	Female	42	Married	Secondary school degree	42
E23	Female	64	Married	Bachelor's degree	36
E24	Female	33	Single	Bachelor's degree	7
E25	Male	60	Married	High school degree	49
E26	Female	37	Married	High School degree	19
E27	Female	50	Married	High School degree	7
E28	Female	25	Single	Associate degree	3
E29	Female	28	Married	Bachelor's degree	5
E30	Female	54	Married	Bachelor's degree	30

Data Collection Tools

Data was collected using a semi-structured interview form. The interview questions were developed based on a comprehensive review of the literature and evaluated by four independent experts in the subject matter and one specialist in measurement and evaluation before being finalized. The interview questions (eight in total) focused on the experiences of pharmacy workers in regard to the demand for, misuse, regulation, and control of prescription drugs, especially in the aftermath of earthquakes. The interviews were conducted in the staff rooms of the pharmacies where the participants were employed. To foster a comfortable interview atmosphere, informal introductory conversations were held before proceeding with the core questions. Where necessary, follow-up and in-depth questions were posed to enrich the discussion. Prior permission was obtained from the participants to audio-record the interviews, and the recording process was conducted entirely on a voluntary basis. The interviews were conducted between December 15, 2024

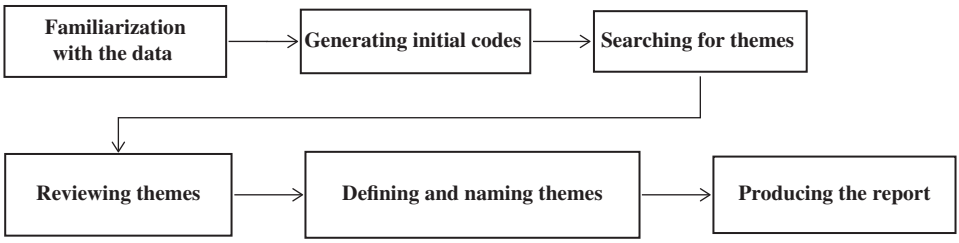
and May 20, 2025, with each session lasting an average of 35 minutes. The data collection concluded when no new information emerged and the existing data was deemed sufficient to answer the research questions.

Data Analysis

The researchers transcribed the audio recordings of the interviews, and the data was then organized into a comprehensive and coherent document suitable for coding. The analysis was conducted using the thematic analysis method described by Braun and Clarke (2006) (see Figure 1).

Figure 1

Stages of thematic analysis



During the analysis process, themes were developed inductively on the basis of the participants' narratives. This approach ensured that the experiences of the participants were represented as authentically and realistically as possible. To enhance the reliability of the findings and maintain consistency in coding, three researchers independently analyzed the data and reached a consensus through discussion, thereby ensuring a solid analytical foundation.

Results

Within the framework of this study, the statements of the participants were categorized into themes: Impact of the Earthquake, Misused Medications and User Characteristics, Methods of Identifying Individuals with SUD, Strategies to Combat Prescription Drug Misuse, Violence and Safety Concerns, and Ministry of Health Regulations and Implementation Issues.

Impact of the Earthquake

Most participants reported a significant increase in the misuse of prescription drugs by individuals with substance use disorders following the earthquakes of February 6, 2023. This rise was not limited to consumption frequency but also included the exploitation of these drugs for commercial purposes. E1 expressed this situation as follows: "The earthquake had a huge effect; I would say the misuse increased by 100%, maybe even

more." E22 confirmed the observation, stating that "After the earthquake, use significantly increased." Some participants also pointed to the emergence of new forms of trade involving these drugs. For instance, E7 noted that

> There was a huge surge after the earthquake. They're being sold illicitly, there's a whole market for them. Individuals visit doctors to obtain medical reports and prescriptions, and then sell the medications. Although the prescriptions are issued in their own names, the drugs are given to others…

Several participants attributed the increased misuse of prescription drugs to psychosocial factors. E15 interpreted this trend as follows: "The use of these medications increased after the earthquake. Psychological distress, financial hardship, and socioeconomic losses led to greater interest in such drugs." Similarly, E1 said, "I think people were overwhelmed both financially and emotionally after the earthquake, and they turned to things like this." A notable rise in demand during night shifts was also emphasized. According to E18, "No one used to ask about these medications during night shifts, but now they come and specifically ask for them."

Other participants highlighted how post-earthquake migration, the destruction of pharmacies, and the reduced number of operational pharmacies shifted the demand for prescription medications. E6 explained that "After the earthquake, many of them had to move away, and the demand here decreased." Similarly, E20 added that "There was a decrease after the earthquake, they started getting them from other places."

Moreover, the findings revealed changes in the ways that individuals with substance use disorders accessed these medications after the earthquake. Participant E23 described the situation as follows:

> I was open during the earthquake and people with addictions were coming in taxis, going from one pharmacy to another searching for these drugs. I encountered many such cases. Because many pharmacies were destroyed, they were visiting the few that remained open.

Finally, some participants noted that certain looting incidents following the disaster specifically targeted these medications. As E13 stated, "The number of patients increased after the earthquake. We didn't experience looting here, but I heard there was looting in Doğanşehir District, and these types of medications were stolen."

These findings demonstrate that the earthquake not only intensified demand for prescription drugs but also reconfigured the relational dynamics through which access occurred. The collapse of physical spaces such as pharmacies, the displacement of populations, and heightened psychosocial vulnerabilities reshaped the interactions among pharmacists, users, families, and broader social networks. Misuse of prescription drugs in the post-earthquake context therefore cannot be understood solely as an individual coping mechanism; rather, it reflects how crisis conditions reorganize social ties, expand informal markets, and generate new strategies of cooperation, dependency, and coercion among actors. In this sense, the earthquake acted as a relational catalyst, amplifying both the risks and the relational pathways of misuse.

Misused Medications and User Characteristics

The majority of participants reported that individuals with substance use disorders predominantly misuse medications containing pregabalin (Lyrica) and gabapentin (Neuron-

tin). The reasons for preferring these drugs include their psychoactive effects, low cost, easy accessibility, and the perception that they pose less risk compared to illicit substances.

According to E24, "Commonly misused medications include Lyrica and other pregabalin-based drugs, as well as Gabaset, Neurontin, and Zaldiar." E25 explained this trend as follows:

Demand for Neurontin and Lyrica groups is increasing. Pseudoephedrine and Xanax groups are currently not in high demand. Nowadays, Lyrica is the most requested.

Similarly, E26 noted that the medication Perge has started to be preferred as an alternative to Lyrica: "Generally, they request Lyrica. Perge is also used as an alternative drug." The participants indicated that alongside medications like Lyrica and Neurontin, users tend to experiment with various other prescription drugs over time, resulting in diversified demands. E19 reported that

Mostly, red and green prescription drugs are requested. Among these, drugs with stronger narcotic effects are used more. These include the Lyrica group, Neurontin, Gabaset, Concerta, Xanax, Akineton.

These statements suggest that addictive behavior is not confined to specific medications but that users are open to exploring other drugs with similar effects. While medications containing pregabalin and gabapentin stand out as the most commonly misused groups, other drugs with different pharmacological profiles are also subject to abuse.

The participants stressed the fact that the legal availability of Lyrica and similar drugs makes them particularly attractive to substance-dependent individuals. These medications are perceived as more financially accessible and less risky than illegal drugs, and thus they are an enticing option for users. E8 described this phenomenon as follows: "They have low cost and strong effects…They use these instead of alcohol because they are cheaper and more effective." E16 emphasized the relative ease and practicality of using these substances compared to illicit drugs: "Lyrica is less troublesome than cannabis, so they prefer these."

Furthermore, a substantial portion of the participants attributed the increased use of these medications to their psychoactive effects. According to E22, "Lyrica and Neurontin, which are prescribed, are used by users to get 'high'. They are used like narcotics." E12 explained how this tendency spreads among users:

They first call the pharmacy and come when we confirm availability. There is a shift from Rivotril to Lyrica. Lyrica is used more because it produces a stronger 'high.'

E5 noted that the perception of pregabalin's stronger effect influences users' preferences:

A major problem in Malatya is the demand for Lyrica…Pregabalin group drugs are preferred because they meet users' desires more…they go after this drug because they get the best effect from it.

The participants also indicated that substance-dependent individuals often find low doses insufficient for their needs, leading to consumption of higher dosages. For example, E19 said,

I know these people swallow a handful of Lyrica at once. One tablet is no longer enough. They are insatiable.

Similarly, E20 noted the high quantities consumed:

> Substance-dependent individuals take 10–15 tablets. Previously, they came during night shifts before the switch to colored prescriptions. I witnessed someone swallow 14 tablets in front of me. Some get 'high' on 4, others on 10.

This behavior leads substance users to request medications with higher milligram (mg) doses. According to E21, "Addicts don't get prescriptions for 75 mg Lyrica. They get 150, 225, and 300 mg dosages; for Neurontin, 600–800 mg." These statements indicate that developing tolerance results in escalation to higher doses and deepening of addictive behavior.

Additionally, some dependent individuals use eye drops and various analgesics alongside pregabalin-based or gabapentin-based medications to conceal the redness caused by cannabis use. E14 explained that "Visine, Cycloplegin drops, Geralgine, Apranax Plus are requested." E6 similarly noted: "They use Visine to hide the eye redness caused by substance use."

The statements of the participants indicate that the misuse of prescription drugs is most intense among males aged 18 to 30 (for instance, E1 remarked that "They are generally males aged between 15 and 30"). However, addictive behaviors are not restricted to this age group and occur across a broader demographic range. E4 also drew attention to socioeconomic status and marital status: "Those over 18 come; their economic status is not very good. Some are married with dependents, but I think most are single." E6 stated that substance use extends to younger ages:

> There is no age limit; I have seen addiction starting at 12 years old. There are many Romanians here. Even if they come with prescriptions, I do not dispense to addicts. I just don't want to bring addicts here…

E8 reported that "Usually, patients are between 15 and 30 years old." E19 indicated that users are mostly young and perceive these drugs as performance enhancers: "These are young people aged 19–30, mostly from industrial areas. They believe these drugs help them work faster or make them feel stronger." E15 characterized the typical user as: "Usually male, aged 20–35, financially disadvantaged, unemployed, and single."

Conversely, female users also appear to be involved in various ways. E22 noted that use initiated due to illness often develops into addiction and male partners have a significant influence: "Usually, young women use them…Their boyfriends become addicted and cause them to become addicted, then they get prescriptions written in their names and come to collect." This indicates that women may act either as direct users or indirectly as intermediaries.

Another point that the participants commonly emphasized is that dependent individuals, once recognized by pharmacists, are unable to obtain medications directly and thus resort to accessing drugs indirectly, by having prescriptions issued in the names of female relatives. Participant E3 explained that

> Some who are better off come, but I don't think they use the drugs themselves. They are being directed by others. At one point, women began to use them because they thought they would not be suspected.

E20 also remarked that women are used as persons who do not raise suspicion:

They get prescriptions written in their mother's or relatives' names…The appearance and speech of these women are so normal that one would never suspect them…They started using women because they thought, 'They won't be suspected.'

Similarly, E23 stated that women both use and trade in these drugs: "Women come, and then you realize they misuse these medications. There are women who sell these drugs." Thus, although prescription drugs are primarily abused by male addicts, women also participate in various forms of misuse. These accounts suggest that women occupy ambivalent positions, being sometimes coerced into facilitating access, sometimes strategically mobilized to mask male addiction, and at other times acting as independent agents in misuse or trade. From a relational sociology perspective, gender does not merely describe user demographics but structures the very social relations through which prescription drug misuse spreads, is legitimized, or concealed. In the post-earthquake context, these dynamics intensified: displacement, economic hardship, and the reorganization of households created new relational pressures that pushed women into roles as both enablers and intermediaries. Thus, gendered patterns of misuse must be understood not only as individual behaviors but as relational practices embedded in broader networks of survival, coercion, and adaptation after crisis.

Furthermore, participant statements revealed that substance users sometimes employ force and threats to have medications prescribed in the names of other people. For instance, E13 noted that "Other addicts pressured and threatened a non-using individual to get Lyrica group medications prescribed in their name. This person had addicted friends who forcibly obtained medical reports and prescriptions on their behalf."

An interesting strategy mentioned by participants is that substance-dependent individuals prefer pharmacies near police stations to create an impression of reliability. E5 described this phenomenon:

Because we are close to the police station, you don't expect people to loiter here…These individuals even go to the pharmacy opposite the police station and inquire. By coming here, the person wants to create the perception that 'I am a clean person; if I were going to misuse this red prescription drug, would I come right in front of the police station to get it?'

Methods of Identifying Individuals with SUD

The majority of the participating pharmacy workers reported recognizing substance-dependent individuals based on their physical and behavioral characteristics. The participants indicated that they identify such individuals through their appearance, speech patterns, tremors, or insistence. E28 drew attention to the importance of age alongside tattoos and cuts on the body as key identifiers of addiction:

The most important clue that helps me suspect them is their youth; we can tell from their look. They have scars and tattoos all over. Their profiles immediately give them away…

Similarly, E24 noted both physical signs such as under-eye bruising, tics, and weight loss, as well as behavioral symptoms like hyperactivity and restlessness:

Sometimes there are facial tics, constant nose wiping. Redness in the eyes, dark circles under the eyes, they are very thin…Besides, their movements are very active, like hyperactivity.

Insistence also emerged as a decisive factor for pharmacists in distinguishing addicts. E23 stated that

> These people are very insistent; they apply a lot of pressure, have tattoos on their arms and hands. Their movements are abnormal. They try to pressure you to give it to them no matter what.

E19 added that some users reveal themselves through their gaze, communication style, and tense behavior, while also emphasizing that not every individual fits the same profile and that some appear more "persuasive":

> Their gaze already gives them away; their behavior is different. They have vacant stares. Their way of asking questions is very telling. You can immediately tell by their nervousness; they become aggressive. The ones we call 'slick' are mostly male addicts…Not all are the same model, but some do not give themselves away. For example, we had an elderly patient who came and said, 'If I don't use this, I can't live; I need it to continue living.'

E17 remarked that shaved hair, tattoos, and youthfulness were identifiers of addicted individuals:

> You can really tell who the patients are. Usually, from their looks, we understand [who are] users. They are younger, have sunken eyes—tattooed types. They shave the sides of their head. They immediately reveal themselves.

Although certain visual and behavioral signs facilitate the identification of addicted individuals, participants also noted that these individuals employ various tactics to conceal these traits. E30 mentioned that some users hide the cuts on their arms ("Usually, there were cuts on their arms, but they hide them"), while E26 elaborated on the subject:

> You can tell from their movements; their arms have razor cuts, [which are] especially visible in summer. Some addicts wear long sleeves to conceal tattoos and razor cuts on their arms. Once, an addict came with his arm in a cast. He said, 'Brother, my arm is broken; I really need this.' They resort to such methods.

These statements suggest that pharmacy workers rely on both physical cues (e.g., scars, tattoos, tremors) and behavioral patterns (e.g., insistence, gaze, communication style) to detect misuse. At the same time, the workers emphasize that addicted individuals actively develop strategies of concealment, and thus the relational and adaptive dynamics between users and pharmacists are revealed.

Strategies to Combat Prescription Drug Misuse

The accounts of the participants indicate that pharmacists develop indirect and strategic approaches to prevent prescription drug misuse and that they avoid direct confrontation. These strategies involve measures at both the individual and organizational levels. Most pharmacists prefer to manage suspicious individuals by claiming the medication is not available rather than explicitly saying "You are addicted" or "I cannot give you this drug." The primary aim of this approach is to prevent conflict and maintain the safety of the pharmacy.

Participants such as E1 and E2 reported using the excuse that the medication is not in stock. E1 explained, "We try to redirect genuinely suspect individuals by saying the medication has not been produced or is out of stock, and we do not give it [to them]."

E2 added that "I pretend to have called the warehouse and then say the medication is not available there." Similarly, E17 described acting strategically to avoid problems:

> We try to refuse politely…We don't keep it on hand…We keep it in the safe…If asked, we say it's not available.

Some pharmacy workers cited previous legal troubles as reasons for refusing to dispense medications. E21 said that "I say I cannot give it because I have been investigated for giving out too much of these drugs." Others, like E3, adopt a strict no-dispensing approach due to the risk of repeated requests: "Generally, we don't give it [to them]; once you give [it] to addicts, more come after."

The experiences of the participants also reveal the social dynamics and network reality of substance use. The interview data showed that addicted individuals act in organized social networks and that a person who obtains medication from a pharmacy soon directs other addicted friends to the same pharmacy. A newly employed pharmacist described the situation:

> I had just started working. I didn't know drugs like Lyrica and Neurontin were misused in our pharmacy. Once a customer came and I gave them this drug; then, within the same day, we received dozens of calls and many visitors.

Similarly, it was noted that addicts inform each other of drug availability and that different individuals are directed to the same pharmacy on the same day:

> They have groups; when they find your pharmacy, they immediately inform their friends to come and get it. Then there were many calls and visitors. People living here did not come; mostly, people I hadn't seen before came (E30).

Such statements and others (E26) indicate that there are active information-sharing and referral networks among addicted individuals, and this complicates prevention efforts. The participants therefore emphasized that refusing to dispense medication at the first contact was the most effective method.

The participants also acknowledged that the strategies employed to prevent misuse sometimes caused genuine patients to suffer. It can be particularly difficult to distinguish between addicts and real patients: "Sometimes, we cannot distinguish the real patients, which leads to their inability to access medication, and to victimization" (E3). Additionally, some addicts reportedly threaten real patients in order to obtain medications through them: "We warn the real patients; we put these drugs in double bags and tell patients not to show them to anyone" (E6). These accounts underline the paradox pharmacists face: while they attempt to safeguard the community by restricting misuse, their defensive strategies may inadvertently marginalize legitimate patients. From a sociological perspective, this illustrates a form of "boundary work," where pharmacists construct symbolic boundaries between "legitimate patients" and "suspect users." However, because addiction networks constantly adapt and develop new tactics, these boundaries remain porous and contested.

Violence and Security Concerns

The participants reported facing threats of physical violence or actual attacks when refusing to dispense prescription medications to substance-dependent individuals. Notably, an incident described by E25 illustrates that such threats can escalate to lethal levels:

Two to three years ago, a pharmacy had problems with these individuals and called the police. Then one of them injured the arriving police officer with a shotgun taken out of the police vehicle. Because of this, pharmacy staff consider these people very dangerous and therefore avoid any confrontation, opting instead to send them away amicably. We absolutely do not keep such medications on hand.

Similarly, E6 stated: "They came and beat me to give them these drugs. I didn't retaliate, otherwise it would have escalated…"

These situations cause pharmacists to feel vulnerable and foster a perception that adequate protection from security forces is lacking: "When you report these people, they mark your pharmacy…If someone comes and vandalizes your pharmacy, your complaint is futile" (E12). It was also noted that violent individuals sometimes target not only pharmacists but also their assistants: "Many pharmacy assistants have been harmed because of this. There are people who attack either when they cannot obtain drugs or after receiving them" (E20).

The threatening behavior of dependent individuals in the pharmacy setting affects not only the staff but also genuine patients, posing serious issues for both physical safety and access to healthcare: "Sometimes those who come curse at us, sometimes they wait in front of the door…Even real patients are afraid in this environment" (E18). E11 emphasized that the threats may not be solely verbal but can also turn into acts: "If you accidentally give [it to them] once, and then realize they are abusing [it], if you refuse the next time, they break the window. That's why we say no from the start."

On the other hand, some dependent individuals attempt to exert pressure on pharmacists by hinting at violence rather than by direct threats. As E19 described it, "They change their tone of voice, then try to create an image like 'I have been in prison before, I am a bit troublesome.' They make us feel that 'there will be problems if you don't give me this.'"

A commonly shared concern among the participants is the increased security risk on on-call (night shift) days. Both physical and telephone threats are reported to occur more frequently on these days:

Between 20–30 addicts come to our pharmacy weekly. They call at night and threaten [us], especially during on-call shifts. Late at night, they try to get medications through threats, saying 'Otherwise, we will burn down your pharmacy' (E15).

Pharmacists tend to use soft-power strategies like "polite refusal" during these periods: "When we are the on-call pharmacy, there are always people coming. We try to manage [the situation] by refusing politely" (E17). These findings reveal that pharmacies are not only sites of healthcare delivery but also contested spaces where illicit demands collide with professional and legal responsibilities. The pervasive threats and acts of violence transform pharmacies into high-risk workplaces, compelling pharmacists to negotiate between patient care, self-protection, and community safety. From the perspective of relational sociology, this dynamic reveals how power operates within everyday interactions: addicted individuals leverage intimidation and symbolic violence to reshape the practices of pharmacists, while pharmacists, in turn, develop avoidance or soft-power strategies to preserve both their professional role and personal security. Thus, the pharmacy becomes a micro-arena of constant negotiation, where fragile boundaries between legality and illegality are redrawn under the shadow of violence.

Ministry of Health Regulations and Implementation Issues

The participants generally supported the Ministry of Health's e-prescription and colored prescription systems but reported encountering various practical challenges. Particularly, it was commonly said that physicians are compelled to write prescriptions due to pressure from patients. The findings reveal that while these systems are positively regarded in principle, practical implementation causes serious difficulties for both doctors and pharmacists.

Some participants emphasized the importance of these systems for controlling prescription drug misuse. E1 said,

> I think it is adequately monitored. These drugs require green and red prescriptions. Ninety percent of doctors don't prescribe [them], but they somehow obtain them from illegal sources, which we call 'underground.' This is especially widespread in Malatya.

E15 also assessed the system's monitoring capacity positively:

> The Ministry is closely monitoring [drug distribution] with the e-prescription and colored prescription applications. The patient's ID number, the recipient's ID, phone number, and address, and doctor's information are all recorded. The Ministry counts drugs twice a year and sanctions pharmacies if drugs are missing.

These statements indicate the system's functional role in record-keeping, traceability, and enforcement.

E5, while supporting the establishment of the system, noted that physicians are under pressure when issuing prescriptions, and some prescriptions may have been written under coercion or threat:

> There is no patient report; it is obvious the prescription was coerced. Either the doctor was threatened or wrote it off to get rid of it. These drugs are not sold without prescription anyway. We sell only to those we believe are genuine patients.

E18 also described the difficulties faced by doctors: "I think the regulations are sufficient, but the real issue is in implementation…Doctors are in a very tough spot." These views indicate that although pharmacists support the control system, practical challenges motivate them to seek more centralized and secure solutions.

Some participants argued that the current system forces pharmacies to make high risk decisions and that this responsibility should be reduced. E17 said, "I think these drugs should only be dispensed through hospitals. Pharmacists should not bear this burden." E16 offered a further suggestion for distribution under police supervision: "These drugs should be distributed through hospitals, under police supervision." These opinions reveal that pharmacists would like a more centralized and controlled distribution mechanism, for the sake of their physical safety and in light of their professional responsibility. These accounts demonstrate how regulatory systems, rather than simply restricting behavior, reshape the interactions between doctors, pharmacists, patients, and addicted individuals. The Ministry's regulations create new networks of accountability and surveillance, but they also generate the unintended consequence of placing doctors and pharmacists in vulnerable positions where they must balance professional obligations with personal safety. In this sense, the regulatory framework itself becomes part of the relational field in which power, trust, and risk are continuously negotiated.

Discussion

This study examined the misuse of prescription medications by substance-dependent individuals after the 2023 earthquake in Türkiye by drawing on the experiences of pharmacy workers. In this respect, the research is pioneering and contributes to the literature by providing original data. According to the pharmacy workers, the earthquake led to an increase in the misuse of prescription drugs among substance users. Additionally, the earthquake destruction caused both substance-dependent individuals and pharmacies to relocate, resulting in a decrease in demand in some areas and a concentration in others. Previous studies have similarly noted that earthquakes deeply affect individuals economically, socially, and psychologically (Bayhan & Yasuntimur 2024; Bayhan et al. 2025; Çetintaş 2025). Research on post-disaster substance use emphasizes that natural disasters drive individuals toward substance use due to social isolation, economic hardship, and trauma (Amiri et al. 2022; İspir et al. 2023; Robinson et al. 2009). For instance, studies following the Bam (2003) and Kahramanmaraş (2023) earthquakes reported significant increases in substance use among survivors. After the Bam earthquake, approximately 50% of substance-dependent individuals exhibited withdrawal symptoms, with a marked rise in opium use (Movaghar et al. 2005). Similarly, following the Kahramanmaraş earthquake, rates of PTSD, anxiety, and depression increased notably, which in turn elevated tendencies toward substance dependence (Çınaroğlu 2024). Furthermore, it has been reported that certain medical interventions during disaster periods inadvertently contribute to addiction. For example, after the earthquake, some pediatric patients developed dependence on transdermal fentanyl (Aslantaş 2024). Health workers frequently encountered addicted survivors during these periods, and the complexity of addiction was exacerbated by analgesic prescriptions such as morphine (Movaghar et al. 2005). In the long term, these individuals, particularly young survivors, continue to suffer from high rates of psychiatric disorders and substance dependence (Pollice et al. 2011). In line with these studies, our findings highlight that the post-earthquake environment created new vulnerabilities for substance-dependent individuals and significantly shaped the experiences of pharmacy workers. The findings of the present study align with existing literature. Participant narratives revealed that efforts to cope with psychological distress and weakening social support networks drove individuals to misuse prescription drugs.

Another finding of the study is that medications containing pregabalin and gabapentin were the most frequently abused prescription drugs. These medications were preferred due to their low cost, easy market accessibility, and "mind-altering" effects. Prior studies support these findings (Kılıç & Özaslan 2023; Servais et al. 2023). The misuse of gabapentinoids has become a significant public health concern worldwide, given their increasing prescription rates and abuse potential. Normally prescribed for neuropathic pain and certain psychiatric disorders, these drugs have come to be misused due to their psychoactive effects. Pregabalin's rapid absorption and high bioavailability increase its abuse potential compared to gabapentin (Evoy et al. 2021; Schifano 2014). For users, the desired effects include euphoria, increased sociability, energizing or relaxing sensations, and feelings of dissociation from reality. Some individuals specifically use these substances to potentiate the effects of opioids or to cope with withdrawal symptoms (Bayhan & Yasuntimur, 2024a;

Evoy et al., 2019; Peles et al. 2020). Gabapentinoid misuse is often observed in individuals with histories of polysubstance use and is also employed to manage withdrawal, pain, anxiety, or insomnia (Evoy et al. 2021). However, such misuse poses serious health risks, especially when combined with opioids, increasing morbidity, and mortality risks (Evoy et al. 2021; Gunatilake 2017). Importantly, pharmacists emphasized that such misuse patterns became more visible in the post-earthquake context, when disrupted health services and weakened social control mechanisms facilitated easier access to these medications. Regarding the profile of those seeking these medications, it should be noted that our study does not provide statistical evidence. Instead, pharmacists perceived that many of the individuals who attempted to obtain pregabalin and gabapentin after the earthquake were males aged 18 to 30. In the accounts of the pharmacists, these individuals sometimes tried to have family members or girlfriends acquire the medications or attempted to build trust by frequenting pharmacies near police headquarters. These perceptions should be understood as part of the experiential knowledge of these pharmacists rather than as generalized findings.

Another important finding is that pharmacy workers recognized substance-dependent individuals by their behaviors (including insistence), speech patterns, tremors, and physical appearance. Although the literature lacks studies directly focusing on the experiences of pharmacy workers, the existing sources on physical, verbal, and behavioral signs enabling identification of substance users support these findings. According to the literature, physical signs commonly observed in substance users include respiratory problems, nasal mucosal damage, injection marks, and skin ulcers (Freye 2009). Furthermore, substance-dependent individuals often attempt to mask their addiction by presenting with general health complaints (Bertolini 2011). Verbally, inconsistent statements and slurred or slow speech patterns are common; in communication, substance abusers may refuse to answer direct questions or provide vague or misleading answers (Bertolini, 2011; Westreich & Rosenthal 1995). These data support the present findings that dependent individuals can be identified through certain external attributes. Therefore, it is suggested that pharmacy staff receive training on addiction diagnosis, referral, and crisis management. Such training is particularly vital in disaster contexts, where pharmacists are often among the first points of contact for vulnerable individuals.

In this study, pharmacy workers reported that they deliberately avoid confrontation with individuals they suspect of being dependent, and that they faced the risk of threats or physical assault when refusing to dispense prescription drugs. This finding indicates that the tendency toward violence against healthcare workers by dependent individuals is markedly present in pharmacy settings. Similarly, the literature reports that a significant proportion of pharmacists experience violent or threatening incidents during interactions with substance-dependent individuals. For example, Smith and Weidner (2011) emphasized that such incidents are more frequent during nighttime hours and drug dispensing. Bhagavathula et al. (2022) reported in their systematic review and meta-analysis that 45% of pharmacists across different countries have experienced violence during their careers, with 39% reporting such incidents within the past year. Additionally, Fernández-Montalvo et al. (2012) noted that approximately 40% of substance-dependent individuals exhibit violent tendencies. In the post-earthquake context, these risks intensified, as weakened security structures and increased desperation among users contributed to more frequent and severe

confrontations. The avoidance strategy that arises from a fear of violence and that was observed among pharmacists in this study aligns with these findings, illustrating how addiction-related violence shapes pharmacy services. Therefore, implementing security protocols and support lines for pharmacy workers is crucial.

The present findings reveal that substance-dependent individuals act in an organized and strategic manner in obtaining medications. They rapidly share information among themselves about the pharmacies from which they have successfully acquired drugs and thereby direct others to the same locations. This situation complicates the strategies of the pharmacists to combat abuse, hampers their ability to distinguish genuine patients from dependent users, and sometimes results in the victimization of real patients. The participants emphasized that the most effective way to handle such situations is to refuse to dispense the medication. In some cases, substance-dependent persons have also been observed to coerce genuine patients into relinquishing their medications. Pharmacists linked the intensification of such organized behaviors directly to the post-earthquake setting, where weakened institutional control and disrupted monitoring facilitated collective strategies among substance-dependent individuals. However, as no direct studies exist on such organized and referral-based drug procurement practices, a comparison with previous research was not possible.

Finally, the participants generally regarded the Ministry of Health's e-prescription and colored prescription applications positively but noted various structural and professional challenges in implementation. Foremost among these challenges is the pressure placed on physicians to prescribe drugs prone to misuse by substance-dependent individuals, often by obtaining medical reports and prescriptions written to justify such use. The pharmacists explained that these challenges became more acute in the post-earthquake period, when physicians also faced increased patient demands and social pressures. This finding reveals that digital tracking systems alone are insufficient in combating addiction and that social pressures on physicians and the ethical dilemmas they encounter during the prescription process must also be considered. The lack of sufficient empirical data on the prescription practices of physicians under social pressure highlights the need for more comprehensive qualitative research. Investigating the social, institutional, and professional dynamics affecting the decision-making processes of physicians through qualitative studies would fill a significant gap in the literature.

This study has some limitations. Due to its qualitative design, the findings cannot be generalized. Moreover, the study focused on the experiences of pharmacy workers with prescription drug misuse after an earthquake, while excluding the perspectives of physicians and substance users themselves.

Conclusion and Recommendations

This study indicates that the impact of the earthquake extended beyond physical destruction and potentially intensified social vulnerabilities and shaped behaviors in regard to substance use. According to the experiences of the pharmacy workers, the destruction of pharmacies and the post-earthquake migration of substance-dependent individuals created variations

in medication access, leading to increased demand in some locations and decreased demand in others. The participants reported that male addicts aged 18 to 30 were the predominant group seeking high-dose pregabalin and gabapentin-containing medications, which were perceived as substitutes for illicit substances. Prescription drugs were sought both for personal use and for small-scale trade. Pharmacists also observed that women were sometimes used as "carriers," as they were perceived to attract less suspicion; the indication is that addiction networks were shaped along gender lines. The participants noted that dependent individuals often shared information about pharmacies, suggesting strong social networks and collective strategies in obtaining medications, especially in the post-earthquake context where institutional oversight was weakened.

The pharmacy workers described how they recognized substance-dependent individuals through behavioral cues (including insistence), speech patterns, and physical appearance. The participants emphasized that some individuals exhibited threatening behavior, including overt or covert intimidation and physical aggression. The earthquake context reportedly exacerbated these risks, as social distress and reduced institutional presence intensified confrontations. To cope, pharmacy workers developed passive resistance strategies, such as indirectly refusing to dispense medications, but they noted that these approaches offered only temporary mitigation and did not resolve the structural challenges. In this situation, the pharmacists acted as direct yet often invisible actors within the dynamics of substance dependence in their communities.

The participants generally supported prescription monitoring systems such as e-prescriptions and colored prescriptions. However, they reported challenges in practice, including the pressure on physicians to issue prescriptions and the difficulty in distinguishing genuine patients from substance-dependent individuals. The pharmacists indicated that these systems alone were limited in effectiveness; social pressures, ethical dilemmas, and post-disaster conditions shaped drug-seeking behaviors in ways that technology could not fully regulate.

Based on the experiences of the participants, a multilayered approach is suggested. First, pregabalin and gabapentin-containing medications could be supplied exclusively through hospital pharmacies under controlled conditions to reduce direct exposure at community pharmacies. Second, protective and supportive measures for pharmacy workers, including training in addiction recognition, crisis management, and personal safety, should be strengthened. Third, mental health support and addiction prevention services should be deployed in post-disaster periods to address increased drug demand. Fourth, public awareness campaigns could target young adults and vulnerable populations to highlight the risks associated with the misuse of prescription drugs.

Future research is recommended to further explore the experiences of physicians encountering substance-dependent patients during the prescription process and to examine how social networks and relational dynamics influence the misuse of prescription drugs. Additionally, studies sensitive to age, gender, and social vulnerabilities could provide more nuanced insights into the patterns observed by the pharmacy workers. The findings of this study are specific to the qualitative accounts of pharmacists in a post-earthquake context and are not intended to provide generalized prevalence data. These initial findings, while limited, offer a strong foundation.

References

Afet ve Acil Durum Yönetimi Başkanlığı (AFAD). 2023. 06 Şubat 2023 Pazarcik-Elbistan Kahramanmaraş (mw: 7.7–mw: 7.6) depremleri raporu. https://deprem.afad.gov.tr/assets/pdf/Kahramanmara%C5%9F%20Depremi%20%20Raporu_02.06

Aktürk, İ., Karaman, H., Altıntaş, F., Yaman, Ö. M. 2024. Madde Kullanan Bireylerin Sokaktan İlaç Alma Davranışının İncelenmesi. *Gümüşhane Üniversitesi Sağlık Bilimleri Dergisi 13*(2), 830–849. https://doi.org/10.37989/gumussagbil.1366988

Alexander, A. C., & Ward, K. D. 2018. Understanding Postdisaster Substance Use and Psychological Distress Using Concepts from the Self-Medication Hypothesis and Social Cognitive Theory, *Journal of Psychoactive Drugs 50*(2): 177–186. https://doi.org/10.1080/02791072.2017.1397304

Amiri, H., Riyahifar, S., Nakhaee, N., & Nekoei-Moghadam, M. 2022. The long-term impact of the earthquake on substance use, *International Journal of Emergency Medicine 15*(1): 44. https://doi.org/10.1186/s12245-022-00449-x

Anadolu, A. 2023, 22 Nisan. Kahramanmaraş merkezli depremlerde can kaybı 50 bin 703'e yükseldi. 15 Mayıs 2025, https://www.ntv.com.tr/turkiye/kahramanmaras-merkezli-depremlerde-can-kaybi-50-bin-783e-yukseldi,y8gMM7CAlE2ltf8TFbXryQ

Arria, A. M., Caldeira, K. M., Vincent, K. B., O'Grady, K. E., Cimini, M. D., Geisner, I. M., Larimer, M. E. 2017. Do college students improve their grades by using prescription stimulants nonmedically?, *Addictive Behaviors* 65: 245–249. doi: 10.1016/j.addbeh.2016.07.016

Aslantaş, H. O.2024. Another lesson from the earthquake: Transdermal fentanyl dependence in two child victims, *Turkish Journal of Physical Medicine and Rehabilitation 70*(3): 406–409. https://doi.org/10.5606/tftrd.2024.14397

Basedow, L. A., Kuitunen-Paul, S., Roessner, V., & Golub, Y. 2020. Traumatic events and substance use disorders in adolescents, *Frontiers in Psychiatry 11*: 559. https://doi.org/10.3389/fpsyt.2020.00559

Bayhan, V., & Yasuntimur, A. 2024a. The socio-psychological profile and addiction experience of psychoactive substance users on probation in Türkiye: a qualitative study, *Alcoholism and Drug Addiction 36*(4): 265–278. https://doi.org/10.5114/ain.2023.137159

Bayhan, V., & Yasuntimur, A. 2024b. "Deprem, kıyameti yaşamak gibidir": 6 Şubat 2023 deprem mağdurlarının deneyimleri üzerine bir çalışma (Malatya örneği). *Nevşehir Hacı Bektaş Veli Üniversitesi Sosyal Bilimler Enstitüsü Dergisi 14*(3): 1416–1437. https://doi.org/10.30783/nevsosbilen.1507536

Bayhan, V., Yasuntimur, A., & Demir, N. 2025. Post-Traumatic Stress and Coping Strategies for Earthquake-Related Stress Among Individuals Affected by the February 6, 2023 Earthquakes: The Case of Malatya, *Firat University Journal of Social Sciences 35*(2): 773–786. https://doi.org/10.18069/firatsbed.1596751

Bennett, T., & Holloway, K. 2017. Motives for illicit prescription drug use among university students: A systematic review and meta-analysis, *The International Journal on Drug Policy* 44: 12–22. doi: 10.1016/j.drugpo.2017.02.012

Bertolini, M. 2011. Screening, by clinical observation, signs and symptoms of addiction to the use of general practice, *Revue Médicale Suisse 7*(309): 1789–1793.

Bhagavathula, A. S., Obamiro, K. O., Hussain, Z., & Tesfaye, W. 2022. Workplace violence against pharmacists: A systematic review and meta-analysis, *Journal of The American Pharmacists Association 63*(1): 23–31. https://doi.org/10.1016/j.japh.2022.07.012

Braun, V., & Clarke, V. 2006. Using thematic analysis in psychology, *Qualitative Research in Psychology 3*(2): 77–101. https://doi.org/10.1191/1478088706qp063oa

Chan, A. Y. L., Yuen, A. S. C., Tsai, D. H. T., Lau, W. C. Y., Jani, Y. H., Hsia, Y., Osborn, D. P. J., Hayes, J. F., Besag, F. M. C., Lai, E. C. C., Wei, L., Taxis, K., Wong, I. C. K., & Man, K. K. C. 2023. Gabapentinoid consumption in 65 countries and regions from 2008 to 2018: A longitudinal trend study, *Nature Communications* 14, Article 5005. https://doi.org/10.1038/s41467-023-40637-8

Çetintaş, A. 2025. Deprem Sonrası Korku ve Kaygıların Bazı Değişkenler Açısından İncelenmesi, *Firat University Journal of Social Sciences 35*(2): 435–448. https://doi.org/10.18069/firatsbed.1566670

Çınaroğlu, M. 2024. Trauma, addiction, and the path to recovery after the kahramanmaraş earthquakes, *Nişantaşı Üniversitesi Sosyal Bilimler Dergisi 12*(1): 37–59. https://doi.org/10.52122/nisantas isbd.1434830

Çıtak, Ş., & Dadandı, İ. 2024. The effect of earthquake exposure on PTSD symptoms is mediated by intrusive rumination and moderated by gender: A cross-sectional study on the 2023 Kahramanmaraş earthquake survivors, *BMC Public Health* 24: 2294. https://doi.org/10.1186/s12889-024-19736-8

Coşkunol, H. 2023. Prevention of postdisaster substance use, *Addicta: The Turkish Journal on Addictions 10*(1): 1–2. DOI: 10.5152/ADDICTA.2023.170423

Ekici, Ö., Şahiner, V., Erzin, G., Ocak, D., Şahiner, Ş. Y., & Göka, E. 2019. Pregabalin abuse among patients with opioid use disorders may increase the severity of withdrawal symptoms: a single-center, case-control study, *Psychiatry and Clinical Psychopharmacology 29*(4): 479–483. https://doi.org/10.1080/24750573.2019.1673946

Emniyet Genel Müdürlüğü Narkotik Suçlarla Mücadele Başkanlığı. 2023. Türkiye uyuşturucu raporu eğilimler ve gelişmeler. Erişim adresi: https://www.narkotik.pol.tr/kurumlar/narkotik.pol.tr/TUB%C4%B0M/Ulusal%20Yay%C4%B1nlar/2023_TURKIYE_UYUSTURUCU_RAPORU.pdf

Emniyet Genel Müdürlüğü Narkotik Suçlarla Mücadele Başkanlığı. 2024. Türkiye uyuşturucu raporu eğilimler ve gelişmeler. Erişim adresi: https://www.narkotik.pol.tr/kurumlar/icisleri.gov.tr/duyurular(1)/2024_uyus_raporu.pdf

Evoy, K. E., Covvey, J. R., Peckham, A. M., Ochs, L., & Hultgren, K. E. 2019. Reports of gabapentin and pregabalin abuse, misuse, dependence, or overdose: An analysis of the Food And Drug Administration Adverse Events Reporting System (FAERS), *Research in Social and Administrative Pharmacy 15*(8): 953–958.

Evoy, K. E., Morrison, M. D., & Saklad, S. R. 2017. Abuse and misuse of pregabalin and gabapentin, *Drugs 77*(4): 403–426. https://doi.org/10.1007/s40265-017-0700-x

Evoy, K. E., Peckham, A. M., Covvey, J. R., & Tidgewell, K. J. (2021). Gabapentinoid pharmacology in the context of emerging misuse liability, *Journal of Clinical Pharmacology 61*(2): 89–99. https://doi.org/10.1002/jcph.1833

Fadhel, F. 2022. Misuse of prescription drugs and other psychotropic substances among university students: a pilot study, *Eastern Mediterranean Health Journal 28*(4): 288–295. https://doi.org/10.26719/emhj.22.019

Fatani, S., Bakke, D., D'Eon, M., & El-Aneed, A. 2021. Qualitative assessment of patients' perspectives and needs from community pharmacists in substance use disorder management, *Substance Abuse Treatment, Prevention, and Policy 16*(1): 38. https://doi.org/10.1186/s13011-021-00374-x

Fatani, S., Dobson, R., & El-Aneed, A. 2019. Qualitative exploration of the education and skill needs of community pharmacists in Saskatoon concerning substance use disorder, *Canadian pharmacists journal : CPJ = Revue des pharmaciens du Canada : RPC 152*(2): 117–129. https://doi.org/10.1177/1715163518816726

Fernández-Montalvo, J., López-Goñi, J. J., & Arteaga, A. 2012. Violent behaviors in drug addiction: differential profiles of drug-addicted patients with and without violence problems, *Journal of Interpersonal Violence 27*(1): 142–157. https://doi.org/10.1177/0886260511416475

Fischer, H. W. 2003. The sociology of disaster: Definitions, research questions, and measurements, *International Journal of Mass Emergencies and Disasters 21*(1): 91–107. https://doi.org/10.1177/028072700302100104

Ford, J. A., Hinojosa, M. S., & Nicholson, H. L. 2018. Disability status and prescription drug misuse among U.S. adults, *Addictive Behaviors* 85: 64–69. doi: 10.1016/j.addbeh.2018.05.019

Freye, E. 2009. Positive signs and symptoms of hard drug abuse, in: E. Freye, *Pharmacology and Abuse of Cocaine, Amphetamines, Ecstasy and Related Designer Drugs* (pp. 247–250). Springer. https://doi.org/10.1007/978-90-481-2448-0_41

Gunatilake, S. B. 2017. Gabapentin and pregabalin misuse, *Journal of the Ceylon College of Physicians 48*(2): 59. https://doi.org/10.4038/JCCP.V48I2.7822

Gürel, M., Bilgiseven, E., Aktürk, İ., Yaman, Ö. M. 2024. A Qualitative Research on the Process of Drug Addict Individuals Accessing Substances, *OPUS Journal of Society Research 21*(1): 17–31. https://doi.org/10.26466/opusjsr.1407945

Hägg, S., Jönsson, A. K., & Ahlner, J. 2020. Current Evidence on Abuse and Misuse of Gabapentinoids, *Drug safety 43*(12), 1235–1254. https://doi.org/10.1007/s40264-020-00985-6

İspir, G. Z., Danışman, M., & Katar, K. S. 2023. Substance use disorders after natural disasters: a narrative review *Journal of Addictive Diseases 42*(4): 578–581. https://doi.org/10.1080/10550887.2023.2242073

Kandel, D. B., Yamaguchi, K., & Chen, K. 1992. Stages in progression in drug involvement from adolescence to adulthood: further evidence for the gateway theory, *Journal of Studies on Alcohol 53*(5): 447–457. https://doi.org/10.15288/jsa.1992.53.447

Kardaş, Ö., & Kardaş, B. 2023. Çocuk ve Ergen Madde Bağımlılığı Tedavi Merkezine Başvuran Olguların Sosyodemografik ve Madde Kullanım Özelliklerinin İncelenmesi, *Bağımlılık Dergisi 24*(2):174–185. doi: 10.51982/bagimli.1112645

Kılıç, Z., & Özaslan, E. A. 2023. Abuse and addiction in gabapentinoid drug users for neuropathic pain, *European Review for Medical and Pharmacological Sciences 27*(12): 5378–5389. https://doi.org/10.26355/eurrev_202306_32772

Kopak, A. M., & Van Brown, B. 2020. Substance use in the life cycle of a disaster: A research agenda and methodological considerations, *American Behavioral Scientist 64*(8): 1095–1106.

Mikhael, E. M., Jebur, N. J., Jamal, M. Y., & Hameed, T. A. 2024. Perception, experience, and practice of Iraqi community pharmacists towards customers with substance use disorder, *SAGE Open Medicine* 12. https://doi.org/10.1177/20503121241275472

Movaghar, A., Goodarzi, R. R., Izadian, E., Mohammadi, M. R., Hosseini, M., & Vazirian, M. (2005). The impact of Bam earthquake on substance users in the first 2 weeks: a rapid assessment *Journal of Urban Health 82*(3): 370–377. https://doi.org/10.1093/JURBAN/JTI089

Murphy, A. L., Phelan, H., Haslam, S., Martin-Misener, R., Kutcher, S. P., & Gardner, D. M. 2016. Community pharmacists' experiences in mental illness and addictions care: a qualitative study *Substance Abuse Treatment, Prevention, and Policy* 11: 6. https://doi.org/10.1186/s13011-016-0050-9

Nalbantoğlu, İ., & Tuncay, T. 2023. Madde bağımlılarının ve ailelerinin bağımlılıkla mücadele deneyimlerinin incelenmesi, *Bağımlılık Dergisi 24*(2): 207–226.

Neuman, W. L. 2012. *Toplumsal araştırma yöntemleri: Nitel ve nicel yaklaşımlar* (S. Özge, Trans.; 5th ed.). İstanbul: Yayın Odası.

Patton, M. Q. 2002. Two decades of developments in qualitative inquiry: A personal, experiential perspective, *Qualitative Social Work 1*(3): 261–283. https://doi.org/10.1177/1473325002001003636

Peles, E., Sason, A., Schreiber, S., & Adelson, M. 2020. Pregabalin Misuse: Motives, Pattern, and Knowledge about Its Risks among Patients in Methadone Maintenance Treatment, *Journal of Psychoactive Drugs 53*(3): 238–246. https://doi.org/10.1080/02791072.2020.1861392

Pollice, R., Bianchini, V., Marola, V., Verni, L., Di Mauro, S., Ussorio, D., Cavicchio, A., Ortenzi, R., Roncone, R., & Casacchia, M. 2011. Post-traumatic and psychiatric symptoms among young earthquake survivors in primary care camp hospital, *European Journal of Inflammation 9*(1): 39–44. https://doi.org/10.1177/1721727X1100900106

Robinson, J., Sareen, J., Cox, B. J., & Bolton, J. 2009. Self-medication of anxiety disorders with alcohol and drugs: Results from a nationally representative sample, *Journal of Anxiety Disorders 23*(1): 38–45. https://doi.org/10.1016/j.janxdis.2008.03.013

Schifano, F. 2014. Misuse and abuse of pregabalin and gabapentin: Cause for concern?, *CNS Drugs 28*(6): 491–496. https://doi.org/10.1007/S40263-014-0164-4

Servais, L., Huberland, V., & Richelle, L. 2023. Misuse of Pregabalin: A qualitative study from a patient's perspective, *BMC Public Health 23*(1): 1339. https://doi.org/10.1186/s12889-023-16051-6

Sevin, M. D., & Erbay, E. 2019. AMATEM'de ikinci kez tedavi gören madde bağımlılarının madde kullanımına ilişkin yaşam deneyimleri, *Addicta: The Turkish Journal on Addictions 6*(3): 689–714. DOI: 10.15805/addicta.2019.6.3.0059

Smith, F., & Weidner, D. 2011. Threatening and violent incidents in community pharmacies: (2) Implications for pharmacists and community pharmacy services, *International Journal of Pharmacy Practice 4*(3); 145–152. https://doi.org/10.1111/J.2042-7174.1996.TB00857.X

Stevens, A. 2011. Drugs, crime and public health: The political economy of drug policy, *International Journal of Drug Policy 22*(6): 463–465. https://doi.org/10.1016/j.drugpo.2011.10.003

Substance Abuse and Mental Health Services Administration (SAMHSA). 2017. Prescription drug misuse and abuse. Retrieved from https://www.samhsa.gov/prescription-drug-misuse-abuse

Tommasello, A. C. 2004. Substance abuse and pharmacy practice: what the community pharmacist needs to know about drug abuse and dependence, *Harm Reduction Journal 1*(1): 3. https://doi.org/10.1186/1477-7517-1-3

Tunçel, Ö. K. 2023. Earthquake, collective trauma, and consequences, *Noro Psikiyatri Arsivi 60*(2): 97–98. https://doi.org/10.29399/npa.28494

Westreich, L. M., & Rosenthal, R. N. 1995. Physical examination of substance abusers. How to gather evidence of concealed problems, *Postgraduate Medicine 97*(4): 111–123. https://doi.org/10.1080/00325481.1995.11945984

West, N. A., Severtson, S. G., Green, J. L., & Dart, R. C. 2015. Trends in abuse and misuse of prescription opioids among older adults, *Drug and Alcohol Dependence* 149: 117–121. doi: 10.1016/j.drugalcdep.2015.01

Williams, S. J., Gabe, J., & Davis, P. 2008. The sociology of pharmaceuticals: Progress and prospects, *Sociology of Health & Illness 30*(6): 813–824. https://doi.org/10.1111/j.1467-9566.2008.01123.x

Yeğenoğlu, S. 2001. How do the pharmacists perceive substance abuse and their prevention role in this context: A qualitative study, *FABAD Journal of Pharmaceutical Sciences* 25: 7–12.

Biographical Notes:

Ahmet Yasuntimur, Ph.D. candidate, İnönü University, Sociology Department. His research interests combine sociology and criminology, focusing on the study of the social determinants of crime and the operation of the justice system. His work often combines empirical analysis with reflection on criminal policy and its effectiveness in different social contexts.

ORCID iD: 0000-0003-0924-8021

E-mail: ahmetyasuntimur@gmail.com

Ersan Ersoy (Ph.D.), is a Professor in the Department of Sociology at İnönü University. His research focuses on applied studies concerning various dimensions of social structure. His primary areas of interest include social values, gender, vulnerable groups, child sexual abuse and stigmatization, management culture, and the sociology of consumption.

ORCID iD: 0000-0002-1050-0602

E-mail: ersan.ersoy@inonu.edu.tr

Vehbi Bayhan (Ph.D.), is a faculty member at Bandırma Onyedi Eylül University, Department of Sociology.His research interests include youth, migration, urbanization, democracy, social media, addiction, gender, violence, globalization, health, risk society, and alienation.

ORCID iD: 0000-0001-5567-3438

E-mail: vbayhan@bandirma.edu.tr

Hatice Birgül Cumurcu (Ph.D.), is a Professor in the Department of Psychiatry at İnönü University, Faculty of Medicine. She has over 20 years of clinical and academic experience in psychiatry. Her research interests encompass mood and anxiety disorders, psychopharmacology, and mental health interventions. She has contributed to various academic publications and has been involved in several national and international research projects. Additionally, she serves as the head of the Alcohol and Substance Use Disorders Treatment and Research Center (AMATEM) at Turgut Özal Medical Center, focusing on addiction treatment and prevention. Prof. Cumurcu is also actively engaged in training and mentoring medical students and residents in psychiatry.

ORCID iD: 0000-0001-9289-837X

E-mail: hatice.cumurcu@inonu.edu.tr

Maria Stojkow (Ph.D.), sociologist, assistant professor at the Faculty of Humanities, AGH University of Science and Technology in Krakow. Her research interests lie in the field of the Muslim community in Poland and the cultural determinants of disability, with a particular focus on Islamic societies.

ORCID iD: 0000-0002-8410-3730

E-mail: stojkow@agh.edu.pl

Ahmet Çetintaş (Ph.D.), is a faculty member in the Department of Social Work at Malatya Turgut Özal University. He conducts his studies at both theoretical and empirical levels. His primary areas of interest include theoretical and conceptual sociology, political thought and social movements, historical-sociological inquiries, studies on social structure and identity, social problems and disadvantaged groups, media, technology and social transformation, as well as disaster and risk research.

ORCID iD: 0000-0002-8757-372X

E-mail: ahmet.cetintas@ozal.edu.tr

Aleyna Yüksel, Ph.D. candidate and research assistant in the Department of Sociology at İnönü University. Her academic interests include consumer culture, wastefulness in urban and rural contexts, surveillance and social control, sociology of work, ethnicity, and qualitative research methodology. She primarily employs qualitative

methods, focusing on analyzing different dimensions of social structure through field research and in-depth studies.

ORCID iD: 0009-0007-0422-7375

E-mail: aleyna.yuksel@inonu.edu.tr