

A Dramatic Case Report: Achived Remission in Metamphetamine Addiction After Changing City, Yet Ended Up in Prison

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ABSTRACT

Introduction: Addiction is often viewed as a brain disease, focusing on the individual's body or brain and describing it as a disordered state. However, this perspective overlooks the significant role of social contexts and how consumption patterns evolve. Substance use disorders should be addressed with a biopsychosocial model, considering environmental impacts on addiction development and treatment. Research shows that changes in the environment can alter substance use behaviors. Additionally, substance use is linked to criminal activities, as drugs can influence thoughts and behaviors leading to crime. **Case Presentation:** This report details a patient with methamphetamine use disorder who was on probation for theft during his substance use period. Despite multiple hospitalizations and treatments, he relapsed each time he returned to his previous environment. However, he achieved remission after moving to a stable, developed area with family support. Unfortunately, he was later imprisoned for his prior offense during this remission period.

Conclusions This case underscores the critical impact of the living environment on substance use behaviors. The patient's remission after relocating from a socially disadvantaged area highlights the importance of environmental factors in addiction treatment. While his imprisonment is unfortunate, the positive changes during his stay with his sister and his abstinence from substance use are promising for his future recovery. Effective treatment for methamphetamine addiction must consider and integrate environmental factors into treatment strategies.

Keywords:

Substance-Related Disorder, Criminal Behavior, Biopsychosocial Model, Social Support

INTRODUCTION

Neuroscientific approaches that consider addiction as a brain disease usually locate addiction within the individual's body or brain and portray it as a disordered or diseased condition (Keane, 2002). However, such explanations ignore the importance of social contexts for addiction problems and how consumption patterns change over time and consider addiction as a process that is often independent of the environment for individuals who use substances (Fraser et al., 2014). The effects of social contexts and processes cannot be ignored at every stage of substance addiction, from its onset to its treatment (Strickland & Acuff, 2023).

In the biopsychosocial model suggested by George Engel, he argues that sociocultural and psychological factors are as important as biological/genetic factors in mental illnesses and that all these factors should be handled in treatment and prevention efforts (Cooper et al., 2013). One of the most essential sociocultural factors is the neighborhood/place of residence. To date, studies on the characteristics of neighborhoods (places) where users live and substance abuse have generally focused on two exposures: economic disadvantage and social disorder (Cooper et al., 2013). Many studies have shown that there is a positive relationship between economic problems and substance abuse (Boardman et al., 2001; Jones-Webb et al., 1997; Williams & Latkin, 2007). Similarly, studies have shown that substance abuse is more likely to occur in those living in socially dysfunctional neighborhoods where there are typically many alcohol shops, abandoned buildings, and vacant lots rather than prosocial institutions (Hill & Angel, 2005; Latkin & Curry, 2003; Schroeder et al., 2001).

One of the concepts reflecting the social aspect of substance use is the behaviors of committing a crime and breaking the law. In many studies investigating the link between substance use and crime, it has been revealed that there is a relationship between drug use and crime (Bennett & Holloway, 2009; Pierce et al., 2017). Opinions arguing that drug use causes criminal behavior suggest that especially financial crimes are committed in order to finance the supply of substances (Bennett et al., 2008) or that neuropsychiatric causes caused by drug use (Brownstein, 2016) lead to this. In addition, some argue that substance use starts or increases with involvement in criminal behavior (Hammersley et al., 1989).

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Although place-based and geographical explanations of addiction aim to explain the social and spatial contexts in which substance consumption and addiction are shaped and provide less individualized understandings of addiction, they are insufficient to explain the development and change of substance consumption patterns over time, as they often treat the places and spaces where substances are used as stable and unchanging (Jayne et al., 2016). Because the environment is a factor that can be changed, relocation may enable individuals to stay away from environments where stimuli reminding them of the substance are present (Cooper et al., 2013; DeWit, 1998).

In this article, we present the addiction and life history of a methamphetamine addict who was sentenced to probation for theft offence during a period of methamphetamine use, achieved remission according to DSM-V after a change of city (no substance use for at least one year) and was convicted for the related offence in the following period.

CASE PRESENTATION

Patient Y was 31 years old, male, single, a high school graduate, had no psychiatric features in his family history, and did his military service. His first substance use was when he was 19 years old; he used cannabis at that time. He started to use methamphetamine 3 days a week on average at the age of 24 when he was working as a subcontracted cleaning worker in a city in the southern regions of Turkey. This city is a location that can be considered a rural area where social control is weak and abandoned buildings are ordinary. At that time, when he was living with his brother, his family became aware of his substance use due to various disciplinary problems, such as not fulfilling the requirements of his job correctly. In 2019, he was treated for about one month in the Alcohol and Drug Addiction Treatment Center (ADATC) unit in the city where he lived.

After the patient was discharged, he went to a drug dealer to provide a substance, and the dealer told him that he could give him a substance if he took all the cigarettes from a nearby supermarket and brought them back. The patient then broke the windows of the market, took the cigarettes, and was arrested by the security teams the next day and referred to the court. After the patient's sister covered all the financial damages of the market, the market managers canceled their complaint. Considering his good behavior in court, he was released on probation for not traveling abroad and giving his signature at the police station 2 days a week.

After this situation, the patient voluntarily applied to our clinic and was hospitalized for three months. After his discharge, the patient returned to the city where he lived, and one month later, he was re-admitted to our clinic and was discharged after about 2 months. He stated that he did not use substances for about one month after his discharge; however, although he wanted to stay away from the people he stated to be substance providers in his environment, he started to use substances again because he could not do this. After that, he decided not to return to the city where he lived with his sister and to live with his single sister in a big, central, and regular city. Afterward, the patient was hospitalized in our clinic for 20 days, although he had two previous unsuccessful treatment processes.

The patient was referred to a rehabilitation center after his last hospitalization in our clinic and stayed in this center for 5 months. After his discharge from there, he started to live with his sister in the province where she lived. During the same period, he was transferred to the institution where his sister worked; he started to work regularly with his sister; he did not receive any medical treatment voluntarily, and he was followed up regularly with monthly controls by making substance analyses in urine. It was learned from the patient's and her sister's reports that he regularly performed religious worship in his daily routine outside of work, went to the cinema with his sister every weekend, and worked to finish school.

No substance metabolites were found in the monthly controls of the patient for 1 year, and the control intervals were reduced to 3 months. During this remission period of approximately 1.5 years, the patient was being followed up with probation related to his previous theft sentence. However, in the last trial, a decision was made for the patient to be imprisoned for 11 months. This decision disappointed the patient and his sister. A supportive interview was held in the patient's last interview.

DISCUSSION AND CONCLUSIONS

Today, despite various treatment approaches such as pharmacotherapy and behavioral interventions in substance addiction, remission rates are not at the desired levels (Tai & Volkow, 2013). In addition to neurobiological reasons, the fact that patients are more frequently exposed to reminder clues about the substance in the familiar environment and social networks in which they continue substance use (Maddux & Desmond, 1982) and the relatively easy access to the substance (Rastegari et al., 2023) can be shown among the reasons for this situation. In studies, it has been reported that substance use is high, especially in areas with irregular residences, abandoned buildings, and houses (Wilkins et al., 2018). In addition, among all risk factors related to drug use, drug use by a group of friends is an essential factor in all age groups (Swanepoel et al., 2016). In the present case, the fact that the patient returned to the environment where he lived after discharge and got together with friends who were substance abusers, the availability of substances in the environment was high, and social control was relatively weak may have paved the way for relapse.

In a longitudinal study conducted with 172 substance users, it was concluded that moving to neighborhoods with less economic disadvantage and better social conditions may weaken relationships with substance users and social networks (Linton et al., 2016). In another study, it was found that when substance users leave the neighborhood where they live, the duration of substance abstinence is prolonged, but moving back to these neighborhoods increases relapse (Maddux & Desmond, 1982). On the other hand, relocation may sometimes result in starting substance use at an earlier age and increasing substance use (DeWit, 1998). As can be seen, how substance use changes varies according to the characteristics of the relocated region (Genberg et al., 2011). In the case we presented, the fact that the person started to stay with his sister in a central city with high social control may have enabled him to stay away from the substance.

Psychological rehabilitation is one of the most important stages to be considered in substance addiction. Rehabilitation programs help to acquire the necessary skills to cope with addiction and provide social support. It has been reported that individuals who do not receive any support after the detoxification process use substances again after a while (Alsubaie, 2023), while those who participate in the rehabilitation process have lower relapse rates (Şamar & Sema, 2022). The fact that the presented patient stayed in the rehabilitation center for about 5 months after his last hospitalization in our clinic was an important step to ensure remission.

One of the most commonly associated offences with substance use is the offences committed to obtain financial income (Pierce et al., 2015). The fact that the patient, who did not have any previous criminal history, committed theft in order to obtain substance is an example of the hypothesis that substance abuse leads to crime. Because the patient could not afford it financially after the development of substance addiction and resorted to such behavior, from this point of view, providing effective treatment for substance abuse may reduce the rate of offences in this group.

In this report, we present the story of a patient diagnosed with methamphetamine use disorder whose remission was achieved with the support of her sister and by relocation despite repeated relapses. The patient started substance use in an area that can be considered as a disadvantaged neighborhood, and although he received inpatient treatment several times, he could not move away from his environment because he continued to live in the same area and started to use substances again. Afterward, he remained in remission for 1,5 years with the rehabilitation process, moving away from the neighborhood and the support of his sister. In the process of handling the offence he committed, although it was initially decided that he would be followed up with probation provisions because his sister covered the financial damages of the relevant market and the complaint was withdrawn, he was eventually punished with imprisonment. Although this situation is sad for the patient and his family, the changes in his life during his stay with his sister and the fact that he did not continue substance abuse are promising for his treatment. In conclusion, an effective treatment approach in the fight against methamphetamine addiction should be holistic, including both pharmacotherapy and psychosocial interventions. It is essential to consider environmental factors in treatment processes and to integrate these factors into treatment strategies.

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DECLARATIONS

ETHICS APPROVAL AND CONSENT TO PARTICIPATE

The consent of the patient presented in the article was obtained for the article.

CONSENT FOR PUBLICATION

The consent of the patient presented in the article was obtained for the article.