

Chapter Four: The Relationship Between Stigma and Substance Use Disorder

Hang Su, Yifan Xu

The previous chapters have laid the foundation for understanding stigma and its impact on mental health and substance use disorders. We have explored the definitions, types, and consequences of stigma, as well as the specifics of SUD. This chapter aims to delve deeper into the intricate relationship between stigma and SUD, examine how different factors influence stigma related to SUD, compare perceptions of SUD versus other mental illnesses, and explore the role of stigma as a barrier to seeking care.

1. Understanding the Relationship Between Stigma and SUD

Stigma is a significant barrier to treatment for individuals with SUD, deeply affecting both the onset and progression of the condition. It manifests as fear of judgment and discrimination, often preventing people from seeking help. This leads to untreated conditions and exacerbates the cycle of addiction. Stigma is pervasive in both public and private spheres, resulting in social exclusion, negative stereotypes, and internalised shame.

The relationship between stigma and SUD is bidirectional. Stigma not only contributes to the onset and exacerbation of substance use disorders but also acts as a barrier to treatment and recovery. Individuals with SUD face significant obstacles in accessing healthcare services, including discriminatory attitudes from healthcare providers and inadequate treatment options. This lack of access can result in untreated conditions and a cycle of addiction that is difficult to break.

The impact of stigma on recovery is profound. One critical aspect is self-stigma, or the internalisation of negative societal attitudes. Self-stigma can erode an individual's self-esteem and self-efficacy, resulting in a lack of motivation to pursue recovery. This phenomenon, known as the 'why try' effect, causes individuals to give up on important activities and goals due to an expectation of failure (Corrigan et al. 2009a). Consequently, stigma not

only hinders initial help-seeking but also undermines long-term recovery efforts by fostering a sense of hopelessness and low self-worth.

Moreover, stigma can obscure the true burden of substance use disorders in the population, as individuals may be reluctant to disclose their struggles due to fear of judgment. Social exclusion and isolation, resulting from stigmatising treatment, can lead to further drug use, directly exacerbating the disease. Ignoring or rejecting individuals who use drugs serves as a powerful social penalty, potentially spurring further drug-taking behaviours. This creates a vicious cycle where isolation drives continued substance use, worsening the condition (Volkow 2020).

Addressing self-stigma is critical for improving treatment outcomes and supporting long-term recovery. Individuals who internalise societal stigma may develop feelings of worthlessness and hopelessness, undermining their motivation to seek help and engage in recovery efforts. This internalised shame can lead to social withdrawal and isolation, further compounding the challenges faced by those with SUD.

It is crucial to delve deeper into the underlying factors that contribute to and perpetuate stigma. Exploring these factors will provide valuable insights into the societal, cultural, and institutional influences that shape public perceptions and attitudes towards individuals with SUD. This understanding is vital for crafting strategies to mitigate stigma and improve support for those affected by substance use disorders.

Factors Influencing Stigma

Several factors contribute to the stigma associated with substance use disorder, including blame, stereotypes of dangerousness and unpredictability, knowledge about SUD, contact and experience, media portrayals, and race and ethnicity (National Academies of Sciences, Engineering, and Medicine 2016 pp. 36–41).

Blame

Individuals with substance use disorders are generally considered to be more responsible for their conditions than those with depression, schizophrenia, or other mental disorders. The belief that a person's substance use disorder is the result of their own behaviour influences attitudes about the value and appropriateness of publicly funded alcohol and

drug treatment services (National Academies of Sciences, Engineering, and Medicine 2016). Several studies consistently show that individuals with SUD are rated significantly more to blame for their condition (59%–67%) compared to individuals with other psychiatric disorders, such as schizophrenia (4%–6%) (Yang et al. 2017).

Stereotypes of Dangerousness and Unpredictability

People with substance use disorders are often viewed as more dangerous and unpredictable than those with other mental health conditions, such as schizophrenia or depression. A survey conducted in the United States found that a vast majority of respondents considered it likely for a cocaine- or alcohol-dependent person to harm others (Link et al. 1997). However, people are less likely to endorse the stereotype of violence if they have had direct contact with individuals who have mental and substance use disorders and have not experienced violent acts by people with these disorders.

Stereotypes of dangerousness can influence public policy, often resulting in the restriction of rights for persons with SUD. Public policy debates frequently highlight beliefs about the dangerousness of individuals with mental illness and substance use disorders. Epidemiological reviews indicate a higher relative risk of violence among people with mental illness compared to those without, though the risk remains small. The risk of violence is higher for those with co-occurring SUD and antisocial personality disorders. Additionally, the risk of suicide, another form of violence, is increased by concurrent substance use, symptoms such as hopelessness and depression, psychotic disorders, bipolar disorder, and environmental factors like access to guns and media reporting of suicide (National Academies of Sciences, Engineering, and Medicine 2016).

Knowledge about SUD

The public often views individuals with substance use disorders as weak-willed, despite evidence showing they are as likely to adhere to treatment as those with other chronic medical conditions, such as hypertension or diabetes. Unfortunately, national surveys in the US from 1996 and 2006 indicate that this misperception has increased over time (Kuppin/Carpiano 2006; National Academies of Sciences, Engineering, and Medicine 2016).

Healthcare practitioners outside the field of behavioural health also lack knowledge about SUD, leading to misdiagnosis and inadequate treatment

regimens. Additionally, negative attitudes towards individuals with mental or substance use disorders are prevalent among healthcare providers. For example, despite high remission rates for alcohol dependence found in population-based studies, many health professionals continue to view alcoholism as incurable. In one study, nurses' self-reported lack of knowledge related to behavioural health was associated with greater fear and avoidance of people with substance use disorders, demonstrating the link between lack of knowledge and prejudicial beliefs. Conversely, emergency room staff who reported having skills in treating these disorders held more positive views about the possibility of recovery than those who did not report having these skills (National Academies of Sciences, Engineering, and Medicine 2016).

Contact and Experience

People's immediate social networks and their contact with individuals who have substance use disorders significantly influence their understanding and opinions about these conditions. However, increased contact does not always reduce stigmatising beliefs. Some studies indicate that contact with individuals who have substance use disorders can sometimes increase levels of stigma, especially among health professionals, whose negative attitudes often intensify over time despite more frequent interactions.

Several factors might explain why contact with individuals who have substance use disorders sometimes deepens stigma. These include the severity of symptoms, the stage of recovery, the quality of contact-based interventions, the fidelity of intervention implementation, and the quality of peer training provided to those offering contact services.

Conversely, there is evidence suggesting that contact can reduce stigma towards people with substance use disorders. For instance, medical students in Australia reported more positive attitudes towards illicit drug users after engaging with them in small-group settings. Additionally, in a qualitative study of pharmacists and drug users in a needle exchange programme in the United Kingdom, both groups reported a decreased sense of stigma with increasing contact and familiarity. Reviews of similar studies found that college students with at least 50% of their friends using drugs scored lower on public stigma measures. Moreover, individuals with a family member who had an alcohol use disorder reported lower levels of stigma towards alcohol users compared to those without a diagnosed family member. It is important to note that lower levels of stigma do not imply support

for substance misuse but reflect more positive attitudes towards people with substance use disorders.

Despite these variations in outcomes, the majority of available evidence suggests a strong and consistent inverse relationship between contact as an intervention and the level of stigma. Increased contact with individuals who have substance use disorders is generally associated with lower levels of stigma (National Academies of Sciences, Engineering, and Medicine 2016).

Media Portrayal

The media play a crucial role in stoking fear and intensifying the perceived dangers of individuals with substance use disorders. Media often depict treatment as unhelpful and portray pessimistic views of illness management and the possibility of recovery. Recent research suggests that the broad reach of US media and the volume and intensity of negative coverage about substance use disorders contribute to increasing stigma globally. Media portrayals often focus on individuals with untreated and symptomatic substance use disorders rather than those on a path to recovery, perpetuating negative stereotypes and stigmatising attitudes (National Academies of Sciences, Engineering, and Medicine 2016).

Race and Ethnicity

Individuals of ethnic and racial minorities access mental health care at a lower rate than white individuals, and when they do, the care they receive is often suboptimal. Several factors influence access, including quality of care and rates of treatment for substance use disorders among ethnic and racial minorities and immigrant groups. Quality of care is compromised by language barriers and provider misunderstandings of cultural ideas about illness, health, and treatment. Although most healthcare professionals agree that cultural competency training is important, lack of cultural awareness remains a problem in many healthcare settings. Providing physical and behavioural health services in integrated care settings has been shown to increase participation in substance use disorder treatment for racial and ethnic minorities (National Academies of Sciences, Engineering, and Medicine 2016).

African Americans in the United States have been highly stigmatised and subject to discrimination. For many years, opioid addiction was seen

primarily as a condition affecting disadvantaged minority groups, leading policymakers to deprioritise addiction treatments. However, with the recent spread of opioid addiction (both prescription and heroin) to white populations, public and political demand for appropriate treatments has increased. Some of the stigma associated with substance use disorders may stem from assumptions about the race or ethnicity of those affected by SUDs. The impact of this intersectionality on stigma could be further explored through a hypothetical vignette study. A vignette study is a research method where participants are presented with hypothetical scenarios and asked to respond to them. In this case, participants could be given a description of a person with a substance use disorder, with the race or ethnic identity of the individual being varied and randomly assigned to different participants. This would help explore whether assumptions about race or ethnicity influence stigma toward individuals with substance use disorders (Yang et al. 2017).

In conclusion, the relationship between stigma and SUDs is multifaceted and pervasive, significantly impacting both individuals and society at large. Stigma acts as a formidable barrier to treatment, exacerbating the onset and progression of SUDs by discouraging help-seeking behaviours and perpetuating negative stereotypes. Factors such as blame, stereotypes of dangerousness, inadequate knowledge, limited contact, media portrayal, and racial disparities all contribute to the perpetuation of stigma. Health-care providers, despite their critical role in treatment, are not immune to stigmatising attitudes, which can undermine the quality of care received by individuals with SUDs. Addressing these issues requires comprehensive strategies that promote education, increase empathy, and dismantle discriminatory practices, ultimately fostering a supportive environment conducive to recovery and well-being for all individuals affected by SUDs.

2. Perceptions of SUD Compared to Other Mental Illnesses

Public perceptions of SUD often differ markedly from those of other mental illnesses. SUD is frequently viewed through a moral lens, with individuals seen as making poor life choices rather than suffering from a medical condition. This perception is reinforced by media portrayals that depict people with SUD as criminals or morally weak, further entrenching negative stereotypes and social stigma.

Despite being categorised within the broader spectrum of mental illnesses, SUD is perceived as more blameworthy and dangerous compared to other mental health conditions. Individuals labelled with drug addiction are often seen as more responsible for the onset and continuation of their condition than those with mental illnesses or physical disabilities. This belief leads to greater stigma and a lower likelihood of receiving help. For example, people with SUD are viewed as more responsible for their health condition compared to those with physical disabilities or other mental illnesses, resulting in less empathy and support (Corrigan et al. 2009a).

Structural stigma significantly impacts the treatment and perception of SUD compared to other mental health conditions. This stigma manifests in healthcare, policy, and community settings, where punitive approaches and exclusionary practices are common. Healthcare providers and policy-makers often focus on punishment rather than treatment for SUD, as seen in policies like mandatory minimum sentences for drug offenses. Similarly, structural discrimination against individuals with mental illnesses is evident in the location of treatment facilities, which are often isolated or situated in disadvantaged urban neighbourhoods. For instance, in Shanghai, both voluntary and mandatory rehabilitation facilities for SUD are located in rural areas, reinforcing stigma and isolation. Programmes like clean needle exchanges also face 'not in my backyard' (NIMBY) opposition, illustrating societal discrimination (Link/Phelan 2001).

Phelan et al. (2008) argue that stigma can be understood as a response to perceived threats, with norm enforcement and disease avoidance being particularly relevant to SUD. Norm enforcement arises because SUD is seen as a violation of social norms, prompting societal efforts to defend against perceived social disorder. Disease avoidance, while typically related to contagious diseases, manifests in the fear of addiction, leading people to distance themselves from those with SUD. This fear exacerbates social isolation and exploitation of individuals with SUD, further degrading their social status (Phelan et al. 2008).

Studies have shown that the public perceives individuals with SUD as more dangerous and unpredictable compared to those with other mental illnesses. Two nationally representative studies in the Netherlands and the United States revealed that 71%–87% of respondents believed people with an addiction were prone to violence. Similarly, UK studies from 1998 to 2003 indicated that individuals with drug addiction were viewed as more dangerous and unpredictable than those with severe depression, panic attacks, dementia, or eating disorders. These findings are consistent across

multiple surveys and countries, with dangerousness being a significant contributor to stigmatising attitudes (Yang et al. 2017).

When it comes to treatment perceptions, beliefs about the appropriateness of different treatments vary significantly between mental health conditions and SUD. Medication, psychiatrists, general physicians, and therapists are commonly endorsed as appropriate treatments for mental health disorders. In contrast, for alcohol and drug dependence, prescription medication is less likely to be viewed as appropriate. Instead, non-biological treatments like therapy, talking to family or friends, and self-help groups are more commonly endorsed (Kuppin/Carpiano 2006). While the public recognises the need for formal treatment for mental illnesses like depression and schizophrenia, they are less likely to endorse biologically focused treatments for substance abuse. Beliefs in biological causation are significantly associated with views on treatment appropriateness, particularly formal treatment options. Conversely, non-biological causal beliefs do not strongly predict recommendations for non-biological treatments (Kuppin/Carpiano 2006).

Overall, the perception of SUD compared to other mental illnesses is significantly more negative, affecting how society views and treats individuals with SUD. The stigma, structural discrimination, and differing treatment perceptions contribute to the marginalisation and inadequate support for those suffering from substance use disorders.

3. Stigma as a Barrier to Treatment and Recovery

The relationship between stigma and substance use disorder is bidirectional, with stigma both contributing to the onset and exacerbation of SUD and acting as a barrier to treatment and recovery. Stigmatised individuals often face significant obstacles in accessing healthcare services, including discriminatory attitudes from healthcare providers and inadequate treatment options. This lack of access can result in untreated conditions and a difficult-to-break cycle of addiction.

Effective treatment for substance use disorders is available, but stigma, particularly public or social stigma, remains a significant barrier to accessing and receiving help (Keyes et al. 2010). Stigma among substance users has been linked to lower self-efficacy and a higher likelihood of experiencing discrimination. Several factors contribute to this stigma, including the association of substance use with social and economic problems, involve-

ment in illegal activities to procure substances, co-existing stigmatising health conditions like HIV, engagement in risky behaviours, and societal moralistic views towards substance use disorders themselves (Gyawali et al. 2018).

Additionally, the stigma surrounding substance use disorders, particularly opioid use, is often reinforced by social, political, and legal systems in many parts of the world. This can lead to legally permissible discrimination against individuals with substance use disorders in certain situations. Substance use disorders are frequently viewed not as health concerns but as criminal issues. In some regions, drug use can even result in summary execution (Corrigan/Nieweglowski 2018; Livingston et al. 2011).

Two broad sets of barriers related to stigma undermine care-seeking and service participation. Person-level barriers include attitudes and behaviours such as avoiding treatment or dropping out prematurely, poor mental health literacy, beliefs in treatment ineffectiveness, lack of a supportive network, and perceived cultural irrelevance of treatments. Provider and system-level barriers include lack of insurance, financial constraints, staff cultural incompetence, and workforce limitations, all of which are influenced by stigma (Corrigan et al. 2014).

A study by Keyes et al. (2010) found that individuals with a lifetime diagnosis of alcohol use disorder were less likely to utilise alcohol services if they perceived higher stigma toward individuals with alcohol disorders. This perceived stigma was more common among males, non-white individuals, those with lower income and education levels, and those who were previously married. However, individuals who reported close contact with a person with an alcohol disorder reported lower perceived stigma. The connection between highly stigmatised views of alcoholism and underutilisation of services suggests that stigma reduction should be integrated into public health efforts to promote alcohol treatment (Keyes et al. 2010).

Stigma is also associated with low investment in mental health care. Barriers to accessing mental health care include lower insurance benefits than for physical conditions, low reimbursement rates for mental health providers, and restricted insurance coverage for people with mental health conditions, especially in low-income settings. Prejudice by healthcare staff has been linked to worsened health outcomes due to diagnostic overshadowing, where physical symptoms are misattributed to mental health conditions. These forms of health discrimination contribute to reduced life expectancy among people with mental health conditions. Surveys show that families can also create substantial barriers to help-seeking among adoles-

cents, who may fear their families will not take their problems seriously, decreasing their willingness to seek support (Thornicroft et al. 2022).

Healthcare providers, despite their critical role in treating individuals with SUD, are not immune to the stigma surrounding these conditions. Negative attitudes among medical professionals can significantly impact the quality of care and overall treatment experience for patients with SUD. This perpetuates stigma and hinders effective treatment outcomes (Volkow 2020).

A study conducted in Shanghai, China, examined healthcare providers' attitudes towards people with SUD, finding high levels of public stigma. Over one third of participants expressed concern about their safety due to their work, reflecting occupational stereotypes. Over 80% held discriminatory attitudes towards individuals in recovery, with nearly 90% agreeing that employers would not consider hiring a former substance user over other candidates. These findings highlight widespread discriminatory attitudes among staff related to SUD, affecting employment and social interactions and reinforcing self-stigma among patients (Lei 2021).

Previous international studies have shown similar negative attitudes among healthcare providers towards patients with SUD. A 2019 study in China's methadone maintenance treatment (MMT) clinics found high levels of public stigma, with providers viewing patients as responsible for their unemployment and undeserving of sympathy. These providers also perceived patients as dangerous and were less willing to interact with them (Lei 2021).

While stigma is frequently cited as a barrier to treatment in various studies involving individuals with SUDs, its influence on treatment-seeking decisions varies significantly across different populations. In some cases, compounded stigmas—such as those related to mental illness, homelessness, or interactions with staff at rehabilitation facilities—can strongly impact substance users' decisions to seek treatment. However, there are instances where stigma is not the primary concern, especially when individuals do not perceive their substance use as problematic. Stigma may also manifest indirectly, through concerns about others' perceptions or feelings of embarrassment. Without concentrated efforts to standardise the definition and measurement of self-stigma and perceived social stigma, the exact magnitude of their effect on treatment-seeking decisions remains uncertain (Hammarlund et al. 2018).

In conclusion, stigma significantly impedes both the treatment and recovery of individuals with substance use disorders. By perpetuating nega-

tive stereotypes and fostering discriminatory attitudes among healthcare providers, stigma creates substantial barriers to accessing effective care. Addressing and reducing stigma is essential to improving treatment outcomes and ensuring that those with SUD receive the support and compassion they need to overcome addiction and achieve long-term recovery.

4. Conclusion

The relationship between stigma and SUD is complex and multifaceted. Stigma creates significant barriers to treatment and recovery, rooted in public perceptions and institutional practices. It prevents individuals from seeking necessary help and perpetuates self-stigma, which undermines their confidence and hope for recovery. Compared to other mental illnesses, SUD often faces harsher judgment and punitive measures rather than supportive interventions.

Various factors, including blame, stereotypes of dangerousness and unpredictability, knowledge about SUD, contact and experience, media portrayal, and race and ethnicity, contribute to the stigma associated with SUD. Addressing this stigma is essential for improving the lives of individuals with SUD and supporting their recovery.

Understanding these complex dynamics is crucial as we move forward. In the next chapter, we will explore strategies to challenge and reduce stigma, paving the way for a more inclusive and supportive approach to treating substance use disorders.

Bibliography

- Corrigan, Patrick W./Druss, Benjamin G./Perlick, Deborah A. (2014): The Impact of Mental Illness Stigma on Seeking and Participating in Mental Health Care. In: *Psychological Science in the Public Interest*, Vol. 15, No. 2, pp. 37-70. DOI: 0.1177/1529100614531398.
- Corrigan, Patrick W./Kuwabara, Sachiko A./O'Shaughnessy, John (2009a): The Public Stigma of Mental Illness and Drug Addiction Findings from a Stratified Random Sample. In: *Journal of Social Work*, Vol. 9, No. 2, pp. 139-147. DOI: 10.1177/1468017308101818.
- Corrigan, Patrick W./Larson, Jonathon E./Rüsch, Nicolas (2009b): Self-stigma and the "why try" effect: Impact on life goals and evidence-based practices. In: *World Psychiatry*, Vol. 8, pp. 75-81. DOI: 10.1002/j.2051-5545.2009.tb00218.x.

- Corrigan, Patrick W./Nieweglowski, Katherine (2018): Stigma and the public health agenda for the opioid crisis in America. In: *International Journal of Drug Policy*, No. 59, pp. 44–49. DOI: 10.1016/j.drugpo.2018.06.015.
- Gyawali, Shreeya/Sarkar, Siddharth/Balhara, Yatan Pal Singh/Kumar, Saurabh/Patil, Vaibhav/Singh, Swarndeep (2018): Perceived stigma and its correlates among treatment seeking alcohol and opioid users at a tertiary care centre in India. In: *Asian Journal of Psychiatry*, No. 37, pp. 34–37. DOI: 10.1016/j.ajp.2018.07.018.
- Hammarlund, R/Crapanzano, KA/Luce, L/Mulligan, L/Ward, KM (2018): Review of the effects of self-stigma and perceived social stigma on the treatment-seeking decisions of individuals with drug- and alcohol-use disorders. In: *Substance Abuse and Rehabilitation*, Vol. 9, pp. 115–136. DOI: 10.2147/SAR.S183256.
- Huiting, Lei (2021): Demographic and psychological predictors of substance disorder related stigma: a cross-sectional analysis. Master's thesis, Shanghai Mental Health Center, Shanghai Jiao Tong University School of Medicine.
- Keyes, K. M./Hatzenbuehler, M.L./McKaulhlin, K.A./Link, B./Olson, M./Grant, B.F./Hasin, D. (2010): Stigma and Treatment for Alcohol Disorders in the United States. In: *American Journal of Epidemiology*, Vol. 172, pp. 1362–1372. DOI: 10.1093/aje/kwq304.
- Kuppin, Sara/Carpiano, Richard M. (2006): Public conceptions of serious mental illness and substance abuse, their causes and treatments: Findings from the 1996 general social survey. In: *American Journal of Public Health*, Vol. 96, pp. 1766–1771. DOI: 10.2105/ajph.2004.060855.
- Link, Bruce G./Struening, Elmer L./Rahav, Michael/Phelan, Jo C./Nuttbrock, Larry (1997): On Stigma and Its Consequences: Evidence from a Longitudinal Study of Men with Dual Diagnoses of Mental Illness and Substance Abuse. In: *Journal of Health and Social Behavior*, Vol. 38, pp. 177–190. DOI: 10.2307/2955424.
- Link, Bruce G./Phelan, Jo C. (2001): Conceptualizing Stigma. In: *Annual Review of Sociology*, No. 27, pp. 363–385.
- Living, James D./Milne, Teresa/Fang, Mei Lan/Amari, Erica (2011): The effectiveness of interventions for reducing stigma related to substance use disorders: a systematic review. In: *Addiction*, No. 107, pp. 39–50. DOI: 10.1111/j.1360-0443.2011.03601.x.
- National Academies of Sciences, Engineering, and Medicine (2016): *Ending Discrimination Against People with Mental and Substance Use Disorders: The Evidence for Stigma Change*. Washington, DC: The National Academies Press. DOI: 10.17226/23442.
- Phelan, Jo C./Link, Bruce G./Dovidio, John F. (2008): Stigma and prejudice: One animal or two? In: *Social Science & Medicine*, No. 67, pp. 358–367. DOI: 10.1016/j.socscimed.2008.03.022

- Thornicroft, Graham/Sunkel, Charlene/Aliev, Akmal Alikhon/Baker, Sue/Brohan, Elaine/el Chammay, Rabih/Davies, Kelly/Demissie, Mekdes/Duncan, Joshua/Fekadu, Wubalem/Gronholm, Petra C/Guerrero, Zoe/Gurung, Dristy/Habtamu, Kassahun/Hanlon, Charlotte/Heim, Eva/Henderson, Claire/Hijazi, Zeinab/Hoffman, Claire/Hosny, Nadine/Huang, Fiona-Xiaofei/Kline, Sarah/Kohrt, Brandon A/Lempp, Heidi/Li, Jie/London, Elisha/Ma, Ning/Mak, Winnie W S/Makhmud, Akerke/Maulik, Pallab K/Milenova, Maria/Morales Cano, Guadalupe/Ouali, Uta/Parry, Sarah/Rangaswamy, Thara/Rüsch, Nicolas/Sabri, Taha/Sartorius, Norman/Schulze, Marianne/Stuart, Heather/Salisbury, Tatiana Taylor/Vera San Juan, Norha/Votruba, Nicole/Winkler, Petr (2022): The Lancet Commission on ending stigma and discrimination in mental health. In: *The Lancet*, Vol. 400, pp. 1438-1480. DOI: 10.1016/S0140-6736(22)01470-2.
- Volkow, Nora D. (2020): Stigma and the Toll of Addiction. In: *The New England Journal of Medicine*, Vol. 382, pp. 1289-1290. DOI: 10.1056/NEJMp1917360.
- Yang, Lawrence H./Wong, Liang Y./Grivel, Margaux M./Hasin, Deborah S. (2017): Stigma and substance use disorders: an international phenomenon. In: *Current Opinion in Psychiatry*, Vol. 30, No. 5, pp. 378-388. DOI: 10.1097/YCO.0000000000000351.

