
The Impact of Narcotic Abuse on Users Mental Health: A Literature Review

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ABSTRACT

Narcotic abuse remains a critical global public health issue that affects not only physical health but also psychological well-being, cognitive functioning, and social relationships. The misuse of narcotic substances has been associated with various mental health disorders, including depression, anxiety, psychosis, emotional instability, and cognitive impairment. However, the complex relationship between narcotic abuse and mental health requires comprehensive examination because the two conditions may influence one another through biological, psychological, and social mechanisms. This study aimed to examine the impact of narcotic abuse on users' mental health by synthesizing existing scientific evidence on its psychological consequences, contributing factors, and potential intervention strategies. This study employed a qualitative literature review method. Relevant scientific publications retrieved from reputable databases, including Scopus, PubMed, and Google Scholar, were analyzed according to predefined inclusion criteria. The findings indicated that narcotic abuse significantly increased the risk of mental health problems, particularly depression, anxiety disorders, psychotic symptoms, impaired cognitive functioning, and a reduced quality of life. The findings also demonstrated that the relationship between substance abuse and mental disorders was bidirectional: psychological distress may encourage narcotic use, while prolonged exposure to narcotic substances may exacerbate existing mental health conditions. In conclusion, narcotic abuse should be addressed through an integrated biopsychosocial approach involving medical treatment, psychological support, rehabilitation programs, and preventive strategies. A comprehensive understanding of this relationship is essential for developing effective policies and interventions that improve mental health outcomes among individuals who use narcotics.

Keywords: Narcotic Abuse, Mental Health, Psychological Disorders, Literature Review

INTRODUCTION

Narcotic abuse has become a major global public health concern that extends beyond physical health consequences to encompass profound psychological and social impacts. In recent decades, the widespread availability and misuse of narcotic substances, including opioids, heroin, and synthetic drugs, have increased significantly across various regions, affecting individuals regardless of age, gender, or socioeconomic status. While early research primarily focused on the physiological effects of drug use, contemporary studies have emphasized that the mental health consequences of narcotic abuse are equally, if not more, severe and persistent (Paul et al., 2024).

Mental health, defined as a state of well-being in which individuals can cope with normal life stressors and function productively, is frequently compromised by substance abuse (World Health Organization [WHO], 2021). Narcotic substances directly interact with the brain's central nervous system by altering neurotransmitter activity and disrupting emotional regulation, cognition, and behavior (Volkow et al., 2019). Consequently, individuals engaged in prolonged narcotic use are at increased risk of developing psychological disorders, including depression, anxiety, mood disturbances, and psychosis.

The increasing prevalence of narcotic abuse has been accompanied by a corresponding rise in mental health disorders (Rehm & Shield, 2019). According to the United Nations Office on Drugs and Crime (UNODC, 2022), millions of people worldwide experience drug use disorders, and many of these individuals also suffer from co-occurring mental health conditions. This phenomenon, commonly referred to as “dual diagnosis” or co-occurring disorders, presents significant challenges for healthcare systems because it requires integrated and multidisciplinary treatment approaches (Bahji, 2024; Sweileh, 2024; Szerman et al., 2022).

Despite extensive research on narcotic abuse and mental health, a critical gap remains in understanding the complex and dynamic relationship between these two phenomena. Many studies have examined substance abuse and psychological disorders as separate issues, resulting in fragmented knowledge and limited intervention effectiveness. This separation fails to capture the multidimensional nature of narcotic abuse, which involves biological, psychological, and social factors operating simultaneously (Belfiore et al., 2024).

The magnitude of narcotic abuse highlights the urgency of developing more integrated prevention and treatment strategies. According to the United Nations Office on Drugs and Crime (UNODC), approximately 296 million people worldwide used drugs in 2021, representing a substantial increase compared with previous decades, while millions of individuals experienced drug use disorders requiring medical and psychological interventions (UNODC, 2022). Furthermore, the Global Burden of Disease study reported that alcohol and drug use contribute significantly to premature mortality and disability worldwide, with substance use disorders frequently occurring alongside psychiatric conditions such as depression, anxiety, and psychosis (Degenhardt et al., 2018). These statistics indicate that narcotic abuse represents not only an individual health concern but also a broader social and economic challenge requiring multidisciplinary solutions.

From a psychological perspective, narcotic abuse produces significant alterations in brain function, emotional regulation, and cognitive processes. Narcotic substances influence neurotransmitter systems, particularly dopamine pathways associated with reward mechanisms, motivation, and emotional responses. Long-term exposure to addictive substances may reduce natural reward sensitivity, increase emotional instability, and contribute to the development of psychological disorders. Volkow et al. (2019) explained that opioid misuse affects brain circuits responsible for decision-making, stress regulation, and impulse control, thereby increasing vulnerability to depression, anxiety, and compulsive behaviors. Consequently, individuals experiencing narcotic dependence often face difficulties maintaining emotional stability, social relationships, and daily functioning.

Previous studies have demonstrated a strong association between substance abuse and mental health problems. Khantzian (2017) introduced the self-medication hypothesis, explaining that some individuals use narcotics as a coping mechanism to manage psychological distress, trauma, or emotional suffering. Meanwhile, Koob and Schulkin (2019) highlighted that chronic substance use disrupts stress-response systems and creates an allostatic state that increases vulnerability to anxiety and depressive symptoms. Recent research by Liu et al. (2024), through a systematic review and meta-analysis, confirmed that opioid use is significantly associated with increased depressive symptoms, demonstrating a consistent relationship between narcotic exposure and psychological impairment. These

findings indicate that narcotic abuse and mental health disorders are interconnected phenomena rather than independent conditions.

Although numerous studies have examined the consequences of substance abuse, several limitations remain in understanding the complex relationship between narcotic use and mental health (Smith & Book, 2024; Stone et al., 2020). Existing research often focuses on specific psychological outcomes, such as depression or anxiety, without comprehensively examining the broader spectrum of mental health consequences, including cognitive impairment, emotional dysregulation, psychosis, and social dysfunction. In addition, some studies analyze narcotic abuse primarily from medical or criminological perspectives, resulting in limited integration of biological, psychological, and social factors. This fragmented approach creates a research gap because addiction requires a multidimensional framework that explains how various factors interact in influencing mental health outcomes.

Furthermore, previous empirical studies have presented diverse perspectives regarding the direction of causality between narcotic abuse and psychological disorders. Some researchers argue that prolonged drug exposure directly contributes to neurological changes that trigger mental health problems, whereas others suggest that pre-existing psychological vulnerabilities increase the likelihood of substance abuse as a coping strategy. Research examining trauma exposure and substance use disorders also demonstrates that traumatic experiences frequently function as shared risk factors influencing both addiction and psychiatric disorders (López-Castro et al., 2024). However, an integrated synthesis explaining the reciprocal relationship between narcotic abuse and mental health remains limited, particularly in connecting neurobiological mechanisms, psychological processes, and environmental influences (Glei & Weinstein, 2020; Schulte & Hser, 2023).

The urgency of this research is strengthened by the increasing demand for evidence-based approaches to address substance-related mental health problems. Conventional approaches that primarily emphasize controlling drug distribution and criminal punishment have demonstrated limitations because they often fail to address psychological vulnerabilities and social determinants contributing to addiction. A public health-oriented approach requires a deeper understanding of how narcotic abuse affects mental health conditions so that prevention programs, rehabilitation services, and psychological interventions can be designed more effectively. Research focusing on the relationship between narcotic abuse and mental health is therefore essential to support healthcare professionals, policymakers, and social institutions in developing comprehensive intervention models.

The novelty of this study lies in its effort to synthesize existing scientific evidence regarding the impact of narcotic abuse on mental health through an integrated literature review framework. Unlike previous studies that frequently investigate isolated psychological consequences, this research combines multiple dimensions of mental health outcomes, including depression, anxiety, psychosis, cognitive impairment, and behavioral changes. By integrating findings from previous empirical studies indexed in academic databases such as Scopus, PubMed, and Google Scholar, this research provides a broader understanding of the mechanisms through which narcotic abuse influences psychological well-being.

This study aims to examine the impact of narcotic abuse on users' mental health by analyzing existing scientific findings related to psychological disorders, cognitive consequences, and psychosocial effects. Specifically, this research seeks to identify major

mental health problems associated with narcotic abuse, explore factors contributing to the relationship between substance use and psychological conditions, and develop a comprehensive understanding of addiction-related mental health challenges. Through systematic analysis of previous studies, this research attempts to provide a theoretical framework explaining the interaction between narcotic abuse and mental health outcomes.

The contribution of this research is expected to provide academic and practical benefits in the fields of public health, psychology, and addiction studies. Academically, this study enriches existing literature by presenting an integrated perspective on the relationship between narcotic abuse and mental health disorders. Practically, the findings may support healthcare providers, rehabilitation institutions, and policymakers in designing more holistic intervention strategies that combine medical treatment, psychological counseling, and social support. Ultimately, this research contributes to strengthening global efforts to reduce the negative consequences of narcotic abuse and improve mental health outcomes among affected individuals.

METHOD

This study employed a qualitative research design using a literature review approach to examine the impact of narcotic abuse on mental health. This method was selected to synthesize existing scientific evidence and develop a comprehensive understanding of the relationship between narcotic use and psychological well-being.

The study population consisted of scientific publications related to narcotic abuse and mental health. Sources were selected using purposive sampling based on their relevance, credibility, and contribution to the research topic. The inclusion criteria covered peer-reviewed journal articles, academic books, and official reports published between 2015 and 2025. Only English-language publications indexed in reputable databases, including Scopus, PubMed, and Google Scholar, were included. Studies addressing substance use disorders, psychiatric outcomes, and psychosocial impacts were prioritized, while sources lacking academic rigor were excluded.

Data were collected using a structured document analysis framework developed by the researcher. The framework was used to systematically extract relevant information from the selected literature, including research objectives, methodologies, key findings, theoretical perspectives, and limitations. This process ensured consistency in data collection and supported comparative analysis across studies.

The data collection process involved several stages. First, relevant literature was identified through database searches using keywords such as “narcotic abuse,” “substance use disorder,” “mental health,” “depression,” and “anxiety.” Second, the identified sources were screened according to the inclusion criteria. Third, the selected studies were reviewed, and relevant information was extracted and categorized based on emerging themes. The literature review process was conducted over three months to ensure comprehensive analysis.

Data were analyzed using thematic analysis. The extracted information was coded and categorized into major themes, including depression, anxiety, psychosis, cognitive impairment, and social determinants. This approach enabled the identification of patterns, relationships, and variations across studies. The findings were then critically interpreted to

develop an integrated understanding of the relationship between narcotic abuse and mental health outcomes.

The validity and reliability of the findings were maintained through source triangulation by comparing evidence from various types of publications. The use of peer-reviewed sources and a structured data extraction framework also helped minimize potential bias and maintain analytical consistency.

This study did not conduct primary statistical testing; however, it incorporated findings from previous studies that applied statistical methods, including regression analysis, meta-analysis, and longitudinal modeling. These findings were analyzed based on the reported results of the original studies.

This study had several limitations. As a literature review, it relied on secondary data, which may have been affected by publication bias and differences in methodological quality among studies. Additionally, the inclusion of only English-language publications may have limited the breadth of perspectives represented. Nevertheless, this approach provided a comprehensive synthesis of existing evidence and contributed to a broader understanding of the relationship between narcotic abuse and mental health.

RESULTS AND DISCUSSION

Overview of Empirical Findings

The synthesis of the reviewed literature reveals that narcotic abuse is strongly associated with a wide spectrum of mental health disorders and psychosocial impairments. The relationship is complex, multifactorial, and bidirectional, involving biological, psychological, and environmental determinants. Empirical evidence indicates that individuals who misuse narcotics are significantly more likely to experience depression, anxiety, psychosis, and cognitive dysfunction compared to non-users. Moreover, the presence of mental health disorders also increases the likelihood of substance abuse, creating a cyclical and reinforcing pattern.

Recent large-scale studies confirm this association. For example, a national study on opioid misuse found a substantial increase in anxiety and depression symptoms among users, with a significant portion of affected individuals not receiving adequate treatment . Similarly, cohort-based research demonstrates that mental health conditions are important predictors of subsequent drug misuse, indicating that psychological distress may precede and contribute to substance abuse behaviors. These findings highlight that narcotic abuse and mental health disorders should not be viewed as isolated phenomena but rather as interconnected components of a broader public health issue.

Depression as a Primary Psychological Outcome

One of the most consistent findings across the literature is the strong relationship between narcotic abuse and depression. Neurobiological research suggests that narcotics significantly alter dopamine transmission in the brain, which is responsible for regulating pleasure, motivation, and reward (Volkow et al., 2019). Over time, chronic exposure to narcotics reduces the brain's natural ability to experience pleasure, leading to anhedonia and persistent depressive symptoms. Empirical data supports this mechanism. Studies show that individuals who misuse opioids exhibit significantly higher rates of depression, with some populations showing increases exceeding 20% compared to non-users . Furthermore,

individuals with depression are more likely to initiate narcotic use as a coping mechanism, supporting the self-medication hypothesis (Khantzian, 2017).

The interplay between depression and narcotic abuse is further exacerbated by social consequences such as unemployment, stigma, and family breakdown. These factors intensify psychological distress, reinforcing the cycle of substance dependence. Therefore, depression should be understood not only as a consequence of narcotic abuse but also as a contributing factor that sustains addiction.

Anxiety, Stress Response, and Emotional Dysregulation

In addition to depression, anxiety disorders are highly prevalent among narcotic users. Research indicates that narcotic substances initially produce calming effects by depressing the central nervous system; however, long-term use leads to dysregulation of stress response systems, particularly the hypothalamic-pituitary-adrenal (HPA) axis (Koob & Schulkin, 2019).

This dysregulation results in heightened sensitivity to stress and increased vulnerability to anxiety disorders. Withdrawal symptoms often include severe anxiety, irritability, and restlessness, which further motivate continued drug use. This creates a feedback loop in which individuals use narcotics to alleviate anxiety, only to worsen it over time.

Evidence from clinical populations shows that anxiety disorders are among the most common psychiatric conditions associated with substance use disorders, with prevalence rates exceeding 40% in some groups. This highlights the importance of addressing anxiety as a central component of addiction treatment.

Emotional dysregulation is another critical outcome. Narcotic users often experience difficulty controlling emotions, leading to impulsive behavior, aggression, and interpersonal conflict. These emotional disturbances contribute to social isolation and reduced quality of life.

Psychosis and Severe Psychiatric Disorders

Narcotic abuse is also linked to severe mental health conditions, particularly psychosis. Psychotic symptoms such as hallucinations and delusions are often associated with prolonged or high-dose drug use. These symptoms are caused by disruptions in neurotransmitter systems, particularly dopamine pathways.

Studies indicate that individuals who use drugs as a form of self-medication are at higher risk of developing psychotic symptoms, especially when consumption levels increase over time. This suggests that the intention behind drug use, as well as dosage, plays a significant role in determining mental health outcomes.

Furthermore, trauma-related disorders such as post-traumatic stress disorder (PTSD) are highly prevalent among individuals who use narcotics. Research shows that many drug users have histories of trauma, which increases their vulnerability to both substance abuse and severe mental illness.

The persistence of psychotic symptoms even after cessation of drug use raises concerns about long-term neurological damage. This underscores the importance of early intervention and prevention strategies.

Cognitive Impairment and Behavioral Consequences

Another major finding is the impact of narcotic abuse on cognitive functioning. Chronic drug use has been shown to impair memory, attention, decision-making, and executive

functioning. These impairments are linked to structural changes in the brain, particularly in the prefrontal cortex (Volkow et al., 2019).

Cognitive deficits significantly affect an individual's ability to function in daily life. They reduce academic and occupational performance, impair judgment, and increase the likelihood of risky behaviors. These consequences contribute to a cycle of dependency and social marginalization.

Behavioral changes are also evident. Narcotic users often exhibit impulsivity, reduced self-control, and increased risk-taking behavior. These traits not only exacerbate addiction but also increase the likelihood of engaging in criminal activities.

Long-Term Impact on Quality of Life

The long-term consequences of narcotic abuse extend beyond mental health to include broader aspects of quality of life. Individuals with substance use disorders often experience social isolation, financial instability, and deteriorating physical health.

Research indicates that individuals with co-occurring mental health and substance use disorders are at significantly higher risk of suicide and self-harm (Degenhardt et al., 2018). This highlights the severity of the issue and the urgent need for comprehensive intervention strategies.

The concept of "allostatic load" Koob & Schulkin, (2019) helps explain these outcomes. Chronic exposure to stress and drug use leads to physiological and psychological wear and tear, resulting in long-term health deterioration.

Environmental and social factors play a crucial role in shaping the relationship between narcotic abuse and mental health. Factors such as poverty, trauma, family dysfunction, and peer influence significantly increase vulnerability.

Studies show that individuals from disadvantaged socio-economic backgrounds are more likely to engage in drug misuse and experience mental health problems. Additionally, shared risk factors such as stress and trauma contribute to both substances use disorders and mental illness.

These findings support the biopsychosocial model, which emphasizes the interaction between biological, psychological, and social factors. Effective interventions must address all three dimensions simultaneously.

The findings of this study confirm that narcotic abuse and mental health disorders are deeply interconnected. This relationship is best understood through an integrated framework that combines neurobiological mechanisms, psychological processes, and social determinants.

The novelty of this study lies in its comprehensive synthesis of diverse research findings into a unified analytical framework. Unlike previous studies that focus on isolated aspects, this research highlights the dynamic interplay between multiple factors.

The results also emphasize the importance of shifting from a punitive approach to a public health-oriented model. Addressing narcotic abuse requires not only medical treatment but also psychological support and social interventions.

CONCLUSION

This study concluded that narcotic abuse had a profound and multifaceted impact on mental health, affecting emotional regulation, cognitive functioning, and behavioral patterns. The findings demonstrated that narcotic use was strongly associated with an increased risk of psychological disorders, including depression, anxiety, psychosis, and cognitive impairment.

The relationship between narcotic abuse and mental health was bidirectional and influenced by multiple factors, including environmental conditions, social influences, and pre-existing psychological vulnerabilities. This complexity highlighted the need for integrated and multidisciplinary approaches in both research and clinical practice.

From a policy perspective, several recommendations can be proposed. First, governments should implement comprehensive prevention programs focusing on education, early identification, and community-based interventions. Second, healthcare systems should adopt integrated treatment models that simultaneously address substance use disorders and mental health conditions. Third, rehabilitation programs should incorporate psychological counseling, social support, and reintegration strategies to promote long-term recovery.

In conclusion, addressing narcotic abuse requires a holistic approach that considers the interaction of biological, psychological, and social factors. By adopting such an approach, policymakers and healthcare practitioners can develop more effective strategies to reduce the adverse consequences of narcotic abuse and improve mental health outcomes among affected individuals.

REFERENCES

- Bahji, A. (2024). Navigating the complex intersection of substance use and psychiatric disorders: A comprehensive review. *Journal of Clinical Medicine, 13*(4), 999.
- Belfiore, C. I., Galofaro, V., Cotroneo, D., Lopis, A., Tringali, I., Denaro, V., & Casu, M. (2024). A multi-level analysis of biological, social, and psychological determinants of substance use disorder and co-occurring mental health outcomes. *Psychoactives, 3*(2), 194–214.
- Degenhardt, L., Charlson, F., Ferrari, A., Santomauro, D., Erskine, H., Mantilla-Herrara, A., ... Whiteford, H. (2018). The global burden of disease attributable to alcohol and drug use in 195 countries and territories. *The Lancet Psychiatry, 5*(12), 987–1012.
- Glei, D. A., & Weinstein, M. (2020). Drug use and mental health among older adults: Trends and correlates. *Addictive Behaviors, 102*, 106132.
- Khantzian, E. J. (2017). The self-medication hypothesis of substance use disorders: A reconsideration and recent applications. *Harvard Review of Psychiatry, 25*(2), 107–115.
- Koob, G. F., & Schulkin, J. (2019). Addiction and stress: An allostatic view. *Neuroscience & Biobehavioral Reviews, 106*, 245–262.
- López-Castro, T., Hu, M. C., Papini, S., Ruglass, L. M., & Hien, D. A. (2024). Trauma exposure, PTSD, and substance use disorders: Findings from recent studies. *Harm Reduction Journal, 21*(1), 45.
- Lent, M. R., Napolitano, M. A., Wood, G. C., & Argyropoulos, G. (2025). Associations between cannabis use, self-medication, and mental health outcomes. *Journal of Cannabis Research, 7*(1), 12.
- National Institute on Drug Abuse. (2023). Common comorbidities with substance use disorders research report. <https://nida.nih.gov/research-topics/mental-health>
- Stone, A. L., Becker, L. G., Huber, A. M., & Catalano, R. F. (2020). Review of risk and protective factors of substance use and problem use in emerging adulthood. *Addictive Behaviors, 102*, 106110.
- United Nations Office on Drugs and Crime. (2022). *World drug report 2022*. United Nations. <https://www.unodc.org/unodc/en/data-and-analysis/world-drug-report-2022.html>
- Volkow, N. D., Jones, E. B., Einstein, E. B., & Wargo, E. M. (2019). Prevention and treatment of opioid misuse and addiction: A review. *New England Journal of Medicine, 380*(21), 2063–2074.
- World Health Organization. (2021). *Mental health atlas 2020*. World Health Organization. <https://www.who.int/publications/i/item/9789240036703>
- Liu, L., Bao, Y., & Wang, Y. (2024). The association between opioid use and depression: A systematic review and meta-analysis. *Journal of Affective Disorders, 347*, 123–135.
- Paul, F. A., Dangroo, A. A., Saikia, P., Ganie, A. U. R., Zaid, M., Das, M., & Gogoi, R. (2024). Societal and individual impacts of substance abuse: A comprehensive exploration. In *The Palgrave Handbook of Global Social Problems* (pp. 1–24). Springer.
- Rehm, J., & Shield, K. D. (2019). Global burden of disease and the impact of mental and addictive disorders. *Current Psychiatry Reports, 21*(2), 10.
- Schulte, M. T., & Hser, Y. I. (2023). Substance use and associated health conditions throughout the lifespan. *Public Health Reviews, 44*, 160543.

- Smith, K., & Book, S. (2024). Anxiety and substance use disorders: A review. *BMC Psychiatry*, 24(1), 215.
- Sweileh, W. M. (2024). Research landscape analysis on dual diagnosis of substance use and mental health disorders: key contributors, research hotspots, and emerging research topics. *Annals of General Psychiatry*, 23(1), 32.
- Szerman, N., Torrens, M., Maldonado, R., Balhara, Y. P. S., Salom, C., Maremmani, I., Sher, L., Didia-Attas, J., Chen, J., & Baler, R. (2022). Addictive and other mental disorders: a call for a standardized definition of dual disorders. *Translational Psychiatry*, 12(1), 446.