



BENZODIAZEPINES: CHRONIC USE AND DEPENDENCE



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ABSTRACT

Chronic use of benzodiazepines is a growing public health concern due to its potential consequences. This study aimed to analyze the impacts of this prolonged use, with an emphasis on the development of dependence and its implications for long-term health. A narrative review of the literature was carried out, using the SciELO and LILACS databases, with the selection of articles published between 2021 and 2024. The inclusion criteria included studies that discussed the chronic use of benzodiazepines and its relationship with other substance use disorders, while the exclusion criteria eliminated publications without empirical data or focused on specific samples. After interpreting the results, it was concluded that chronic use of benzodiazepines is strongly associated with the development of dependence and serious long-term health implications, highlighting the urgent need for appropriate management and intervention strategies to prevent and treat these problems.

Keywords: Benzodiazepines. Dependency. Chronic Use.

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INTRODUCTION

Chronic use of benzodiazepines (BZDs) is a common practice in the treatment of anxiety disorders and insomnia, however, it is associated with significant risks that need to be managed with caution. Although these medications are effective in the short term, especially due to their rapid onset of action, prolonged use can lead to the development of dependence, which affects between 20% and 100% of patients who use BZDs for periods longer than six months (Wright, 2020). This risk is of particular concern when patients continue to use the drugs for long periods without adequate follow-up.

Benzodiazepine dependence can be severe and is often associated with patterns of multi-drug abuse, especially in cases where use occurs without close medical supervision. One study demonstrated that 56% of patients used benzodiazepines exclusively, while 44% were involved in multi-substance abuse, highlighting the diversity of usage patterns (Edinoff *et al.*, 2021). In addition, abrupt discontinuation of BZDs can trigger a severe withdrawal syndrome, with symptoms that can be compared to those seen in cases of alcohol withdrawal, which underscores the need for a careful tapering strategy (Edinoff *et al.*, 2021).

Another important aspect to be considered in the chronic use of benzodiazepines is the impact on cognitive functioning. Studies indicate that long-term use may be associated with cognitive decline and increased risk of dementia, especially among the elderly (Lapeyre-Mestre, 2019). Although there are mixed results as to causality between the use of BZDs and these effects, the evidence on impairment of memory and cognitive function is a cause for concern for many healthcare professionals. This aspect is particularly relevant in more vulnerable populations, such as elderly patients, who may suffer even more from these adverse effects (Lapeyre-Mestre, 2019).

In view of the above, the objective of this study is to analyze the impacts of chronic use of benzodiazepines, with emphasis on the development of dependence and its implications for long-term health.

METHODOLOGY

This study was conducted through a narrative literature review, aiming to analyze the impacts of chronic use of benzodiazepines, emphasizing the development of dependence and its implications for long-term health. The databases used to search for articles were SciELO and LILACS, covering publications from different areas of health.

The inclusion criteria established for the selection of articles were: studies that addressed the chronic use of benzodiazepines and their health consequences, published between 2021 and 2024; and articles that discussed the relationship between

benzodiazepine dependence and other substance use disorders. On the other hand, the exclusion criteria were: publications that did not present empirical data or that were previous literature reviews; and studies focused on specific populations that did not represent a comprehensive sample, such as only inpatients.

After applying the inclusion and exclusion criteria, the selected articles were analyzed qualitatively, taking into account the findings, the methodologies used, and the implications discussed by the authors. This analysis allowed a comprehensive understanding of the available evidence on the subject, facilitating the identification of patterns and gaps in the existing literature on the chronic use of benzodiazepines and their consequences.

RESULTS AND DISCUSSION

The chronic use of benzodiazepines (BZD) has generated growing concerns due to its adverse health effects, especially with regard to the development of dependence and the long-term implications. Several studies explore different aspects of this problem, highlighting the multifaceted nature of addiction, the interaction with other substances, and the devastating consequences for physical and mental health. By confronting the ideas present in the works of Lopes *et al.* (2021), Oh, Park and Song (2021), Chapoutot *et al.* (2021) and Sarangi, Machahon and Gude (2021), it is possible to observe the convergence around some central points, while significant differences in approaches and recommendations are outlined.

A crucial aspect addressed by Lopes *et al.* (2021) is the association between BZD use and other substance use disorders, especially alcohol. The study shows that almost half of the patients with alcohol use disorder (AUD) were using benzodiazepines at the time of hospitalization, and a large proportion of these patients had misuse of the medication, characterized mainly by the increase in prescribed doses. This behavior reflects a worrying pattern of tolerance, in which users require progressively higher doses to obtain the same therapeutic effect. The relationship between the duration of alcohol addiction and BZD misuse suggests a complex interaction between these substances, exacerbating the risk of developing substance use disorders. This data is relevant because it reinforces the idea that benzodiazepine dependence rarely occurs in isolation; It is often intertwined in a broader context of cross-dependencies.

Chapoutot *et al.* (2021) corroborate this view by highlighting that BZD dependence is extremely difficult to overcome. The study shows that only 5% of patients are able to stop using it on their own and that, even with medical assistance, success rates in discontinuing

the medication remain between 25% and 30%. These data reflect the severity of the problem, indicating that BZD addiction is not only a therapeutic challenge, but also a public health problem.

The difficulty of stopping use is linked, among other factors, to the development of withdrawal symptoms, which can be severe, including exacerbated anxiety, insomnia, and even seizures, creating a vicious cycle in which the patient resumes use to avoid discomfort. In addition, the study emphasizes that for a significant percentage of patients, psychotherapeutic interventions such as cognitive behavioral therapy (CBT) have been shown to be effective, increasing successful discontinuation rates to up to 70-80% of cases. This underscores the importance of treating not only chemical dependency, but also the underlying emotional and behavioral factors (Chapoutot *et al.*, 2021)

Oh, Park and Song (2021) expand on this discussion by investigating the implications of long-term benzodiazepine use for physical health and mortality. The study conducted in South Korea points out that BZD users have a 1.15 times higher risk of mortality compared to non-users, revealing that the adverse impacts go beyond addiction and significantly affect the overall health of individuals.

According to Oh, Park, and Song (2021), the elevated risk of mortality may be related to a number of factors, including cognitive dysfunction, which is aggravated by long-term use of BZD, especially in older patients. The study mentions cognitive decline and increased vulnerability to falls as some of the most common complications, which can contribute to poorer overall health and increase the likelihood of premature death. This finding is particularly relevant in elderly populations, for whom long-term use of benzodiazepines should be avoided, given the high risk of complications.

Sarangi, Machahon and Gude (2021) bring a contemporary perspective when discussing the impact of the COVID-19 pandemic on the use of benzodiazepines. The study points out that the rates of use of these substances fluctuated during the pandemic, with some studies reporting a significant increase in consumption. This phenomenon can be explained, in part, by the increase in levels of stress, anxiety, and insomnia during the pandemic period, which led many individuals to resort to these medications as a way of coping.

However, according to the aforementioned study, the increase in use also raises concerns regarding the development of dependence, since many individuals may have gone beyond short-term therapeutic use and entered a pattern of prolonged and inappropriate use. This cycle of dependence can be particularly difficult to break, because, in addition to the chemical factor, there is the psychological component, in which individuals

begin to use benzodiazepines to deal with emotional and stress problems exacerbated by the pandemic (Sarangi; Machahon; Gude, 2021)

This analysis is reinforced by the data of Lopes *et al.* (2021), who highlight that chronic BZD use is often associated with psychiatric comorbidities and the use of other illicit drugs, such as cocaine and heroin. This indicates that long-term use of benzodiazepines can not only create a cycle of addiction but also exacerbate other mental health problems and increase the propensity for illicit substance use.

The correlation between BZD use and the development of psychiatric disorders, such as depression and severe anxiety, suggests that these drugs may, in the long term, not only lose their therapeutic efficacy, but also worsen the clinical condition of patients. The study warns of the need for greater awareness among prescribers, since the prolonged prescription of BZD should be carefully monitored and, whenever possible, replaced by therapeutic alternatives, such as psychological treatments or other medications less likely to cause dependence (Lopes *et al.*, 2021).

With regard to treatment, Chapoutot *et al.* (2021) and Sarangi, Machahon and Gude (2021) converge on the idea that a multidisciplinary approach, involving behavioral therapies and psychological support, is crucial to help patients overcome benzodiazepine dependence. Both studies highlight that psychotherapeutic interventions, such as cognitive behavioral therapy, can be extremely effective in helping patients cope with withdrawal symptoms and restructure their addiction-related thinking and behavior patterns.

Sarangi, Machahon, and Gude (2021) also point out that the pandemic has revisited gaps in mental health care, which may have contributed to the increased use of BZD, further highlighting the need for appropriate intervention and the crucial role of mental health professionals in offering ongoing support and alternatives to chronic use of these substances.

The analysis of the studies reveals, therefore, that the chronic use of benzodiazepines is intimate with a series of serious consequences, ranging from the development of dependence and progression to substance use disorders to increased mortality and the deterioration of mental and physical health. The interaction between different substances, the difficulties in stopping use, and the long-term implications for quality of life underscore the need for more effective and preventive management strategies. BZD addiction is a public health problem that requires immediate interventions, both at the prescription level and in the management of patients who are already in long-term use of these substances. The dialogue between the analyzed studies points to the importance of integrated therapeutic approaches, which involve psychological support,



awareness of prescribers, and careful monitoring to mitigate risks and ensure the safety and well-being of patients in the long term.

FINAL CONSIDERATIONS

It was concluded that the chronic use of benzodiazepines is strongly associated with the development of dependence and serious long-term health implications, corroborating the growing concern regarding this issue. The study aimed to analyze the impacts of this prolonged use, highlighting the interaction between benzodiazepines and other substance use disorders, the difficulty of discontinuing medication, and the risks associated with mortality and physical and mental health. Through a comprehensive literature review, it was possible to identify the complexity of the relationships between BZD use and psychiatric comorbidities, as well as the urgent need for effective interventions in the management of these patients.

The analysis of the data revealed that the chronic use of benzodiazepines not only increases the risk of dependence, but also has serious health consequences, such as cognitive dysfunction, increased mortality, and a vicious cycle that makes it difficult to stop using them. The alarming rates of dependence observed in the reviewed studies reinforce the need for a more careful approach on the part of health professionals with regard to the prescription and follow-up of patients in long-term use of these medications. Thus, the objective of the study was achieved, demonstrating that the chronic use of BZD is a public health problem that requires attention and appropriate intervention strategies.

Despite the significant results, this study has some limitations, especially in relation to the diversity of the populations analyzed and the lack of longitudinal data that can provide a more detailed view on the long-term consequences of benzodiazepine use. In addition, the variation in the methodologies of the reviewed studies may have influenced the generalization of the findings, which limits the applicability of the results to all user populations. Therefore, it is critical that future research focus on longitudinal investigations and in different demographic contexts, aiming to better understand the nuances of BZD use and its repercussions.

Future work could include studies exploring alternative interventions to benzodiazepine use, such as integrated therapeutic approaches that consider mental health and psychosocial support, with an emphasis on nonpharmacological methods for the management of anxiety and insomnia. In addition, investigations analyzing the effectiveness of education programs for health professionals on benzodiazepine prescribing, as well as the impact of the COVID-19 pandemic on the pattern of use and



dependence on BZD, are of great relevance. These approaches will contribute to the construction of more effective strategies in addressing the problem of benzodiazepine dependence, promoting the health and well-being of affected individuals.



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