



Sexual Dysfunction associated with Alcohol Abuse Among Male Adults: A Literature Review

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Abstract

This literature review delves into the significant issue of sexual dysfunction resulting from alcohol abuse among adult males in South Africa. There is a dearth of studies on sexual dysfunction caused by chronic alcohol use. With alcohol consumption being a widespread and culturally ingrained behavior in the region, this study examines the existing body of research to elucidate the complex relationship between alcohol abuse and sexual problems in men. Articles were searched from scientific search engines such as CINAHL Plus (EBSCO), PubMed, Medline, APA Psych and INFO as well as manual searches through Google and Google Scholar search engines. Both quantitative and qualitative studies that showed the sexual dysfunction associated with alcohol abuse among male adults were included. A total of 95 articles were screened, and 8 full-text articles were ultimately included in the review. The review reveals a strong association between alcohol abuse and various forms of sexual dysfunction, including erectile dysfunction, diminished sexual desire, and performance anxiety. The detrimental effects of alcohol on the male sexual functioning are multifaceted, involving physiological, psychological, and socio-cultural factors. This literature review offers a thorough examination of the significant concern of sexual dysfunction arising from alcohol abuse in adult males. It underscores the necessity of acknowledging and addressing the intricate relationship between alcohol use and sexual health to formulate effective prevention and treatment strategies. The study advocates for additional research on the same topic, emphasizing the need to inform healthcare professionals, policymakers, and researchers. The ultimate objective is to enhance the sexual health and overall well-being of men through evidence-based insights and targeted interventions.

Keywords: *Alcohol Abuse; Male Adults Sexual Dysfunction*

1. Introduction

Sexual dysfunction associated with alcohol abuse is a complex and multifaceted issue that has significant implications for the well-being of adults. Understanding this association is crucial not only for individual health but also for public health interventions and policies tailored to address the specific needs of this population (Neong, Billington, & Congly, 2019).

Alcohol abuse is a pervasive concern globally, with South Africa being no exception (Bn et al., 2017). The cultural and social dynamics in South Africa contribute to patterns of alcohol consumption that may differ from those observed in other regions (Sudhinaraset, Wigglesworth, & Takeuchi, 2016). As individuals engage in excessive or chronic alcohol consumption, the impact on various aspects of health, including sexual function, becomes a matter of increasing concern (Rohilla, Dhanda, Meena, Jilowa, Tak, & Jain, 2020).

South Africa faces a high prevalence of alcohol abuse, with societal and individual consequences that extend beyond the immediate health risks (Onaolapo, Olofinnade, Ojo, Adeleye, Falade, & Onaolapo, 2022). While the health implications of alcohol abuse are well-documented, there is a need for focused research on the specific link between alcohol consumption and sexual dysfunction among male adults. Sexual dysfunction encompasses a range of issues, including but not limited to erectile dysfunction and diminished sexual desire, which can significantly affect the quality of life for those experiencing these challenges (Salari, Hasheminezhad, Almasi, Hemmati, Shohaimi, Akbari, & Mohammadi, 2023).

Research from other regions has suggested a bidirectional relationship between alcohol abuse and sexual dysfunction. Alcohol's impact on the central nervous system, hormonal balance, and vascular function can contribute to sexual difficulties (Zheng, Islam, Bell, Skiba, & Davis, 2020). Moreover, the psychosocial effects of alcohol abuse may exacerbate existing emotional and relational stressors, further influencing sexual health (Muhamad, Horey, Liamputtong, Low, & Sidi, 2019).

It is widely acknowledged that excessive alcohol consumption has negative effects not only on life expectancy but also on sexual health and relationships. This is due to its neurological and vascular mechanisms and hormonal toxicity, which ultimately has a detrimental impact on both social and sexual aspects of life (Mollaioli et al., 2020). In light of the rise in the number of male adults dependent on alcohol in recent years and the increasing prevalence of sexual dysfunction among males, the researchers have reviewed relevant studies to conduct a comprehensive literature review of the impact of alcohol consumption on man's sexual dysfunction. This study seeks to bridge existing knowledge gaps by examining the prevalence, risk factors, and manifestations of sexual dysfunction among male adults in South Africa who engage in alcohol abuse. Through a comprehensive exploration of this relationship, the findings of this study aim to contribute valuable insights to both academic discourse and public health strategies tailored to the specific needs of the South African population.

2. Methodology

Research articles were searched for from CINAHL Plus (EBSCO), PubMed, Medline, PsycINFO as well as manual searches through Google and Google Scholar search engines. Search expressions were developed for sexual dysfunction associated with alcohol abuse among male adults that were published in the English language from December 2010 to October 2023 (see Table 1). The same expression of search strategy was used for all databases and search engines. Article searching was undertaken from Oct 2023 to November 2023.

Table 1. Searching strategy

AND	sexual dysfunction" or "erectile dysfunction
AND	(alcoholism OR alcohol dependence)
AND	(male adults" AND "alcohol abuse")

Both qualitative and quantitative research articles were incorporated into the review, with the exclusion of non-original research articles. The exclusion criteria ensured that only articles assessing sexual dysfunction associated with alcohol abuse among male adults were included, following the protocol outlined in Figure 1. Data extraction was conducted and recorded in Microsoft Excel, followed by sorting and arranging alphabetically based on the first author's name, with the removal of all duplicates.

To ensure study quality, a scoring system was implemented, and any studies with 5 scores or fewer points were excluded from the review. Each record underwent independent screening by both reviewers, with selection based on the predefined inclusion and exclusion criteria. In cases of doubt during abstract-level screening, records were included for full-text review. Consensus between both reviewers was required for records where doubt existed.

Thematic data analysis was employed to synthesize full-text studies that met the quality assessment criteria of 5 or more scores. Data were coded and categorized to develop themes, with the synthesis process subjected to scrutiny by an experienced researcher to uphold quality and adherence to inclusion criteria. Prior to data synthesis, a meticulous quality assessment of the included papers was conducted, accompanied by a formal risk-of-bias evaluation to ensure the validity and reliability of the findings.

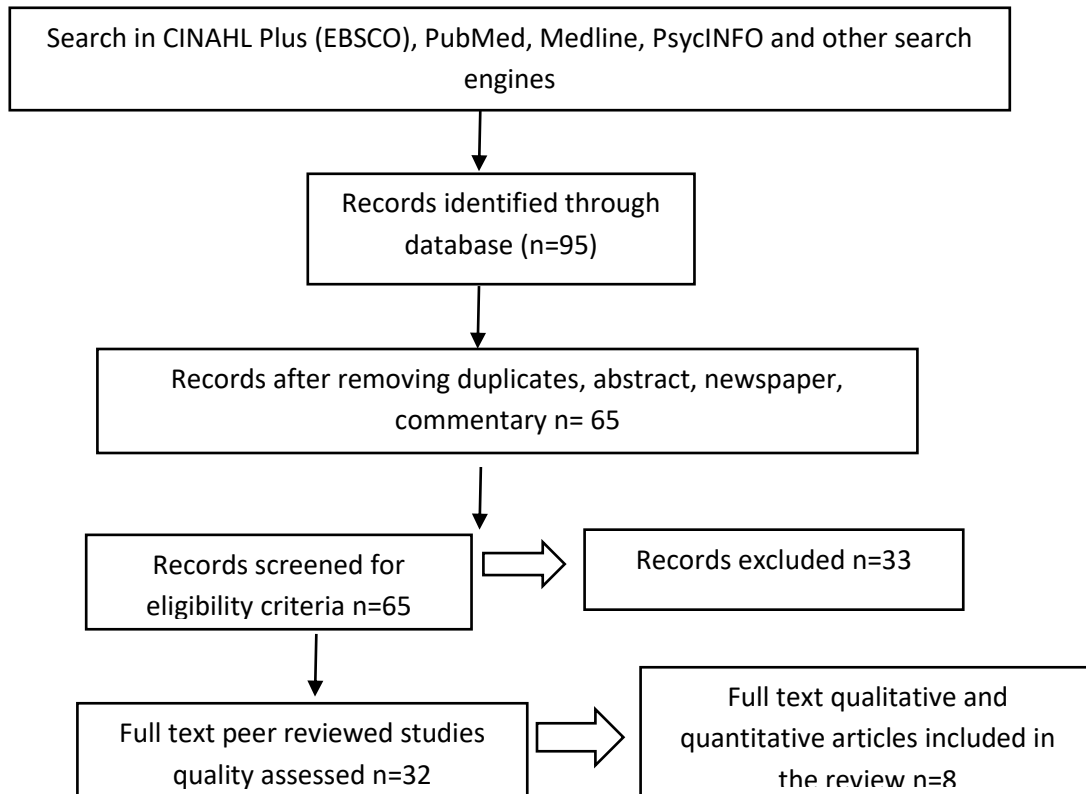


Figure 1. Flow chart for selection of reviewed

2.1 Ethical Approval

This review did not require ethical approval because all the information gathered was freely available in the public domain.

3. Findings

Eight peer-reviewed research papers meeting the inclusion criteria were identified, spanning from December 2010 to October 2023. Among these papers, approximately four focused on the prevalence and patterns of sexual dysfunction in male patients with alcohol dependence. Another study delved into the major domains of sexual dysfunction, specifically sexual desire, orgasmic dysfunction, and satisfaction, exploring their association with sociodemographic factors. A separate paper assessed sexual functions and marital satisfaction among alcohol-dependent individuals compared to matched controls. Additionally, one study determined the typology, demographic, and clinical correlates of sexual dysfunction in alcohol-dependent men, while another explored the relationship between alcohol dependence and erectile dysfunction.

These studies were published across various years: two in 2020, two in 2021, one in 2015, one in 2016, one in 2018, and one in 2022. The synthesized findings from these selected studies, highlighting specific effects identified in this review, are presented below. The researcher also examined how these findings demonstrate the effects of alcohol abuse on erectile dysfunction. Detailed information on each individual study is available in Appendix A Table A1.

3.1 Erectile Dysfunction (ED):

A study conducted by Dhillon et al. (2020) disclosed that approximately 43.58% of alcohol-dependent males experienced erectile dysfunction, as indicated by the International Index of Erectile Function. The literature further establishes a positive association between heavy alcohol consumption and erectile dysfunction. Chronic alcohol intake disrupts the delicate hormonal balance, impeding the capacity to attain and sustain an erection (Prabhakaran et al., 2018). Additionally, it adversely affects the central nervous system, resulting in diminished sexual desire and performance. Another study by Bhainsora et al. (2021) found that 58% of male patients with alcohol-use disorders suffered from erectile dysfunction.

3.2 Premature Ejaculation (PE)

Alcohol consumption can contribute to premature ejaculation, causing distress and frustration in males. The impairment of cognitive and motor skills, often associated with alcohol abuse, can result in challenges in controlling ejaculation. Aswal et al. (2012) conducted a study revealing a 76% prevalence of sexual dysfunction in patients with alcohol dependency. Among these, impotence was the most common diagnosis (28%), followed by loss of libido (26%), delayed ejaculation (10%), excessive libido (8%), and premature ejaculation (4%). A prospective cohort study by Akre et al. (2014) focusing on males aged 18–25 years indicated that alcohol consumption serves as a predictive factor for premature ejaculation. Additionally, Prabhakaran et al. (2018) found that 15.5% of patients with alcohol dependency experienced premature ejaculation in their study.

3.4 Reduced Sexual Desire

The present study reveals that alcohol dependency can dampen sexual desire, often referred to as "brewer's droop," leading to a reduced libido and making it difficult for men to engage in or show interest in sexual activity. In a cross-sectional study examining the prevalence and types of sexual dysfunction among married male patients with alcohol dependence syndrome, the majority reported experiencing more than one sexual dysfunction. Specifically, 87.5% of the patients noted a decrease in sexual drive

(Bhainsora et al., 2021). Mandal et al. (2021) similarly found poor sexual desire among alcohol-dependent men in their study.

3.5 Performance Anxiety

Alcohol-induced anxiety, frequently associated with sexual performance, can worsen sexual dysfunction. This anxiety may initiate a harmful cycle, where individuals turn to alcohol to cope with the distress stemming from inadequate sexual performance, thereby intensifying dysfunction. A study conducted by Acharya et al. in 2022 revealed that approximately 7% of males with alcohol dependency expressed dissatisfaction with their sexual performance. Mandal et al. (2021) found that sexual satisfaction was notably diminished in alcohol-dependent males.

3.6 Relationship Issues

The negative consequences of alcohol abuse on sexual function can significantly affect relationships. Common outcomes include frustration, resentment, and breakdowns in communication, leading to heightened emotional and psychological distress. Research, such as that conducted by Chao et al. (2015), indicates that erectile dysfunction, a prevalent result of alcohol abuse, diminishes sexual satisfaction. This, in turn, has repercussions on partner relationships and overall life satisfaction, causing additional distress.

4. Discussion of Study Findings

This review has uncovered a robust connection between alcohol dependency and various facets of male sexual dysfunction, impacting both physical and psychological dimensions. Understanding these associations is essential for healthcare professionals dealing with the intricate interplay between alcohol use, sexual function, and overall well-being. Chronic alcohol consumption is linked to hormonal imbalances, disrupting the ability to achieve and sustain an erection.

Dhillon et al. (2020) reported that 43.58% of alcohol-dependent males experienced erectile dysfunction according to the International Index of Erectile Function. Bhainsora et al. (2021) supported these findings by revealing a 58% prevalence of erectile dysfunction in male patients with alcohol-use disorders. This aligns with other studies showing a positive association between the quantity of alcohol consumed and sexual dysfunction.

The study by Dişsiz and Oskay (2011) highlighted that the amount of alcohol consumed serves as a significant predictor of sexual dysfunction development. Additionally, Prabhakaran et al. (2018) found a noteworthy positive correlation between the severity of alcohol dependence, daily alcohol consumption, and sexual dysfunction. These collective findings emphasize the critical need for comprehensive understanding and targeted interventions to address the intricate relationship between alcohol dependence and male sexual health.

The present study observed an increased occurrence of premature ejaculation in alcohol-dependent patients. Cognitive and motor skill impairment resulting from alcohol abuse may contribute to difficulties in controlling ejaculation. This aligns with findings from other studies, indicating that premature ejaculation is the most prevalent sexual dysfunction in males with alcohol dependency (Ghadigaonkar and Murthy 2019). Additionally, the current study revealed that alcohol dependency is associated with decreased libido, presenting challenges for men to become aroused or interested in sexual activity. This finding aligns with a systematic review covering clinical and experimental studies on sexual dysfunctions in alcohol-dependent men from North India. The review concluded that elevated alcohol consumption, heightened severity of Alcohol Dependence Syndrome (ADS), and prolonged duration of drinking were correlated with erectile dysfunction (ED), inhibited libido, and delayed ejaculation (Pendharkar, Mattoo & Grover, 2019).

The recent study further highlighted the connection between alcohol-induced anxiety, specifically related to sexual performance. This anxiety may initiate a cycle where individuals use alcohol to cope with distress, exacerbating further dysfunction. Research indicates that individuals may turn to alcohol and other substances to address sexual performance anxiety, enhance performance, or overcome sexual dysfunction, but excessive drinking can lead to increased performance anxiety (Grover et al., 2014).

The detrimental effects of alcohol abuse on sexual function extend to relationships, causing frustration, resentment, and breakdowns in communication. Excessive alcohol consumption is widely acknowledged for its adverse impact not only on life expectancy but also on sexual health and relationships. These effects result from its influence on neurological and vascular mechanisms, as well as hormonal toxicity, ultimately negatively affecting both the social and sexual aspects of life (Mollaioli et al., 2020).

5. Recommended Strategies.

The current study proposes the following strategies to mitigate the prevalence of excessive alcohol use:

Public Health Awareness: Initiatives aimed at raising public awareness about the consequences of alcohol abuse on sexual health can be effective in reducing the prevalence of this issue. Information campaigns targeting both adults and adolescents should be considered.

Access to Treatment: Providing accessible and affordable treatment options for alcohol abuse, including counselling and rehabilitation programs, can help individuals overcome their dependence on alcohol and subsequently improve their sexual health.

Encouraging Healthy Lifestyles: Promoting a healthy lifestyle, which includes regular exercise, a balanced diet, and reduced alcohol consumption, can help alleviate the physical and psychological consequences of alcohol abuse on sexual function.

Educational Programs: Comprehensive sexual education programs should be implemented to address both alcohol abuse and sexual health. These programs can be tailored to different age groups and socio-economic backgrounds.

6. Conclusion

The connection between alcohol abuse and sexual dysfunction among male is a multifaceted issue with significant health, psychological, and relational implications. Addressing this problem requires a comprehensive approach that involves public health campaigns, improved access to treatment, and education programs aimed at promoting healthier lifestyles. By understanding the complex relationship between alcohol abuse and sexual dysfunction, countries can take important steps toward improving the well-being of its male population and fostering healthier relationships and communities. This study also identified a lack of data in many developing countries regarding the connection between alcohol abuse and sexual dysfunction. There is a crucial need for additional research to delve into this topic, allowing for the development of strategies aimed at addressing and mitigating this issue.

AUTHORS' CONTRIBUTIONS: H Matakanye conceptualised, designed and conducted data collection through a literature search where the librarian from the University of South Africa was requested to assist in doing the literature search. The researcher then requested a skilled academic to assist with data analyses and selecting quality articles. The researcher then wrote the manuscript and submitted it to the journal.

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Informed Consent Statement: Not applicable as the study was a systematic literature review.

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Appendix A

Table A1. Summary of reviewed articles Sexual Dysfunction associated with Alcohol Abuse Among Male Adults in South Africa

First Author (Year)	Region	Purpose	Population and sample size	Methodology	Sexual dysfunctional associated with alcohol abuse.	ARI Score
Bhainsora et al., 2021	India	To study the prevalence and types of sexual dysfunction in the clinical sample of married male patients with alcohol dependence syndrome	100 patients with diagnosis of ADS.	Cross sectional study,	Chronic and severe alcohol dependence increases the chances of developing sexual dysfunctions.	
Dhillon et al., 2020	India	To study the other major domains of sexual dysfunction, namely sexual desire, orgasmic dysfunction and satisfaction, and their association with sociodemographic factors	78 male patients were recruited	Cross-sectional descriptive study	Sexual dysfunction in alcohol dependence patients was significantly associated with a family history of paternal alcohol abuse.	
Acharya et al., 2022	India	This study aimed to find the prevalence and pattern of sexual dysfunction in male patients with alcohol dependence	100 patients attending psychiatry out patient department	Cross-sectional study	Sexual dysfunction is significantly and positively associated with duration, amount of alcohol consumed per day, and severity of alcohol dependence.	
Prabhakaran et al., 2018	India	The aim is to estimate the prevalence and correlates of sexual dysfunction in alcohol dependent patients and to explore the	Cross sectional descriptive design.	84 male patients admitted for de-addiction in a tertiary care center.	Sexual dysfunction is common in male patients with alcohol dependence.	

		association between sexual dysfunction and various alcohol-related variables			
Mandal et al., 2021	India	To study the prevalence of sexual dysfunction among alcohol-dependent patients admitted to the psychiatry ward	Cross-sectional study	50 alcohol dependent subjects and 50 healthy controls	Sexual dysfunction is common and seen in nearly half of the patients with alcohol dependence affecting desire, erection, and satisfaction with orgasm. It impairs the sexual satisfaction and quality of life of the individual.
Rohilla et al., 2020	Indian	This study was aimed to assess sexual functions and marital satisfaction among AD individuals compared to matched controls.	Cross-sectional descriptive study	70 alcohol-dependent men	The study showed that participants with AD were more likely to have sexual dysfunction and lower level of marital satisfaction in their spouses
Pendharkar et al., 2016	India	To determine the typology, demographic and clinical correlates of sexual dysfunction in alcohol-dependent men.	cross-sectional study	101 males with alcohol dependence and attending the Drug De-addiction and Treatment Centre and 50 healthy controls	The finding of this study showed that a significant proportion of patients with AD has sexual dysfunction.
Chao et al., 2015	Taiwan	To assess the relationship of alcohol dependence and erectile dysfunction.	cross-sectional study	271 males with history of alcoholism.	

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