ORIGINAL ARTICLE

A Qualitative Inquiry into the Psychosocial Determinants of Sedative Hypnotic and Anxiolytic Misuse among Adults in Islamabad

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ABSTRACT

Objective: The use of sedative hypnotics or anxiolytics in adults poses a significant public health concern. Understanding the underlying factors contributing to their use is essential for devising effective preventive interventions. However, there is a dearth of exploratory studies investigating the determinants of sedative, hypnotic, or anxiolytic use disorder. This study aimed to explore the psychosocial determinants of Sedative Hypnotic or Anxiolytic Use Disorder among adults.

Study Design: A phenomenological qualitative approach was employed.

Place and Duration of Study: The study was conducted at the Department of Clinical Psychology, Shifa Tameer-e-Millat University, Islamabad, Pakistan, from September 2020 to July 2021.

Methods: Eight participants with sedative-hypnotic or anxiolytic use disorder were selected using the snowball sampling technique. By using the DSM-5 criteria for Sedative Hypnotic Anxiolytic Use Disorder, the participants were screened. An in-depth interview was conducted with participants to explore the determinants of sedative, hypnotic, and anxiolytic medications. After transcribing the interviews, thematic analysis was used to extract themes.

Results: The analysis unveiled six psychological themes, including personality traits, distressing life events, depressive features, relapse due to withdrawal symptoms, tolerance, and desired effects of the drug. Additionally, several social themes emerged, such as ease of access, knowledge about the drug, and social influence.

Conclusion: The findings underscore the multitude of psychosocial factors contributing to an individual's susceptibility to drug use and subsequent abuse, highlighting the imperative to address these factors. The study emphasizes the necessity for multifaceted interventions targeting both the psychological and social determinants that drive drug use.

Keywords: *Anti-Anxiety Agents, Anxiolytics, Hypnotics*.

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Introduction

The culture of self-medication in Pakistan is deeply entrenched due to various factors, including limited access to formal healthcare services, pharmacist autonomy in dispensing medications without prescriptions, reliance on traditional remedies, low health literacy, social norms favoring informal healthcare advice, stigma surrounding professional healthcare seeking, and the over prescription and misuse of antibiotics. These factors collectively contribute to a widespread practice where individuals diagnose and treat their own ailments, often without proper medical guidance or supervision.[1] This culture of self-medication poses significant risks, including incorrect diagnosis, improper medication usage, drug interactions, antibiotic resistance, and delayed treatment of serious health conditions. Addressing this issue requires comprehensive efforts to improve

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healthcare access, enhance health literacy, regulate pharmacy practices, promote evidence-based traditional medicine, and raise public awareness of the dangers of self-medication. Collaboration between healthcare providers, policymakers, community leaders, and the public is crucial in promoting safe and responsible healthcare practices in Pakistan.

Substance use disorder, characterized by a constellation of cognitive, behavioral, and physiological symptoms, denotes persistent substance use despite significant adverse consequences. Within the spectrum of substance use disorder, sedative, hypnotic, or anxiolytic use disorder stands as one of ten recognized categories, delineated by prolonged and unjustified self-administration of sedative, hypnotic, or anxiolytic drugs.[1] These medications, classified as benzodiazepines, exert their effects as central nervous system depressants, prescribed primarily for their therapeutic properties such as calming, sleep induction, and anxiety reduction.[2]

Globally, the prevalence of sedative, hypnotic, and anxiolytic use has surged among adults. Data from the National Epidemiologic Survey in the USA indicated an estimated usage of 0.16% and 0.13% for sedatives and tranquilizers in 2001. Similarly, Canada reported a frequency of approximately 3.4% for sedative hypnotic use, while France and Italy reported rates of 7.5% and 8.6%, respectively.[3] This rise in drug utilization can be attributed to indiscriminate prescribing practices and self-medication stemming from inadequate awareness.

The misuse of prescription drugs, particularly sedative hypnotics or anxiolytics, has become a pressing public health concern in Pakistan, garnering heightened attention and resources. Notably, individuals in their teens or twenties who engage in regular use of these substances often escalate their consumption to levels meeting clinical criteria for sedative, hypnotic, or anxiolytic use disorder. In Pakistan, findings from a survey revealed that the average age of sedative hypnotic usage was 25, with approximately 41% of drug users in Sindh reporting usage at some point in their lives. Among this group, 84% had used these drugs in the past year, with a majority reporting daily usage over the preceding 30 days. The average age of initial benzodiazepine use was approximately 25 years.[4]

Psychological determinants, encompassing individual features such as parenting, childhood experiences, and psychological distress, significantly influence behavior. These factors operate at the individual level, shaping mental states and processes. Conversely, social factors, reflecting broader societal structures and processes, exert influence on individuals' behaviors and outcomes.[5] Studies conducted in the United States have elucidated reasons for drug use among adolescents, ranging from seeking independence and relaxation to curiosity and peer pressure.[6] Similarly, experiences of loss, violence, aggression, and trauma have been identified as common themes contributing to substance use vulnerability.[7]

Furthermore, psychological components such as sleep disturbances, life events, chronic stressors, and social norms surrounding alcohol consumption play pivotal roles in predisposing individuals to sedative, hypnotic, or anxiolytic use.[8] Familial, social, and individual risk factors, including childhood maltreatment, familial substance abuse, and association with delinquent peers, have been identified as contributors to substance misuse and subsequent outcomes.[9]

The clinical efficacy of sedatives, hypnotics, and anxiolytics in alleviating anxiety, inducing sleep, and managing panic symptoms is widely acknowledged. Numerous studies have underscored the anxiolytic and hypnotic properties of these medications, as evidenced by research highlighted in a report by the American Psychiatric Association on benzodiazepine dependence, toxicity, and abuse.[10] In Pakistan, the accessibility of sedatives, hypnotics, and anxiolytics over the counter is facilitated by ineffective legislation and lax enforcement, coupled with frequent prescribing by healthcare practitioners. [11] Despite their clinical use, the widespread availability and usage of benzodiazepines among adults raise concerns about potential abuse and addiction. Recognizing the multifaceted factors contributing to the misuse of these medications, including anxiety, insomnia, stress, depression, trauma, and societal pressures, underscores the need for comprehensive prevention strategies within a public health

framework.[12] Benzodiazepines represent one of the most commonly prescribed and utilized pharmaceutical categories globally that have lethal effects. This study aims to explore the psychosocial determinants underlying the use of these drugs, shedding light on the complex interplay of individual and societal factors driving their consumption.

Methods

The study was conducted at the Department of Clinical Psychology, Shifa Tameer-e-Millat University, Islamabad, Pakistan, from September 2020 to July 2021. This study employed a qualitative research design guided by a constructivist paradigm. Constructivism posits that individuals construct their own understandings and meanings through their experiences and social interactions.

In this study, the researcher used snowball sampling to select a sample of individuals. DSM-5 based diagnostic criteria for sedative hypnotic anxiolytic use disorder was used with fifteen participants for screening purposes. Those who met the complete criteria of Sedative Hypnotic Anxiolytic Use Disorder were recruited for the interview. The sample size was 8, including 2 male adults and 6 female adults. The sample was interviewed until saturation. The inclusion criteria were based on participants who were currently using sedatives, hypnotics, or anxiolytics for at least twelve months or more. The researcher opted to interview people aged 20 to 35 for this study. The age limit is intended to create a more cohesive group, making comparisons between participants more relevant. Participants who were using medications other than sedative hypnotics or anxiolytics were excluded.

An interview guide was developed using available literature, expert opinion, and peer review prior to conducting interviews with the participants. The interview guide was a series of questions that explored the psychological and social factors that became a causative agent of the use of sedative hypnotic anxiolytic drugs and how these factors had maintained this behavior.

Table 1: Socio-demographic characteristic of the participants

Variables	Participants
Age	
20-25	3
25-30	3
30-35	2
Gender	
Male	2
Female	6
Occupation	
Employed	2
Unemployed	6
Marital status	
Unmarried	7
Divorced	1

The study protocol was approved by the Institutional Review Board and Ethics Committee of the university, vide letter no: DCP-EAL. No:0006/MS, dated 10th July 2020. Eligible participants were recruited and provided with an information sheet, demographic form, and informed consent documents. Prior to the interview, the study's purpose, procedures, and data use were explained. Participants were informed of the voluntary nature of their participation, their right to withdraw at any time, the confidentiality of their data, and the absence of physical harm. Written consent was obtained from all participants.

In-depth, semi-structured interviews were conducted with 8 adults aged 25-35 years. Interviews were audio-recorded with consent, transcribed verbatim, and transcripts were returned to participants for validation to ensure accuracy. The

data were analyzed using thematic analysis, a qualitative method for identifying, analyzing, and reporting patterns (themes) within the data. The analysis process involved coding the transcripts, categorizing codes, and iteratively developing themes and subthemes. To enhance rigor, the emerging analysis was discussed with a supervisor to identify and mitigate potential researcher biases. Table 1 depicted that the majority of the participants were female (75%, N=6) and were unemployed (75%, N=6) along with unmarried on a marital status (87.5%, N=7), with only one divorced individual. Age distribution was relatively even among young adults: 37.5% (N=3) were aged 20–25, another 37.5% (=3) were aged 25–30, and 25% (N=2) were aged 30–35. Overall, the sample is characterized by young, unmarried women who are currently unemployed.

Results

The thematic analysis of interview data from eight adult participants (aged 25-35 years) identified ten distinct determinants contributing to Sedative, Hypnotic, or anxiolytic use. These determinants were categorized into two primary domains: Psychological Determinants (seven themes) and Social Determinants (three themes). The following sections detail these themes, supported by direct quotations from participants to illustrate the core findings.

Psychological Determinants

Figure 1 illustrates the key psychological determinants associated with the use of sedative, hypnotic, or anxiolytic substances among participants. The findings suggested that a combination of distress, poor coping, and personality-related vulnerabilities increases susceptibility to substance use.

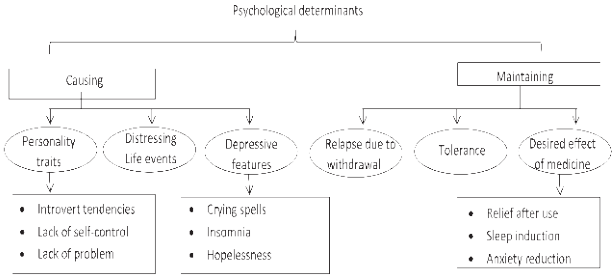

Fig.1: Psychological determinants of sedative, hypnotic, or anxiolytic

1. Personality Traits

A pattern of social withdrawal and limited self-regulation emerged as a key personality-based vulnerability. Most participants described being homebound, having a small social circle, and being reserved.

"I spend all my time at home." (P1)

"I have been staying in a hostel for 5 years and spend most of my time in my room. I don't have many friends here... I am always with family whenever I go home." (P2)

A perceived lack of self-control was directly linked to substance use. Participants described turning to medication when feeling unable to manage their internal states.

"It seems to me that when a person does not have control, then he goes towards this medicine because the only way to control himself is to take the help of medicine." (P4)

Furthermore, difficulty with independent problem-solving was common, with participants reporting needing constant assistance when confronted with challenges.

2. Desired Effects of Medicine

The pursuit of specific, immediate psychoactive effects was a universal motivator. Participants sought SHAs primarily for rapid relief from anxiety, induced sleep, or emotional numbing. Four participants explicitly reported feeling relief and relaxation.

"After taking this medicine, I get relief, I become stress-free." (P2)

"After taking the medicine, I feel much better, and my mind gets relaxed, my body nerves get better... Just like all the tensions are over." (P3)

Management of insomnia was a primary desired effect for four participants.

"I feel sleepy after taking medicine... I sleep a lot by taking this medicine... But that medicine become a requirement for me." (P1)

"The effect of this medication is that I can sleep easily at night but if I don't take it I am unable to sleep whole night." (P7)

Three participants reported a reduction in acute anxiety symptoms.

"I need to use this medicine when I have restlessness at night because of which I do not sleep and I take this medicine to get rid of restlessness …" (P1)

"It seems that now I can easily express myself after taking medicines because I used to get sweat during confusion, my hand legs got it... now after taking

medicine I got the control over my body." (P5)

3. Distressing Life Events

Acute or chronic psychosocial stressors acted as significant triggers for both initiation and escalation of use.[12] Almost all participants believed that distressing events detrimentally impacted their well-being and led to initial drug use. These events included traumatic accidents, romantic breakups, and academic pressure.

"My paper was in General Medicine after 4 days, and I couldn't sleep at night... so to ease my mind, I took a .05 Xanax." (P4)

4. Depressive Features

Symptoms of depression, including persistent low mood, crying spells, and restlessness, were closely intertwined with SHA use. All participants reported depressive features leading to initial use and later misuse.

"I used to cry the whole day, I used to cry so much without any reason." (P4)

"I need a lot at that time when I have a lot of restlessness at night due to which I cannot sleep." (P1)

5. Relapse Due to Withdrawal

A powerful cycle of addiction was maintained by the fear and experience of withdrawal symptoms. Five participants reported resuming use after attempting to cut down due to experiencing severe withdrawal symptoms like insomnia, gastrointestinal distress, and heightened anxiety.

"I stopped taking this medicine for 1 week but I was facing a lot of issues. So I started taking it again." (P1)

"I have tried to stop the medicine but I could not sleep much again and then the same thing… I used to have stomach pain, diarrhea and vomiting." (P7)

6. Tolerance

The pharmacological phenomenon of tolerance was a key factor driving the progression and chronicity of the disorder. Four participants reported needing higher doses to achieve the initial desired effect, resulting in more frequent use.

"Yes, absolutely. Initially, I started with 0.05 mg of dose, and now it has increased to 1 mg in three years. And earlier I was just taking medicine in case of a problem, now it is that if there is any small issue, then I take it." (P2)

"Yes, it has increased a lot... earlier I used to use it only when I had to give a presentation, now I have started using it regularly." (P5)

Social Determinants

Based on the qualitative data summarized in Figure. 2, the social determinants driving and maintain sedative-hypnotic or anxiolytic use among adults can be grouped into three interconnected themes: ease of access, knowledge sources, and social influence.

1. Ease of Access

The widespread and unregulated availability of prescription SHAs was a critical enabler. Participants obtained medications without prescriptions from friends, family members, or home supplies, highlighting a casual circulation of these drugs.

"This medicine was given to me by my friend... his brother is a doctor, so always finds it in his house." (P5)

"Seeing me crying all night my aunt gave that medicine to me for use which was available at home..." (P6)

2. Knowledge About Drug

Participants' understanding of the drugs' effects and risks primarily came from non-medical sources. Two participants with medical or self-taught backgrounds cited formal or internet-based research.

"I myself am a house officer and I studied it in pharmacology; I know the action mechanism behind this." (P2)

"I have learned a lot from the internet... I saw a video on YouTube that shows how this medicine affect you." (P8)

Knowledge was also shaped by social media, normalizing use.

"I have followed bloggers on Instagram for a long time who also use the same medicine for a long time now he's alright." (P5)

3. Social Influence

Initiation and patterns of use were often directly influenced by an individual's immediate social network. Three participants reported friends introducing them to the drugs for managing study-related stress.

"My one or two friends used to do this medicine... when there was a prep leave... the one who couldn't sleep took a tablet." (P2)

"One of my friend told me about it, she was a regular user of that medicine so she guide me about medicine and their dosage." (P4)

Another three participants reported familial

influence, observing or obtaining medications from family members who used them.

"My aunt... gave that medicine... she also had sleep issues, so she was taking it from long time." (P6)

"Father had medical issues, and sometimes doctors prescribed the same medicine to him, and I myself used to give this medicine to my father." (P7)

Discussion

The primary objectives of this research were to examine the psychological and social influences on the utilization of sedatives, hypnotics, and

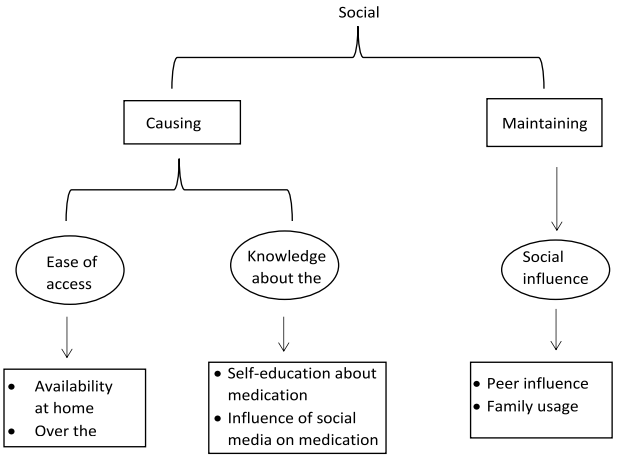

Fig.2: Social determinants of sedative hypnotic or anxiolytic use disorder among adults

anxiolytics among adults. It sought to elucidate how these factors contribute to medication initiation and perpetuate substance misuse. The study's conclusions stem from the analysis and interpretation of data gathered via in-depth interviews conducted with eight participants currently engaged in the use of sedative hypnotics or anxiolytics. Through the thematic analysis, psychological and social determinants emerged as significant precursors to drug use among adults.

Personality traits represent fundamental characteristics that distinguish individuals from one another, encapsulating their distinct patterns of thoughts, emotions, and actions.[13] Within the context of drug use, three specific themes emerged as key personality traits predisposing individuals to substance abuse: introverted tendencies, lack of self-control, and deficient problem-solving skills.[14] Research conducted in the National Institute on Drug Abuse (NIDA) suggests that individuals with extroverted personalities may be more inclined to seek rewards beyond the pleasurable effects of drugs.[15] Conversely, those with introverted traits may exhibit lesser interest in such rewards, instead being drawn to the gratifying sensations induced by drug use. This study's results highlighted how introverted tendencies, characterized by a preference for solitude, limited social connections, and a reserved demeanor, were prevalent among participants engaging in drug abuse.[16]

Furthermore, the findings underscored the significant influence of self-control on individuals' drug-related behaviors. Self-control, defined as the internal struggle between reason and emotion, intellect and impulse, and executive function and action, emerged as a critical determinant of substance use.[17] It is widely acknowledged that self-control serves as a robust predictor of excessive alcohol consumption, tobacco use, and drug abuse among individuals. The influence of distressing life events, such as divorce, breakups, accidents, loss of a parent, and major setbacks, emerged as a prominent theme among participants, motivating their use of drugs.[18] Substance abuse often serves as a coping mechanism for individuals experiencing psychological distress. Individuals with mood disorders may seek pharmacological assistance to manage their negative emotional states.[19] While these substances may offer temporary relief from mood symptoms, prolonged use and withdrawal can exacerbate mood disturbances, leading to heightened abuse and eventual dependence. The study's findings identified three psychological determinants perpetuating the use of sedatives, hypnotics, and anxiolytics: relapses due to withdrawal, tolerance, and the desired effects of the substance.[20] The first theme that emerged as a perpetuating factor was relapse due to withdrawal. Several participants reported relapsing after a period of abstinence due to experiencing withdrawal symptoms.[21] Withdrawal often leads to relapse due to the physical discomfort and psychological distress associated with cutting down drug use.[22] Symptoms such as anxiety and low mood, coupled with physical discomfort, serve as strong motivators for drug abusers to continue their substance use and increase their risk of relapse.[23] Another theme was tolerance to the substance, with participants mentioning the need to increase the dose to achieve desired effects.

Tolerance develops when individuals no longer respond to a drug as they did initially, necessitating a higher dose to achieve the same effect. Lastly, a consistent theme throughout the interviews was the desired effects of medication on psychological and physical well-being. Subthemes emerged, including reported relief after use, sleep induction, and anxiety reduction. Participants cited relief from insomnia and anxiety as key reasons for their drug use. The study also highlighted two social determinants contributing to drug use: ease of access and knowledge about the drug. Easy accessibility to drugs, as noted in previous research, encourages substance use. Participants mentioned obtaining sedatives, hypnotics, and anxiolytics easily from pharmacies without prescriptions, reflecting the prevalence of over-the-counter medicines in Pakistan. Lastly, social influence emerged as a significant determinant, with participants citing family and peer influence as contributing factors to their drug use. Social learning theory suggests that individuals, especially those in influential roles, can encourage substance use in others.

The findings of this research were subject to certain limitations. The results couldn't be broadly generalized to all populations due to the limited sample size and the limited inclusion of males in the research. DSM-5-based semi-structured interviews was conducted with participant screening rather than a standardized diagnostic tool. Future research should explore cultural and biological determinants of sedative hypnotic anxiolytic addiction and investigate additional risk factors or personality traits that heighten vulnerability for using these drugs as a coping mechanism.

Conclusion

The study concludes that various psychological factors, such as personality traits, distressing life events, and depressive features, play a significant role in facilitating the excessive use of anxiolytic and sedative-hypnotic drugs. Additionally, social factors such as easy access to drugs, knowledge about their use, peer pressure, and a family history of drug use contribute to adults becoming susceptible to using anxiolytics, leading to anxiolytic, sedative, and hypnotic disorders.

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Author Contributions

MF: Conception and design of the work, manuscript writing for methodology design, investigation, data acquisition, curation, statistical analysis, validation of data, interpretation, write-up of results, revising, editing, supervising for intellectual content, writing the original draft, proofreading, and approval for final submission

SG: Conception, design of the work, and approval for final submission.

MF is the nominated guarantor and takes full responsibility for the overall content and integrity of the work