



A Qualitative Study of Gender Disparity of Substance Use in Children: Understanding Diverging Pathways and Influences

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Abstract

In India, substance abuse among children is a growing health concern with significant impact on the mental well-being, health, academic performance and social functioning. This study examines the gender disparity of substance abuse among Indian children, with the focus on the initiating factors, pattern of use, reason for continuation, and psychosocial outcomes between both boys and girls. The present study focuses on the qualitative approach and draws on semi-structured questionnaires. The sample consists of 20 participants (10 girls and 10 boys) receiving de-addiction rehabilitation treatment in SPYM organization, Delhi. Findings of the study reveal a notable gender-based disparity in both types of substance abuse and socio-environmental triggers that influence the consumption of drugs. The study reveals that while boys exhibit higher deviant behavior linked to substance use, both genders are equally vulnerable on an individual level. Environmental factors influence addiction risk in both genders, with peer pressure and family dynamics having a greater impact on boys. These findings highlight the need for gender-sensitive, context-specific prevention and intervention strategies.

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INTRODUCTION

Worldwide, there has been a rapid increase in the consumption of drugs, especially among underage children. Substance abuse is defined as 'harmful and hazardous use of psychoactive substances', such as illicit drugs and alcohol.¹ A person consuming the substance is habituated and uses substances in a way that is extremely risky as well as damaging for the user and the people around them. As per the World Drug Report (2021), the year 2019 has observed a rapid rise of 22% of people who took substances was observed from the year 2010 and there has been an increase in drug trafficking and substance abuse worldwide.² India got caught in this destructive cycle of abuse, with the number increasing day by day. It is estimated that 1.58 crore children between the ages of 10 and 17 in India struggle with substance addiction, including cannabis.² In addition, according to a Ministry of Social Justice and Empowerment (2019) report, 2.8% of Indians between the ages of 10 and 75 (or 31 million people) already consume cannabis.³ Substance abuse is one of the main reasons that

claim lives on the streets, especially among children. According to the Save the Children, India report,⁴ substance abuse is reported as a major health problem in this segment of the population. These children indulged in substance use at any time in their lives, and it started at the minimum age of 5 years old.⁵

Substance use affects both men and women differently. There are various aspects in which gender disparity is observed, such as biological, psychological and social aspects. Although it is observed that substance-use disorder is reported higher among men as compared to women, women with substance-use disorder represent a more vulnerable profile, where they are less likely to undergo treatment.⁶ Substance abuse among women was not recognised until recently, as most studies focused on the context of substance abuse among males.⁷ Men and women also differ differently for their consumption of substances. Talking about the prevalence and pattern of substance abuse, men are observed to have a higher prevalence and abuse illicit drugs, whereas women are observed to rely on licit or prescriptive drugs. Considering the difference in terms of the psychological and emotional triggers, men usually consume drugs due to social pressure, peer pressure, or thrill seeking, but women consume substances as a self-medicated way to overcome stress, trauma, anxiety, or depression. For social and environmental reasons, men are accepted in society for substances such as alcohol or recreational drugs, hence allowing them to seek treatment, whereas substance abuse among women is considered taboo, which further restricts them from seeking treatment. Therefore, gender has implications for health issues across the lifespan of a person in terms of norms, roles, and relations. It also influences a person's willingness to take risks and health-seeking behavior, exposure to health risks, and vulnerability to disease.

Substance abuse among children is a global concern; context-specific patterns shaped by the socio-cultural and economic factors need to be taken into consideration. Although existing literature addresses the growing incidence of substance abuse, there is a scarcity of literature on the gender disparity of substance abuse, especially among chil-

dren. The impact of gender disparity on substance abuse is complex and depends on multiple factors. These areas are not explored much, especially in the Indian context, where substance abuse among girls is considered taboo and is often neglected, hence minimally researched. Gender plays a crucial role in shaping adolescent exposure to substances, their coping mechanism, peer influences, and prevention and rehabilitation services. Therefore, the aim of the study is to understand the gender disparity in the diverse pathways and influence of substance abuse. The first objective of the study is to focus on the different pathways that lead to gender differences in substance abuse and the second objective of the study is to understand the influence of substance abuse on both genders.

METHODOLOGY

Study Design

The participants were selected through purposive sampling according to the purpose of the study and to ensure representativeness in the study. The study uses a qualitative multiple case study where multiple participants (10 boys and 10 girls) were interviewed. Case study design helps in in-depth exploration of complex issues, multiple cases ensure the comparability of the data within and across data and it helps in gaining a holistic perspective. It also involves an investigation of an exclusive system, which is used to examine a situation inside a certain context and time frame.^{8,9} Hence, it is a more suitable approach in this study. A retrospective approach was used as where the participants were required to recall their substance abuse experience, family situations and peer relations.

Participants

The participants selected were the children from the lower socioeconomic strata in Delhi, where families were involved in jobs like daily wage workers, labor, house helpers, etc. 20 children (10 girls and 10 boys) were selected. The children selected in the study have been cannabis consumers for more than 1 year. The participants selected in the study are the newly admitted children (to avoid the influence of

the treatment on the study) in the SPYM organisation, Delhi. There are two separate centres for the treatment of boys and girls with addiction. The mean age of the participants is 14.4 years for girls and 13 years for boys.

Ethical Approval

This study has received ethical approval from the Institutional Ethical Committee (IEC) of Sikkim University. Informed consent was obtained from participant parents and the organization prior to inclusion in the study.

PROCEDURE

First, permission was sought from the centre's coordinator. Children who are newly admitted (1–2 days of admission) were identified and studied, to minimize the compounding bias due to treatment. After that, each participant was interviewed separately in a separate room so they wouldn't feel uncomfortable disclosing their prior experiences. After being informed about the study, the participants were given the assurance that they could leave the study at any moment if they so desired. As a result, the interviewer read and clarified the consent letter to the parents and the organization's project manager in a preferred language (Hindi and English). Before they signed the consent form, they were asked if they had any questions.

Initially, questions concerning personal information and family history were given to the participants. The interviewer then moved on to discuss the participants' past substance use and the factors that led to drug misuse. A semi-structured questionnaire was developed focusing on the initiation of the substance, peer pressure, school environment, family issues or conflicts, behavior, personal issues, and others. The interviews were all conducted in the morning between 10 a.m. to 12 noon. The duration of each interview ranges from 30 to 40 minutes.

Data Collection and Analysis

Approval from the selected university's research committees to conduct the study was obtained. In-depth interviews were used in this study to gather data in order to look into people's opinions, experiences, and/or motivations about particular topics.¹⁰

A semi-structured schedule guided the interview process. The data were analysed using qualitative thematic analysis according to Braun and Clarke's (2006) six-step method.¹¹ The transcripts were read many times and the initial memo was taken. A data-driven approach was used to generate verbatim codes and identify themes.

A scheduled method was used to collect the interview responses and was analysed using Braun and Clarke's six step method.¹¹ The transcripts were read many times and the initial memo was taken. A data-driven approach was used to generate verbatim codes and identify themes.

RESULTS

Six main themes have emerged from the data and each theme has further sub-themes. These themes and sub-themes help in identifying the factors responsible for the gender disparity among children in substance use. The main themes that emerged were: Individual vulnerability, family as a factor into substance abuse, Deviant behavior, Environmental facilitation, Peer relation, and Positive insight into the future. A thematic network (Figure 1) of the themes and sub-themes is created to create an illustration for the factors associated with substance abuse.

DISCUSSION

The aim of the study is to understand gender disparity and diverging pathways and influences that affect childhood substance use. The prevalence of the gender disparity in substance abuse is significantly higher in the Indian context; significantly, boys consume illicit drugs higher rate in comparison to girls.¹²

Theme 1: Individual vulnerability to substance abuse

The primary impact of the substance abuse is observed on the participants, both boys and girls, is that they themselves become vulnerable to the substance abuse.

Sub-theme 1.1. Early initiation

The present study shows that both girls and boys started consuming substances below the age of 12

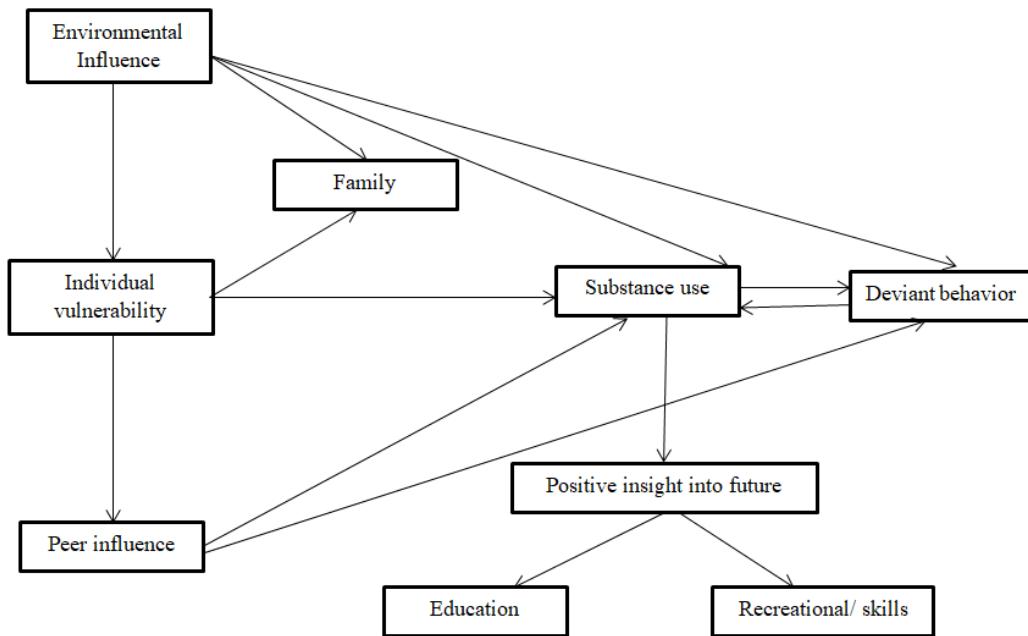


Figure 1: A thematic network of the factors associated with substance use

years. The average age of initiation in boys is 10.5 years, and in girls is 10.7 years. Early onset is related to early exposure to unhealthy and harmful habits. Children at this stage are not mentally developed to understand what they are doing and the consequences of their actions. Hence, this leads to unhealthy dependence on the drugs at an early stage.

Sub-theme 1.2. Withdrawn from education

The dropout rate is common among both genders. It is observed that education is the first thing that is most affected once the child is addicted. Schooling is not given much importance by the children after they go into addiction. The study shows that the majority of children have reached middle school and drop out after that. Children whose parents are into addiction, in such households too, education is not given much importance, as the dropout rate is observed to be higher in the families where education is not given much importance.¹³

Theme 2: Family as a Factor in Substance Abuse

Children observe behaviour from their surroundings. When they observe that a particular behaviour is

normal in their surroundings, they themselves get involved in the behaviour without understanding the consequences of the behaviour.¹⁴ The study reveals that family as a facilitator for addiction is observed in both genders.

Sub-theme 2.1. Familial facilitation

Family impacts both girls and boys equally, but through different approaches. Boys who develop attachment issues with family members are inclined toward substance abuse to fill the hole in their relationship.¹⁵ Boys are more likely to observe a father who is into addiction, some with only daily tobacco consumption, some of them being occasional drinkers, or some who drinker regularly and become more fascinated with it than girls. One of the children's fathers died due to overconsumption of alcohol. Apart from the parents, the siblings of the children also engaged in the addiction. Some of them are consuming legal (alcohol) and illegal (smack, ganja, etc.) after reaching the legal age, whereas siblings who have not reached the legal age still consume drugs. Girls who experienced Adverse Childhood Experiences (ACEs) such as parental substance abuse and neglect are strongly linked to substance abuse that leads to developing low self-esteem, impulsivity, and attachment issues.¹⁶

Sub-theme 2.2. Familial relationship

The majority of children, especially boys, reported having a good and warm relationship with either parent, mostly with the mother, where the child reported that “*papa ke saath rishta accha nahi hai sirf mummy ke saath hai, papa nasha karke aate hai ladai hoti hai ghar me*” (*I have a good relationship with my mother but not with my father, father is an alcoholic and every time he drinks we have a fight*). Disrupted familial relationships are reported more by the girls as compared to the boys.¹⁷ The majority of girls reported an association of shame and addiction. A girl reported that “*Parivar sharminda hai, aas paas ke logo ko bol diya hai mai rishtedar ke ghar me hu*” (*My family is ashamed of me, they have told the neighbours that I live separately from my relatives*). Children mostly share a warm relationship with their siblings, but some children reported that consumption of the drugs has strained their relationship with their siblings, as one child reported that “*Bhai ke saath theek hai behen ke saath nahi, behen mana karti hai nasha karne se nahi manne se baat nahi karti hai*” (*My relationship is good with my brother, not with my sister, my sister told me not to consume, but I didn't listen, so she doesn't talk to me now*).

Sub-theme 2.3. Conflict between parents

Both the girls and boys reported that their parents shared abusive relationships, especially due to the father's alcoholic nature as One child reported that “*jab bhi papa nasha karke aate hai mummy ke saath ladai hoti hai*” (*There is a fight between parents whenever father drinks*). Apart from the addiction, financial strain is also the main important reason for the conflict, as a child reported that “*paise ko wajah se ladai hoti hai roz*” (*Conflicts related to money occur*).

Theme 3: Deviant Behaviour

Deviancy is observed more among boys as compared to girls. This is due to the fact that girls are under parental supervision, despite both young girls and boys spending equal amounts of time with their peers. Girls' deviant behavior decreases when they spend time with their parents, whereas spending time with parents does not have any impact on the boys' deviant behavior.¹⁸

Sub-theme 3.1. Running away tendency

Boys and girls have reported that at least once in their lifetime, they have run away from their home. Running away tendency is often a display of the child psychologically escaping from the environment that is toxic. The child tries to escape a difficult home environment and the negative consequences of the child's addiction that have been left on the family. Girls who ran away were more likely to have PTSD and have sex to survive, while boys were more likely to commit violent and drug-related crimes.¹⁹ NCRB reported that children who run away from home are the ones who are often neglected and abused at their home or surrounding. One child reported “*haan, jab mai 6 saal ka tha tab ghar se bhaaga tha dosto ke chakkar me*” (*Yes, when I was 6 years old, I ran away from my home due to my friends*), another child reported that “*Haan baga tha 5-6 baar 2-2 mahine ke liye*” (*Yes, I ran away from my home for 5-6 times that too for 2 months every time*).

Sub-theme 3.2. Impulsivity

Children reported that they do not think before they act and take actions without much thought. Impulsivity increases the risk for drug abuse, and conversely, substance use produces acute and chronic changes in impulsivity.²⁰ Boys with histories of substance use show increased impulsivity and decreased inhibition, especially among users of cannabis or alcohol,²¹ whereas girls with a history of substance abuse show increased levels of urgency-related impulsivity (i.e., acting on impulse during distress).²² One of the participants reported that “*haan mann toh abhi bhi karta hai. Nahi toh apne aap ko nuksan pahuchane ka mann karta hai*” (*Yes, I still feel like consuming it, otherwise I feel like hurting myself*). Another child who stays with friends and consumes drugs reported that “*haan, chor se cheena hai bina kuch soche samjhe*” (*Yes, I steal without thinking much*).

Sub-theme 3.3. Guilty

Guilt plays a critical and gender differentiated role. Boys are more likely to experience behavioral guilt, such as about their actions and their consequences, like hurting someone, whereas girls are more likely to experience relational/ emotional guilt, like disapp-



pointing others, breaking trust, or being a burden on loved ones.²³ In this study, a boy responded that "*log nashedi nashedi bolte hai isiliye wapas nahi jaane ka mann karta hai*" (People labelled me as 'addict', that's why I don't feel like going back). A girl reported that "*gharwale sharminda hai, logoko bola hai bahar rishtedaaro ke ghar pe hai*" (Family is ashamed and they told everyone that I am at a relatives place). This study also observes the behavioral guilt experienced by boys and relational guilt experienced by girls.

Sub-theme 3.4. Antisocial activities

Both boys and girls are likely to become involved in antisocial activities, as drugs push the children into criminal activities due to the need to support them financially. Boys exhibit a higher rate of overt aggression, such as violence, vandalism, and gang activities,²³ whereas girls show more covert or relational antisocial activity, such as lying, risky sexual behavior, or manipulating adults.²⁴ In the present study, the majority of the men were involved in antisocial activities such as snatching, robbery, gambling, etc., whereas a few girls were involved in gang activities and often involved in lying to their family or engaging in risky sexual behavior.

Theme 4: Environmental facilitation

Research suggests that environmental factors influence substance use behaviors. Differences in racial and socioeconomic status are examples of environmental factors that might contribute to substance abuse, including exposure and access to substances, neighbourhood disadvantage and disorder, and environmental barriers in treatment that contribute to the growth of substance abuse in the society.²⁵

Sub-theme 4.1. Unsafe environment

The majority of the children are living in an environment where it is unsafe for their personal growth of the person. Children living in such conditions become numb to the outside crime and consider it a 'normal day-to-day activity'. Boys who grow up in high-risk environments are often involved in early substance use and externalising antisocial behavior.²³ One child reported, "*Area accha nahi hai, waha pe bohot saare log nasha karte hai*" (Area is

not good; there are a lot of people in my area who consume substances). However, the environment has an equivalent impact on the child's substance abuse despite gender. It is observed that girls report more higher risk in early substance initiation as compared to the boys.²⁶

Sub-theme 4.2. Social taboo

Social taboo is associated with people becoming addicted. Once a person consumes drugs, they become an addict for their whole life. Even if they want to leave, the taboo is not letting them. These children are labelled as delinquent and troubled by society, which makes the child difficult to come out of the taboo. Social taboo is more relevant amongst girls' substance use despite being the ones who consume less than boys. One girl reported that "*parivaar wale sharminda hai, logo ko bol rakha hai padhne bahar bheja hai*" (Family is ashamed they have told everyone that I have sent me to study outside). This explains the cultural shame attached to girls that leads to facing harsher judgment and "moral panic".²⁷ A boy reported that "*haan, padosi pareshaan karte hai, nahi bhi nasha karne pe tokte hai*" (Yes, neighbours tease a lot, even if I don't consume, they tease that I have consumed). Social taboos among boys might make them receive more severe punishment from law and order. Social taboo often creates gender specific roles in society, hence creating gender differences.

Sub-theme 4.3. Weak law and order

Weak law and order often leads to a lack of supervision and enforcement of the law and provides liability to those who sell drugs to minors. This leads to the normalcy of substance abuse in society. According to the UNODC report (2024) countries with porous law enforcement, children as young as 10 years are exposed to the street- level substance sale and abuse.²⁸ This also leads to the peer-led exploration of harmful and illicit substances like cannabis or inhalants. Boys are more likely to engage in distribution, increasing the addiction risk, whereas girls, especially runaways, are pulled into drug-for-sex exchanges or exploitation. Hence, having a strong law and order is important to provide stability, safety and prosperity in the society.

Theme 5: Peer relations

Cultural norms highlight the discrepancy between genders as they dictate a double standard for the monitoring and punishment of deviance for girls and boys. Peer substance use is one of the strongest predictors of a child's substance initiation across different cultures.²⁹ This discrepancy is observed to play different roles between boys and girls. On one hand, boys have a greater opportunity to engage with classmates who encourage them into substance abuse, while female adolescents are often protected from engagement with their peers.³⁰

Sub-theme 5.1. Peer influence on addiction

Children, especially boys who are into substance abuse, have shown that they have been negatively influenced by their peers to engage in the risk-taking behavior, with one of the children stating that "*nahi wo humhe galat raste pe le jaa rahe hai, galat kaam karwa rahe hai jaise chor nasha*" (No, they are misguiding us, they make us steal and do drugs). Children's perception of the importance of peer approval and use is more often overestimated, which fuels the idea that "everyone is doing it". Girls often start consuming substances through their close relationships, such as boyfriends or female friends.³¹ One girl reported that "*mere boyfriend ke saath kiya tha pehli baar*" (Started consuming it with my boyfriend first).

Sub-theme 5.2. Lack of a good friend

Children whose friend circle involves both high levels of positive and negative friendships are more likely to become involved in substance abuse.³² Other research also talks about that friendship intimacy has potential risk for adolescents regarding substance abuse, depending upon factors such as the characteristics of a friend.³³ Behavioral issues are more likely to lead to substance use when close friends are also users. In the absence of strong connections with peers who do not use substances, at-risk adolescents may gravitate towards deviant social groups. This study reveals that the majority of the participants, both girls and boys, have friends who are addicted, due to which they gravitate towards substance abuse themselves.

Theme 6: Positive insight into the Future

During addiction recovery, moving forward with a positive outlook or positive mindset plays a crucial role. It is grounded in purpose, hope and realistic goals. This psychological orientation leads to a reduction in the relapse rate and improves resilience and motivation. During the treatment, encouraging the patients to set small personal goals, engaging in skill-building, and discovering the purpose of life shifts the focus from the past trauma or failure towards a positive future.

Sub-theme 6.1. Education as a factor in leaving addiction

School-based prevention is found to be an effective strategy for the reduction of substance abuse among children.³⁴ Research shows that both boys and girls who have lower educational attainment are linked with more drug abuse, whereas higher educational attainment leads to a decreased likelihood of becoming involved in substance abuse.^{35,36} Education helps in developing awareness, critical thinking, decision-making skills, and provides a structured, positive environment in the life of a child. Education can also be integrated into the rehabilitation program, which helps them to recover and reintegrate into society.

Sub-theme 6.2. Learning recreational activities to help them leave addiction and become financially independent

Recreational activities can contribute to their recovery and future stability by focusing on redirecting focus and energy, building self-esteem and confidence, social connection and social support, and skill development. By developing and enhancing their skills, they can turn those skills into professionalism and become financially independent. This study shows that where the majority of boys are involved in playing outdoor games, girls are involved in household work such as cooking. Research has shown that children participating in multiple leisure activities exhibit lower rates of substance abuse and better mental health outcomes as compared to those who are not involved in leisure activities.³⁷⁻³⁸



LIMITATION

Social desirability will be observed as higher on the sensitive topics like substance use and family behaviors. This might be experienced among the girls, who may experience greater stigma. Secondly, due to geographical limitations from lower socioeconomic strata in Delhi, it limits the generalizability of the results to other urban or rural settings in India or different socioeconomic contexts. Third, the small sample size in the study limits the generalizability of the findings among children from the community. Fourth, contextual variables such as the availability of substances, school environments, and community-level interventions were not studied comprehensively, which may have influenced the outcomes. Finally, the study does not consider environmental and familial factors that might influence mental health issues, trauma exposure, or developmental disorders, which can co-occur with substance use and vary by gender.

CONCLUSION

The findings show gender-specific differences in substance use among children from disadvantaged socioeconomic backgrounds in Delhi. The research shows that although both boys and girls are individually vulnerable to substance use, boys exhibit a notably higher prevalence of deviant behaviors associated with substance use. Factors in the environment- such as exposure, availability, and lenient social norms- significantly contributed to early initiation and continued use. Peer influence emerged as a more significant factor, reflecting children's stronger reliance on social and peer connections within their communities. Additionally, familial substance use indicates distinct gender pathways of risk within the family setting, influencing both girls and boys equally but differently. Other factors like early initiation, deviant behavior, or environmental facilitation show a considerable amount of impact on both boys and girls. These findings show the importance of developing intervention strategies that are sensitive to gender and specific to the context, taking into account the actual experiences of children living in marginalized urban areas. Programs aimed at prevention and treatment must consider the distinct

social and family structures that influence substance use behavior among boys and girls in these communities. By integrating gender-specific risk factors and local socio-environmental contexts, public health initiatives can be more effectively designed to reduce early substance use and its long-term effects on at-risk populations.

Availability of Data and Materials

Due to the potential for participant identification, the datasets developed and evaluated during the present study are not publically available; however, they can be obtained from the corresponding author upon reasonable request.

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