

Psychosocial Determinants Of Drug Abuse: A Mixed-Methods Case Series From Tamil Nadu, India

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ABSTRACT

Drug use in young people is an increasing health issue in the community that is determined by various psychosocial and environmental factors. There is limited evidence that investigates these determinants in region-specific settings, especially in South India. To investigate the psychosocial factors of substance utilization among young people in Tamil Nadu with the help of a mixed-method approach. An explanatory sequential mixed-methods design was adopted. The quantitative component involved a descriptive case series of nine individuals with a history of substance use, using a structured case record format. Descriptive statistics were used for analysis. This was followed by qualitative in-depth interviews, which were analyzed using inductive thematic analysis. Integration of findings was performed at the interpretation stage. Alcohol and tobacco were the most commonly used substances, with evidence of polysubstance use. Media influence was reported by all participants, followed by emotional distress related to broken relationships and peer pressure. Qualitative findings revealed themes of normalization through media, emotional vulnerability, peer conformity, strict parenting, and lack of communication, providing deeper insight into the quantitative results. Substance use is strongly shaped by psychosocial and environmental influences. Integrated, multi-level interventions addressing media exposure, family dynamics, and emotional well-being are essential.

Keywords: Substance use; Psychosocial factors; Mixed-methods; Youth; Media influence

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1. INTRODUCTION

Drug and alcohol use is a major global public health concern, especially during the youth years. Alcohol, tobacco smoking, and illicit drug use are major global causes of disease, death, and social detriment.^{1,2} This population is particularly at risk given the stage of development and the increased influences of social and environmental factors.³ This critical stage may involve exploratory and risky behaviours, and is a vulnerable period for the onset of substance use.

Over the past few decades, we have come to appreciate that substance use is not solely an individual decision but one heavily shaped by an array of psychosocial, cultural, and environmental factors. Peer pressure, family environment, emotional health, and media influences are key factors in the development of attitudes and behaviours around substance use.^{4,5} Social learning theory states that we learn from watching others and mimicking their behaviour, particularly if it is rewarded.^{5,6} This theory is relevant to understanding how teens may learn to use substances from their friends or the media.

India has its own distinct socio-cultural factors that could affect substance use. India is experiencing rapid social and economic changes that have shifted life patterns, norms, and family dynamics. Recent national surveys have shown a high burden of substance use, with alcohol and tobacco being the most prevalent substances used by young people.^{7,8} Research has shown rising trends in early onset and polysubstance use among adolescents, which has implications for future health and social outcomes.⁹ Despite this alarming trend, little is known about the psychosocial factors related to it,

especially at the regional level. The state of Tamil Nadu, a culturally rich region in South India, provides an interesting context. It has robust family structures, high educational standards, and a thriving film industry that exerts a considerable impact on social norms and behaviours. Tamil Nadu's film and digital media often depict substance use in a way that could romanticise these behaviours and influence young viewers. Yet, conventional family systems may include authoritarian parenting and poor emotional support, potentially leading to emotional distress and unhealthy coping strategies. These features of the state suggest that we consider substance use in its cultural context.

Peer influence, relationship difficulties, stress, and family factors have been shown to play a role in substance use in past studies.^{4,10} Adolescence and young adulthood are times when peers play a significant role in social development, and the need for acceptance can be a motivator for substance use.³ Likewise, negative emotional events, such as relationship problems and stress, have been associated with substance use as a coping mechanism.¹⁰ Parents and family have also been shown to play an important role in both protecting against and increasing the risk of substance use.⁴ But how these factors interplay in cultural contexts is not well understood.

To date, the majority of substance use studies in India have used quantitative methods, focusing on epidemiology. These studies offer epidemiological information, but often overlook the why, what, and how of substance use. To inform targeted and context-relevant interventions, it is crucial to understand the "why" of substance use. Explanatory sequential mixed-

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methods approaches, in particular, can be used to combine quantitative and qualitative data to better understand phenomena.¹¹ In view of this, there is a need for research exploring substance use in a multi-dimensional manner, which tries to capture both objective and subjective realms. This is especially relevant in diverse communities such as Tamil Nadu, where social, family, and media factors may play a unique role.

Thus, the current study seeks to understand the psychosocial factors associated with substance use among young people in Tamil Nadu through an explanatory mixed-methods study. This study aims to deliver a holistic view of the social, emotional, and environmental factors associated with substance use through a triangulation of quantitative and qualitative data, and help inform culturally sensitive prevention efforts.

2. METHODOLOGY

2.1 Study Design

We employed an explanatory sequential mixed-method approach in this research to examine the psychosocial factors related to substance use. This is done by collecting and interpreting quantitative data, and subsequently collecting qualitative data to further explain and interpret the quantitative data. The method is quite appropriate in studying a complex behavior, because quantitative patterns can be connected to the experiences of the participants. The mixed-methods method enhances the completeness and clarity of the findings by relating trends to psychosocial processes.¹¹

2.2 Study Setting

The research was carried out in the southern state of India, Tamil Nadu, which has unique socio-cultural attributes. The region has been typified with strong family structures, educational benchmarks, and a strong media environment, particularly through film and the online world. These situational variables are important to the formation of behavioral patterns and provide a feasible space where the psychosocial parameters of substance use amongst the youth are examined.

2.3 Study Participants

The research involved people who had a history of substance use who were determined through purposive sampling. The sampling method was used to make sure that the participants with personal experience of the phenomenon under study were included and could contribute worthwhile information. The study included participants between the ages of 18 years and above, who were willing to participate in the study and give informed consent. Those who did not want to participate or could not deliver credible information were omitted. Nine participants were recruited, and the same group was used in both quantitative and qualitative stages of the study.

2.4 Quantitative Component

The quantitative part of the research was based on the descriptive case series design that was supposed to record the nature and trends of substance use among the participants. A structured format of case record, which captured the socio-demographic information, including age, gender, education, occupation, residence, and family type, was used to collect the data. Moreover, such characteristics of substance use as the type of substance used, duration, frequency, and age of onset were documented. There was also the evaluation of psychosocial factors, such as peer pressure, media influence, family environment, relationship problems, and stress.

The data obtained were tabulated, and the statistical analysis was conducted with the help of descriptive statistics. The distribution of variables was summarized using frequencies and percentages. This step offered an insight into the trends and the commonality of substance use and related psychosocial variables in the research sample.

2.5 Qualitative Component

After the quantitative stage, a qualitative one was implemented to understand more about the psychosocial determinants of substance use. The participants were interviewed using a semi-structured interview guide in which in-depth interviews were conducted. This was done by enabling the participants to share their experiences freely, as well as ensuring that areas of interest were covered across interviews.

The entire interview was done in the local language, called Tamil, to ensure that there was easy communication and that the participants could be more open to give their views. The interviews were tape-recorded with the permission of the participants and transcribed as it is. The transcripts were then translated into English, taking care of the original meaning and context of the responses of the participants.

An inductive thematic analysis method was used in the analysis of the qualitative data. The analysis was initiated by the repeated re-reading of the transcripts in order to become familiar with the data, which was followed by the identification of the meaningful units and initial coding. These codes were then clustered into larger groups, and this resulted in the emergence of themes that portrayed patterns and insights that were recurrent. Themes were checked and revised to make sure that they were coherent and relevant, and ultimate interpretations were made on the basis of narratives of the participants.

2.6 Integration of Quantitative and Qualitative Data

The synthesis of results was done during the interpretation phase of the research. The quantitative findings revealed the psychosocial factors of importance when it comes to substance use, whereas the qualitative findings gave a detailed description of how these factors affected the behavior in the real-life situations. The integration process made it possible to learn more about the phenomenon, linking statistical trends to personal life experience and social backgrounds. The synthesis of

the meaning increased the validity of the results and their applicability.

2.7 Ethical Considerations

The study was conducted with strict observation of ethical principles. All participants were informed about informed consent and informed about the purpose of the research, procedures to be followed, and their right to withdraw without any consequences at any point. Anonymity and confidentiality were ensured by withholding the identification data in the data and by keeping the records secure. The research was conducted in accordance with the general ethical principles of research involving human subjects.

2.8 Rigor and Trustworthiness

The qualitative aspect was rigorous as indicated by the laid-down principles of trustworthiness. The credibility was achieved by means of deep involvement in the interactions with the participants and thorough data analysis. Reliability was ensured using a systematic and clear method of data collection and analysis. Grounding interpretations in the narratives of the participants helped to confirm them, whereas a detailed description of the study context and participants was used to help with the transferability. The mixed-method design also made the study stronger as it allowed triangulation of the results provided by using quantitative and qualitative data.

3. RESULTS

3.1 Socio-demographic Characteristics

A total of nine participants were included in the study. Table 1 shows the socio-demographic characteristics of the participants. Most of the participants included those aged 20-25 (44.4%), above 25 (33.3%), and a small percentage were below 20 (22.2%). This study indicates that males were more represented in terms of use of substances, as the sample consisted mainly of males (77.8%).

Regarding education, the majority of the participants were undergraduate students (66.7%), with a smaller percentage having gone through school (11.1%) or having achieved graduate education and higher (22.2%). In terms of occupation, most of them were college students (66.7%), then there were employed individuals (22.2%), and a minor portion (11.1) of unemployed individuals. The distribution of the participants was rather similar (urban 55.5% and rural 44.4%). The majority of the respondents were members of nuclear families (77.8%), with a lesser percentage of the respondents being members of joint families (22.2%). In this study, as indicated by Table 1, substance use was more prevalent in young, male, college-going people, with no significant difference between the urban and rural populations.

Table 1: Socio-demographic Characteristics of Participants (n = 9)

Variable	Category	Frequency (n)	Percentage (%)
Age (years)	<20	2	22.2
	20-25	4	44.4
	>25	3	33.3
Gender	Male	7	77.8
	Female	2	22.2
Education	School level	1	11.1
	Undergraduate	6	66.7
	Graduate and above	2	22.2
Occupation	College student	6	66.7
	Employed	2	22.2
	Unemployed	1	11.1
Residence	Urban	5	55.5
	Rural	4	44.44
Family type	Nuclear	7	77.8
	Joint	2	22.2

3.2 Substance Use Characteristics

Table 2 summarizes the patterns of substance use among the participants. The most frequent substance was alcohol, with 66.7% of the respondents reporting its use, and then tobacco use (55.6%). A polysubstance use was recorded in 22.2% of the participants, which means that a person is using more than one substance at the same time.

The time of substance use among the participants was different, and over half of them (55.6%) indicated that

they had used substances for more than three years, which implies long-term use. A lower percentage of respondents had used it between one and three years (33.3%), and just a single participant (11.1%) had used it in the last year. The frequency pattern was mostly weekly (66.7%), occasional (22.2%), and daily (11.1%). All respondents indicated that they started using substances at 18 years or above. These findings indicate that the substance use among the participants was regular and sustained, as shown in Table 2.

Table 2: Substance Use Characteristics (n = 9)

Variable	Category	Frequency (n)	Percentage (%)
Type of substance used*	Alcohol	6	66.7
	Tobacco	5	55.6
	Multiple substances	2	22.2
Duration of use	<1 year	1	11.1
	1–3 years	3	33.3
	>3 years	5	55.6
Frequency of use	Occasional	2	22.2
	Weekly	6	66.7
	Daily	1	11.1
Age of initiation	≥18 years	9	100.0

*Multiple responses recorded

3.3 Psychosocial Factors Associated with Substance Use

Table 3 shows the psychosocial factors related to the use of substances. The most notable factor, according to the present research, was media influence, as all participants confirmed it (100%). Sixty-six point seven percent of the participants reported strict parenting, and there was a possibility of association between restrictive family environments and substance use behavior.

Fifty-five point six percent of respondents mentioned peer pressure and relationship-related issues, which shows the significance of interpersonal dynamics. Participants reported stress (33.3%) and broken family structure and poor parent-child communication (22.2%) each. These results indicate that a complex of social, familial, and emotional factors may affect the use of substances, with media exposure being the most universal one, as shown in Table 3.

Table 3: Psychosocial Factors Associated with Substance Use (n = 9)

Psychosocial Factor	Present (n)	Percentage (%)
Media influence	9	100.0
Strict parenting	6	66.7
Peer pressure	5	55.6
Relationship issues	5	55.6
Stress	3	33.3
Broken family	2	22.2
Poor parent-child communication	2	22.2

3.4 Family Environment Characteristics

Table 4 describes family environment characteristics. Most of the participants (66.7%) indicated that they had very strict parental supervision, with the other participants (33.3%) indicating that they were moderately supervised by their parents. No respondent had a soft parenting style, and this shows that most of the parenting styles were authoritarian.

As far as family relationships are concerned, 44.4% respondents had a poor relationship with family, 33.3%

respondents had an average relationship, and only 22.2% respondents indicated that they had a good relationship with family. These results indicate that a significant percentage of the study participants went through inappropriate family upbringing, which can be the root cause of emotional distress and susceptibility to substance use. Also, 22.2% of the participants reported a family history of substance use. As Table 4 indicates, family-related factors have been observed to be important in shaping substance use behavior.

Table 4: Family Environment Characteristics (n = 9)

Variable	Category	Frequency (n)	Percentage (%)
Parental supervision	Very Strict	6	66.7
	Moderate	3	33.3
	Lenient	0	0.0
Family relationship	Poor	4	44.4
	Average	3	33.3
	Good	2	22.2
Family history of substance use	Yes	2	22.2
	No	7	77.8

3.5 Reasons for Initiation of Substance Use

Table 5 provides the reasons why the use of substances was initiated, and Figure 1 shows them. The most common reason for initiation, according to all

participants (100%), was media influence. The second most prevalent factor was emotional distress due to the relationships that were broken, which was reported by 77.8% of the participants.

The peer pressure was mentioned by 55.6% of the respondents, which shows the importance of social conformity and group dynamics in substance use introduction. Conversely, curiosity was indicated by 22.2% of the participants, and stress relief by 11.1%, indicating that those elements were relatively less decisive. Social and emotional factors were more active

initiating factors than individual factors, including curiosity, as shown in Figure 1.

In general, according to Table 5 and Figure 1, the beginning of substance use seems to be considerably predetermined by external psychosocial factors, which are media exposure and interpersonal experiences.

Table 5: Reasons for Initiation of Substance Use (n = 9)

Reason	Frequency (n)	Percentage (%)
Media influence	9	100.0
Broken relationships	7	77.8
Peer pressure	5	55.6
Curiosity	2	22.2
Stress relief	1	11.1

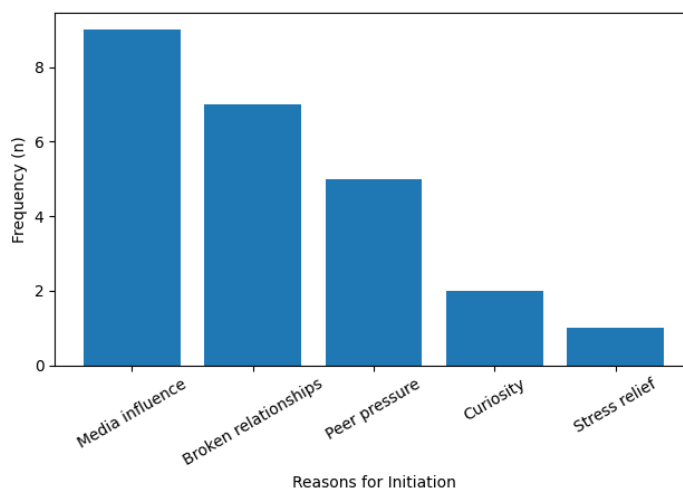


Figure 1. Reasons for Initiation of Substance Use (n=9)

3.6 Qualitative Findings (Thematic Analysis)

The findings obtained after the qualitative analysis of in-depth interviews were the identification of several interrelated themes explaining the initiation and continuation of substance use among the participants. The interviews were carried out in Tamil and allowed the participants to be more open and authentic in their expressions. The transcripts were then translated into English with no loss of original meaning and context. Themes gained as a result of the analysis give more in-depth information about the psychosocial factors that were identified in the quantitative results.

Theme 1: Influence of Media and Normalization of Substance Use

The most dominant theme among the participants was media influence. The participants repeatedly explained the ways in which substance use is represented in films and social media as acceptable, appealing, or even desirable. These images seemed to make substance use appear less risky and have led to normalized use in daily life. Exposure to such images repeatedly affected the attitudes and curiosity of the participants and led to the subsequent initiation of substance use. A significant number of participants saw substance use as a socially acceptable activity, but not a harmful practice. “In

movies, drinking and smoking are shown as normal. It doesn’t look like something wrong.”

Theme 2: Emotional Distress Related to Broken Relationships

A psychological factor that impacted the substance use was emotional distress caused by failed relationships. The participants stated that they had a disappointing, rejected, and emotionally hurt experience following a conflict or a breakup in relationships. The use of substances was commonly explained as a means of coping with these negative feelings. This theme emphasizes the place of interpersonal relations in defining behavior, especially at delicate stages of young adulthood. “After my relationship ended, I felt very low and started using to forget everything.”

Theme 3: Peer Pressure and Social Acceptance

The peer influence was an important factor, especially during the initiation stage of substance use. Respondents have indicated that drug use usually started in social places where there was either direct or indirect communication of encouragement or coercion to conformity to group norms. The need to be accepted and not social outcasts became a powerful incentive to the

use of the substance. "My friends were using, and I didn't want to feel different from them."

Theme 4: Strict Parenting and Lack of Emotional Support

Strict parenting and family environment were found to be a critical contributing factor. Most interviewees reported that their parents were very authoritative, with little room to communicate. The feelings of frustration, lack of autonomy, and isolation were linked to such environments. The participants stated that they could not express their issues or receive emotional support in the family, as this factor led to the desire to find other coping strategies, among which substance use was included. "My parents were very strict. I couldn't share anything with them."

Theme 5: Stress as a Contributing Factor

Stress has become a factor that predisposes substance use behavior. The participants mentioned that they were stressed by different sources, such as personal relationships, expectations, and life difficulties. Drug use was commonly understood as a momentary reprieve from stress. Even though it was not always reported, stress was a significant reinforcing factor in the persistence of substance use. "When I feel stressed, using helps me forget things for some time."

Theme 6: Poor Communication and Emotional Expression

One of the trends that was observed throughout the interviews was the absence of open communication, especially in the family environment. The respondents stated that they had a problem in communicating their feelings and seeking support, and as a result, they internalized their stress and emotional distress. This communication deficiency led to a sense of isolation and vulnerability to substance use as a coping mechanism. "I didn't have anyone to talk to about my problems."

3.7 Integration of Quantitative and Qualitative Findings

The combination of quantitative and qualitative results gives a holistic perspective of the psychosocial conditions of substance use. Though the quantitative research raised significant variables such as media influence, destroyed relationships, peer influence, and family-related variables, the qualitative findings expounded how these variables worked in real-world life situations. The media influence, which was cited by all who were included in the quantitative results, was further expounded in the qualitative analysis as a normalization process by constant exposure to substance use in cinematography and social media. Similarly, the broken relationships that also fall into the category of a major factor in initiation were qualitatively characterized as an emotional distress resulting in substance use as a coping mechanism. The peer pressure that was quantitatively stressed was explained through the stories about the need to be socially accepted and conform to the peer groups. Qualitative narratives were

also used to support family-related issues like stringent parenting and inadequate communication, and elucidate emotional isolation and lack of support structures.

In general, the synthesis of results shows that substance use is not predetermined by a single factor but a complicated combination of social, emotional, and environmental factors. The qualitative results are used to supplement the quantitative results to provide them with depth and context, hence improving the overall interpretation of the study.

4. DISCUSSION

The existing explanatory mixed-method study provides a general understanding of the psychosocial factors that predict substance use in the youth in Tamil Nadu. The mix of quantitative data and qualitative data preconditions the fact that the study highlights a multifactorial and complex nature of the substance use behavior and preponderates on the role of social, emotional, and environmental variables.

The universal impact of media on the initiation of substance use was one of the most outstanding discoveries in this research. The influence of the media was mentioned by all participants, and it showcases the strong role of the cinema and digital platforms in shaping the norms of conduct.⁶ Past studies have shown that recurrent exposure to substance use representations in media may normalize these behaviors and lower the perceived risks, hence increasing the risk of initiation.^{12, 13} These portrayals can even be better when it comes to the young people, since Tamil Nadu is the region where the power of cinema is very high. This observation was also supported by the qualitative data, which revealed the way the subjects internalized these images as socially acceptable practices.

Another important determinant was emotional distress associated with interpersonal relationships, especially broken relationships. The participants often reported substance use as a process of coping with emotional pain and mental distress. This observation conforms to the current literature that people in negative emotional states tend to use substances to self-medicate.^{14, 15} The transition to adulthood is often accompanied by emotional challenges, and inadequate coping mechanisms may increase vulnerability to maladaptive behaviors such as substance use.

Peer influence was also found to be a major influencer of both initiation and persistence of substance use. The need to be socially accepted and to conform to group norms was a very crucial determinant of behavior. Research has always indicated that peer networks play a major role in influencing risk-taking behaviors, especially among adolescents and young adults.¹⁶⁻¹⁸ The qualitative evidence in this research also demonstrated the way in which peer dynamics work in directing encouragement as well as indirect social expectations, which reinforce substance use behaviors.

Another significant determinant was found to be family environment, especially in terms of strict parenting, low communication, and emotional support. The respondents reported having authoritarian parenting

styles that were linked to frustration and emotional seclusion. The past research has reported that parenting styles that are high in control and low in emotional support are linked with a high risk of substance use.^{19, 20} Besides, the absence of open communication in families can lead to the fact that people will not be able to find support in times of distress, which will further contribute to the need to resort to maladaptive coping strategies²¹. Stress was indicated as a causal factor, but it was not as significant as the other factors. The participants reported the use of substances to provide them with a short-term alleviation of stress caused by personal and social problems. This observation concurs with the stress-coping model, which indicates that people can turn to the use of substances as a coping mechanism to deal with the perceived stress in instances where they do not have adaptive coping mechanisms.²² The qualitative results also indicated that stress was usually associated with other determinants, including relationship problems and family issues, which indicated an interplay of various determinants.

The fact that the present study was conducted in the mixed-methods format is also a strength, as it allowed gaining a more profound insight into the subject of substance use behavior through the combination of statistical trends and lived experiences. The prevalence and distribution of psychosocial factors obtained by means of quantitative data were supplemented by the qualitative data aimed at obtaining an explanation to give the contextual meaning to the findings, which contributed to the increased validity and richness of the findings. This approach is particularly applicable in the context of behavioral studies, where there is a complexity in interactions between individual and environmental elements that need to be considered in a holistic manner.²³

Even though the study has its strengths, there are some limitations that are worth taking into account. First, the sample size is small, and thus the findings cannot be generalized to a larger population. Second, purposive sampling can create a selection bias since the participants were chosen based on certain attributes. Third, the use of self-reported information can be prone to recall bias and social desirability bias, which can cause inaccurate responses. Also, the qualitative data were translated into English, which could have introduced slight differences in interpretation, although attempts were made to retain the original meaning. Lastly, the quantitative aspect is cross-sectional in nature, which restricts the possibility of creating a causal relationship between psychosocial factors and substance use.

Further studies are encouraged to use bigger and more diverse populations in the future in order to increase the generalisability of results. Longitudinal research would particularly be beneficial in causal correlation and the time-related formation of substance use. There is also a need to explore intervention-based research that will encompass significant psychosocial determinants that have been identified in this study, which include media influence, peer dynamics, and family communication.

In terms of the significance of multi-level interventions, the results are significant at the level of public health. Media literacy programs can be applied to help the youth become more critical of the content of substances, but family-based intervention can be employed to improve communication and emotional support. Programs based in school and college that target peer education and mental health support can also be useful in decreasing substance use. In addition, the culturally sensitive elements, such as cinema and social norms, are required in the development of efficient preventive approaches.

5. CONCLUSION

The current explanatory mixed-methods research indicates that psychosocial, emotional, and environmental factors have a complex interaction that determines substance use among young people in Tamil Nadu. The results prove that the use of substances is not a single action but is highly rooted in a greater social and cultural setting. Media influence turned out to be the most significant determinant, and exposure to substance use images that caused normalization and risk perception reduction was reported by all the participants. Interpersonal, particularly emotional distress due to failed relationships and peer pressure, also turned out to be crucial in the initiation and maintenance of substance usage. There were also discovered family-related problems, such as strict parenting, poor communication, and the absence of emotional support, which predispose vulnerability by inhibiting the ability to cope in a healthy manner. This mixture of quantitative and qualitative findings provides us with the general idea of the interplay of these factors in reality. In spite of the fact that quantitative data generated significant determinants, qualitative data indicated how this occurred, via normalization, emotional coping, and social conformity. This explains why the multidimensional approach is applicable in the study of substance use behavior. The results as a public health concern depict the relevance of proper and contextual interventions. There is a need for media literacy strategies, family communication, emotional resiliency strategies, and peer influence strategies. Additionally, to prevent, culturally sensitive approaches with references to social conventions of areas and media reporting are necessary. Overall, the given work may be regarded as a contribution to the growing amount of literature on the role of psychosocial factors in substance use and as a stressor of the importance of integrative approaches to addressing the complicated issue.

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