

SUBSTANCE ABUSE: PREDICTING, PREVENTING, AND PROTECTING ADOLESCENTS

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ABSTRACT

The ensuing chapter addresses a very pertinent and sensitive issue viewed from a psychologist's lens that is vividly seen as quite a rampant phenomenon. The global status report presented by World Health Statistics (2024) on alcohol and health and treatment of substance use disorders highlights that in 2019 alone, alcohol caused 2.6 million deaths worldwide, and psychoactive drugs accounted for nearly 600 000 deaths. As such, the impact of substance use on health and development is recognized in the 2030 Agenda for Sustainable Development, through Sustainable Development Goals (SDG) health target 3.5, which calls for the strengthened prevention of substance use and treatment of substance use disorders. In response to this growing concern, the author intends to design a tripartite model- 3P Model—Predict, Prevent, and Protect which aspires to provide a holistic, proactive, and culturally relevant response to the escalating challenge of adolescent substance use in India.

Keyword: Predicting, Preventing and Protecting Adolescents, World Health Statistics, Sustainable Development Goals Etc.

INTRODUCTION

It is ironical to note that the ensuing section refers to the recent research conducted in the past years from the city Chandigarh. That's why the substance abuse issue is particularly striking as Chandigarh, being a hub for educated and forward-thinking individuals with high literacy rate and strong emphasis on education, it shows that even in well-informed populations, mental health support, societal pressures, and accessibility to substances play a big role. These studies underscore the pressing need for targeted interventions and policy measures to address substance abuse among various demographics in Chandigarh.

- *Substance misuse among college-going male students (Singh et al, 2023):* A cross-sectional study involving 256 male college students in Chandigarh revealed that 38.7% engaged in substance use. Smoking was the most prevalent (82.8%), followed by alcohol consumption (75.7%) and chewing tobacco (26.2%). Notably, law students exhibited a 100% prevalence rate, with significant associations found between substance misuse and factors such as age, academic discipline, mother's education level, and current living situation.
- *Addictive behaviours among adolescents (Rana et al, 2023):* Research encompassing 1,634 adolescents aged 13–19 in Chandigarh identified a 19.1% prevalence of addictive behaviours: 6% were current smokers, 6.1% consumed alcohol, and 7% used drugs. Male gender and having a working father were significant predictors of smoking. The study emphasized the need for intervention programs targeting both adolescents and their social environments to mitigate these behaviours.
- *Buprenorphine's impact on substance-abuse patients (The Times of India, October, 2023):* A study by Government Medical College, Patiala, reported that patients

undergoing treatment with Buprenorphine experienced improved health-related quality of life and reduced stigma. The research highlighted the drug's effectiveness in opioid substitution therapy within the region.

- *Urban vs. rural substance abuse patterns (The Times of India, September, 2023):* A comparative study found that urban patients had a higher incidence of psychiatric comorbidities (35.6%) compared to their rural counterparts (26.4%). Mood disorders were more prevalent among urban patients, suggesting the necessity for locality-specific prevention and treatment strategies.

Hence, it is important to note that ever since the onset of this year, 2025, almost every month, different states have been in news regarding this issue. Leading newspaper- The Tribune dated January 25, 2025 mentioned an escalating drug crisis in Punjab, it is therefore called for an urgent and united efforts to address the issue. The Himachal Gyan Vigyan Samiti, Shimla, urged the government to make a concrete policy to check the growing drug abuse and deaths due to it, mentioned in The Tribune, February 25, 2025. Recently, this March 1st, 2025, headline stated “War on Drugs” campaign aimed at ridding the state of the scourge of drug menace.

SUBSTANCE USE, MISUSE AND ABUSE

These terms are often used interchangeably but have distinct meanings, especially in the context of public health, psychology, and social impact. Substance Use is the consumption of legal or illegal substances without necessarily causing harm. Examples include occasionally drinking alcohol in social settings, taking prescribed medication as per the doctor's instructions, using tobacco products within legal limits. Substance Misuse means using a substance in a way that is harmful, inappropriate, or outside recommended guidelines. Examples would be like taking a higher dose of a prescribed medicine without consulting a doctor, using sleeping pills recreationally and occasional binge drinking or mixing substances in ways that may be unsafe where as substance abuse is understood as repeated and excessive use of substances despite negative consequences on health, relationships, or daily life like consistently usage of drugs or alcohol in a way that impairs personal, social, or occupational functioning, dependence on narcotics, alcohol, or prescription drugs and engaging in risky behaviours.

Key Differences

Category	Use	Misuse	Abuse
Intent	Normal consumption	Occasional improper use	Repetitive harmful behaviour
Frequency	Controlled	Sporadic	Chronic and escalating
Impact	No harm	Potential short-term risk	Significant long-term damage

Therefore, from a psychologist's perspective, substance abuse or substance use disorder is considered a chronic and relapsing mental health condition that involves the compulsive use of substances, despite the negative consequences it brings to an individual's life. Psychologists view substance abuse not just as a matter of bad habits or poor choices but as a complex interaction between biological, psychological, and social factors.

Key psychological facets:

Psychological Dependence: Individuals with substance abuse may develop a strong psychological craving for the substance. This can be linked to using the substance to cope with stress, anxiety, depression, or trauma. They may also seek it out for feelings of pleasure, escape, or reward due to the changes it brings in brain chemistry, such as the release of dopamine National Drug Intelligence Center, (2011).

Behavioural Patterns: People with substance abuse often engage in patterns of compulsive behaviour, meaning they have difficulty stopping use despite knowing the negative consequences. This includes repeated unsuccessful attempts to quit and the prioritization of substance use over other life responsibilities.

Cognitive Distortions: Thinking errors or irrational beliefs may play a role, such as believing they can control their use or that the substance is helping them function or feel better, even when evidence suggests otherwise.

Neurobiological Factors: Psychologists also recognize the biological basis of addiction, with substances affecting the brain's reward system. Chronic use can lead to neuroplastic changes in the brain, making it harder to stop using and leading to cravings and withdrawal symptoms (Volkow et al 2001)

Emotional Regulation: Many individuals use substances to manage emotions, particularly if they struggle with emotion regulation. This could stem from childhood trauma, abuse, or mental health issues like depression, anxiety, or bipolar disorder; World Health Organization (2009).

Environmental and Social Factors: Psychologists consider the social environment as a significant influence. Family dynamics, peer pressure, socioeconomic status, and the presence of stressors (e.g., work, relationship issues) can contribute to the development and persistence of substance abuse; Spoth et al (2008).

Empirical reflection on ongoing research and treatment developments in addressing Substance Abuse

Contemporary psychological research increasingly conceptualizes substance abuse as a *biopsychosocial phenomenon*, shaped by the dynamic interplay of biological predispositions, psychological processes, and environmental influences. A growing body of empirical studies reflects this shift, offering deeper insights and more refined interventions. Several psychological theories remain foundational in current research.

- The Biopsychosocial Model (Engel, 1977) continues to guide holistic treatment approaches. Bayar and Ercib (2024) applied this model to cognitive behavioural therapy-based psychoeducation for adolescent smokers, demonstrating reduced substance abuse proclivity.
- The Self-Medication Hypothesis (Khantzian, 1985) is central to research on trauma and addiction. Jiang (2024) supported this perspective by exploring how emotional dysregulation and environmental stressors contribute to substance use.
- Incentive-Sensitization Theory (Robinson & Berridge, 2001) gains support from neuroimaging studies indicating that structural brain differences may precede substance use (NIH, 2024).
- The Cognitive-Behavioral Model remains empirically validated, particularly in adolescent-focused interventions (Bayar & Ercib, 2024).

- Garland et al. (2022) developed Mindfulness-Oriented Recovery Enhancement (MORE), which has been shown to significantly reduce opioid misuse and improve emotional resilience.
- Clinical trials in 2024 demonstrated that Semaglutide (Ozempic/Wegovy) can reduce alcohol cravings and intake by approximately 40%, offering promise as a novel pharmacological treatment (The Times of India, 2024).

Therefore, a well-rounded prevention program targets different groups with tailored strategies. Through education, skill-building, positive environments, and community support, we can significantly reduce the risk of substance abuse and promote healthier lifestyles for all age groups. As a psychologist working within Indian culture and ethos, intervention modules for adolescents should integrate traditional values, familial structures, community support, and modern psychological approaches (Dutra et al, 2008). Here's a 3P Model (Predict, Prevent, Protect) intervention framework, a humble endeavour by the authors.

3P MODEL: PREDICT, PREVENT & PROTECT ADOLESCENTS FROM SUBSTANCE ABUSE IN INDIAN CULTURE

Predict – Identifying Risk Factors & Early Signs

Objective: Recognize early indicators of vulnerability to substance use among adolescents.

1. Risk Assessment & Screening

- Conduct culturally sensitive screening assessments in schools and communities (e.g., questionnaires, behavioural checklists).
- Identify high-risk factors such as peer pressure, academic stress, family conflicts, socio-economic struggles, and lack of parental supervision.

2. Family-Centric Analysis

- Use family genograms to assess intergenerational substance use and behavioural patterns.
- Encourage joint family discussions about family values and substance-free living.

3. Socio-Cultural Awareness

- Understand regional substance trends (e.g., alcohol in some states, tobacco in rural India).
- Address social stigma around mental health and substance abuse, promoting open conversations.

Prevent – Building Emotional & Behavioural Resilience

Objective: Equip adolescents with coping skills, awareness, and alternative engagement to prevent substance use.

1. Cultural & Value-Based Education

- Integrate Indian philosophical values (Yoga, Ayurveda, Dharma, Self-discipline) into prevention strategies.
- Conduct moral storytelling through Panchatantra, Ramayana, and real-life heroes to emphasize ethical decision-making.

2. Emotional Resilience & Coping Skills

- Teach self-regulation techniques using Yoga, meditation, and pranayama.
- Introduce journaling, gratitude practice, and art therapy to help adolescent's express emotions.

3. School & Peer-Led Awareness Programs

- Train peer educators as anti-drug ambassadors in schools.
- Organize street plays (Nukkad Natak), dance, music, and sports competitions promoting a drug-free lifestyle.

4. Parental & Teacher Sensitization

- Conduct workshops for parents and teachers on recognizing adolescent stress and peer pressure issues.
- Promote authoritative parenting styles with open dialogue rather than punishment.

Protect – Rehabilitation, Relapse Prevention & Community Support

Objective: Provide structured support for at-risk and recovering adolescents.

1. Helpline & Crisis Counselling

- Strengthen 24/7 counselling helplines (e.g., Childline, Nasha Mukt Bharat helplines).
- Train school counsellors in motivational interviewing and cognitive-behavioural therapy (CBT) for addiction recovery.

2. Community-Based Rehabilitation

- Collaborate with gurudwaras, temples, mosques, and churches to create youth engagement programs.
- Develop skill-building and vocational training centers for at-risk youth.

3. Government & NGO Collaborations

- Leverage initiatives like Nasha Mukt Bharat Abhiyan for policy-level intervention.
- Partner with local NGOs for outreach programs in slums, rural areas, and urban schools.

CONCLUSION

Psychologists can make predictions and determine a potential future course of action for individuals with substance abuse issues by using various assessment tools, theoretical frameworks, and clinical judgment based on their training and expertise. While it's important to recognize that addiction is complex and every person is unique, psychologists may use therapies such as Cognitive Behavioural Therapy (Magill & Ray, 2009), Motivational Interviewing (VanBuskirk & Wetherell, 2014), or Dialectical Behaviour Therapy (Swales, 2009) to address the underlying psychological causes of substance abuse. The aim is to help individuals identify triggers, change maladaptive thought patterns, develop coping strategies, and build healthier behaviours. In nutshell, the above stated culturally integrated intervention plan not only aligns with Indian values and ethos but also utilizes modern psychological frameworks to predict, prevent, and protect adolescents from substance abuse.

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