

Escalating Crisis of Substance Abuse in Northern India: Patiala, Punjab vs. Muzaffarnagar, Uttar Pradesh for Prevalence, Influencing Factors and Multidisciplinary Treatment Approaches

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Abstract:

Background: Substance abuse disorders, in other words addiction when it is severe, is a chronic brain disorder with serious impact on individual who suffer, the public health and with high burden of disease. There is not any satisfactory therapy which cure its disorder effectively in considerable time.

Objective: To review and discuss the magnitude of substance abusers in Northern India, with special reference to Patiala (Punjab) and Muzaffarnagar (Uttar Pradesh).

Methodology: Literature on substance abuse in Northern India from January 2005 to January 2025 was ascertained using PubMed, Medline, and Google Scholar as search engines. To understand the magnitude of substance abusers and evaluate effective treatment strategies, purposive sampling was utilized with a sample size of 520 in Northern India.

Results: The Patiala studies revealed a high overall substance abuse prevalence, though it was higher in rural (73.63%, 2014–2015) than urban (61.41%, 2019–2021) areas. Rural Patiala showed significantly higher rates of alcohol abuse (18.38% vs. 10.61%) and multiple substance abuse (38.26% vs. 27.01%). Conversely, drug abuse was higher in the urban setting (23.79% vs. 17.04%). Tobacco products were highly prevalent in both areas (47.59% rural, 45.66% urban). While rural abuse focused on traditional substances like *Desi* liquor (48.87%) and *Zarda* (51.09%), urban areas exhibited the emergence of more dangerous substances, notably Smack (a form of heroin, 14.14%). Opioid, cannabinoid, and pharmaceutical drug prevalences were broadly similar between the two regions (Opioids ≈ 19%, Cannabinoids ≈ 9–11%, Pharma ≈ 6–7%). A 2014 study in rural Muzaffarnagar focused on adolescents, revealing substance abuse in 10.1% of boys and 2.2% of girls. A critical finding was that this substance use was often intertwined with high rates of psychosocial problems (41.43%), such as conduct disorder and depression, suggesting it may function as a coping mechanism for underlying mental health issues.

Conclusion: The substance abuse crisis in Northern India demands a multi-pronged approach. Interventions must be context-specific (e.g., targeting alcohol in rural Patiala vs. 'Smack' in urban areas), and must utilize integrated care since adolescent abuse is frequently a coping mechanism for underlying psychosocial issues. Furthermore, the profound severity of the crisis in Uttar Pradesh requires an immediate recalibration of national resources, ultimately mandating a comprehensive, multidisciplinary strategy to strengthen policy, expand infrastructure, and enhance data collection.

Keywords:

Substance abuse, Northern India, Multidisciplinary, Socioeconomic, Prevalence, Substance abuse epidemiology.