Original Article

Socio-demographic and Clinical Profile of Substance Abusers Attending a Regional Drug De-addiction Centre in Chronic Conflict Area: Kashmir, India

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Abstract

Background: The menace of substance abuse is not only a socially unacceptable reality, but in its entirety is a disease and emerging as a major public health challenge.

Objective: To study the socio-demographic and clinical profile of patients attending the drug de-addiction centre.

Methods: A descriptive study was undertaken in a drug de-addiction centre at the Police Hospital in Srinagar, and all patients (198) who were admitted during this period were interviewed.

Results: The mean (SD) age of patients was 26.8 years (SD 7.37), and over half (56%) belonged to the lower-middle social class. Poly-substance abuse was seen in 91.9%; medicinal opioids and cannabis were the most common substances abused. Most common age of initiation was 11–20 years (76.8%), with peer pressure and relief from a negative mood state being the most common reasons given for starting the drug(s). Prevalence of a co-morbid psychiatric disorder was high, on the order of 49.5%. A high rate of volatile substance use was observed among adolescents (54.5%).

Conclusion: A pattern of poly-substance abuse was found to be quite common in patients, and use of volatile substances at a very young age emerged as a new trend. The dreadful repercussions of substance abuse justify the urgency to evolve a comprehensive strategy.

Keywords: addiction, de-addiction centre, drug abuse, polysubstance

Introduction

Although the history of substance abuse is as old as mankind itself, recently it has become a global problem that is influenced by social, economic, political, and psychosocial factors. The problem is not merely that of an individual or a community, and a drug, but involves interaction between the triad (1). The multiplicity of factors associated with drug abuse and their interrelatedness makes the problem a complex one (2).

In India, traditional drugs such as opium, charas, bhang, and ganja were used by certain sections of society either for recreation or as part of religious rituals. In societies elsewhere, the three most commonly used drugs, however, are nicotine, caffeine, and ethanol (3). Over the past few decades, the drug scenario in the country has

changed rapidly. The changes are seen in terms of availability, choice of psychoactive drug, users, and their socio-demographic characteristics (4). The increase in drug abuse in various segments of society during the past decade has led to an alarming increase in tensions (5).

The geographical location of Jammu and Kashmir makes easy transit of drugs possible across the state. The prevailing socio-political upheaval in Kashmir has worsened the drug abuse scenario (6,7). Opiate abuse, including heroin, has become the most serious problem in Kashmir over the past few years. Media reports about large-scale cultivation of cannabis (*charas*) in southern Kashmir, and seizures of large quantities of opioids, mostly heroin, in

northern frontier areas are increasing alarmingly. Unauthorised mushrooming of sale outlets of alcohol are becoming a common sight in the city of Srinagar and adjoining areas (8,9). The situation is likely to worsen further if adequate measures are not taken by clearly identifying and helping vulnerable groups.

The formulation and delivery of interventions that need to be effective and appropriate in countries facing substance abuse problems are dependent on a knowledge of the trends and patterns of drug abuse inclusive of their relation to health and social problems. Keeping this in mind, the present study aims to assess the socio-demographic profile of substance abusers admitted at the Drug De-addiction Centre of the Police Hospital in Srinagar.

Materials and Methods

A descriptive study was conducted in the Drug De-addiction Centre (DDC) at the Police Hospital, located in the centre of the city of Srinagar, which is looked after by the Police Department in collaboration with the Psychiatric Diseases Hospital. This centre has one visiting consultant psychiatrist, two medical officers, one clinical psychologist, one medical social worker, a yoga trainer, a martial arts trainer, and staff nurses.

Over a period of one year (June 2008 to May 2009), 198 substance abusers were admitted to the Drug De-addiction Centre. All of the admitted patients were included in the study, after obtaining consent from the patients in the case of adults and from parents in the case of minors. Two or more sittings were carried out to build a rapport and confidence amongst the patients, which helped in extracting more information.

A pretested and pre-designed questionnaire was used in evaluating the patients. The questionnaire covered details regarding age, education, occupation, type of substance(s) used, age of initiation for each substance, and relevant family history. For socio-economic status, education, occupation, and per-capita family income of the patient were taken into consideration (10). Information on treatmentseeking behaviour and path of referral was also collected. In addition, reasons for substance abuse were explored. Diagnosis of co-morbid psychiatric disorder(s) among the clients was based on Diagnostic and Statistical Manual for Mental Disorders (DSM) IV criteria. Descriptive analysis (percentages, mean, and standard deviation) was performed using software SPSS

(Statistical Product and Social Sciences) version 11.5.

Results

Over a period of one year (June 2008 to May 2009), 198 patients with substance abuse were admitted to the DDC. All were male, with a mean (SD) age of 26.8 years (SD 7.37). Over half (53.5%) had a high school education; 22.2% were unemployed, and 20.2% were students. Most of the patients (89.9%) were from a nuclear family. The majority (70.7%) had never married. More than half (56%) had a poor or lower-middle socioeconomic background (Class III & IV). Ninetysix per cent of respondents were Muslim. Details of the socio-demographic profile are given in Table 1.

Over two-third (76.8%) of patients had started substance abuse in the age group of 11 to 20 years. The most common substances of abuse identified include nicotine (94.4%), medicinal opioids (65.7%), cannabis (63.6%), benzodiazepines (45.5%), other prescription medications (43.4%), alcohol (32.5%), inhalants (11.1%), and cocaine (7.5%). Also included were crude opium, psychotropic drugs such as antidepressants, typical antipsychotics, and non-benzodiazepine hypnotics. Inhalant use was seen pre-dominantly among adolescents (54.5%), whereas nicotine (50.2%), cannabis (49.2%), alcohol (51.1%), opioids (58.4%), and benzodiazepines (53.48%) were more pre-dominant in the age group of 21 to 30 years. Poly-substance abuse was present in 91.9% of patients. Different reasons cited for substance abuse included peer pressure (96%), relief from a negative mood state (45%), enhancing a positive mood (18%), and prescription medicine abuse (17%). The most common reasons cited for seeking treatment were social (97.4%) and medical (89.3%). Most of the patients were accompanied by their family members (34.3%) or referred by private practitioners (27.2%), whereas 21.2% of patients reported on their own and 10.6% were brought by police (Table 2).

The prevalence of psychiatric disorders was high, and was present in nearly half (49.5%) of patients. Bipolar affective disorder was the most common disorder, present in 25.7%, schizophrenia in 9.09%, antisocial personality disorder in 5.5%, post-traumatic stress disorder in 2.5%, and attention deficit hyperactivity disorder in 2.52%. Family history of psychiatric disorder and substance abuse was present in 23.2% and 4.04% respectively (Table 3).

Table 1: Socio demographic characteristics of patients attending Drug De-addiction center (n = 198)

	Frequency	(%)
Age group		
11-20	40	(20.2)
21-30	100	(50.5)
31-40	44	(22.2)
41-50	14	(7.1)
Sex		
Males	198	(100)
Females	0	(o)
Education		
Illiterate	16	(8.1)
Primary	50	(25.3)
High School	106	(53.5)
Graduates & postgraduate	26	(13.1)
Occupation		
Unemployed	44	(22.2)
Semiskilled	92	(46.5)
Skilled	22	(11.1)
Student	40	(20.2)
Socioeconomic status		
High I	8	(4)
Upper Middle II	80	(40)
Lower Middle III	64	(32)
Poor IV	48	(24)
Very Poor V	0	(o)
Religion		
Muslim	190	(96)
Sikh	6	(3)
Hindu	2	(1)
Marital status		
Married	56	(28.3)
Never married	140	(70.7)
Separated	2	(1)
Family type		
Nuclear	178	(89.9)
Joint	20	(10.1)
Residence		
Urban	144	(72.7)
Rural	54	(27.3)

Table 2: Age of initiation, type of drug abuse, reasons for substance abuse and treatment seeking behavior among attendees of De-addiction center

	Frequency	(%)
Age of initiation of substance abuse		
> 10	20	(10.1)
11–20	152	(76.8)
21-30	26	(13.1)
Type Of Substance Used ^c		
Nicotine	187	(94.4)
Cannabis	126	(63.6)
Alcohol	65	(32.5)
Opioids (Medicinal)	130	(65.7)
Benzodiazepines	90	(45.5)
Inhalants	22	(11.1)
Cocaine	15	(7.6)
Others ^a	86	(43.4)
Reasons for drug abuse ^c		
Peer pressure	192	(96)
Relief from negative mood state	90	(45)
Enhancing positive mood state	36	(18)
Prescription medicine abuse	34	(17)
Treatment seeking behavior ^c		
Social	193	(97.4)
Medical	177	(89.3)
Legal	39	(19.6)
Path of referral		
Family and friends	68	(34.3)
Self	42	(21.2)
Police	21	(10.6)
Private Practitioners	54	(27.3)
Others ^b	13	(6.6)

 $^{^{\}rm a}$ Others (crude opium, psychotropic drugs like antidepressants, typical antipsychotic and non benzodiazepine hypnotics).

Discussion

There has been a phenomenal increase in psychiatric morbidity, including stress-related disorders, due to the socio-political unrest in Kashmir for the last two decades. It is a well established fact that patients suffering from stress-related disorders are more likely to develop substance use disorders, owing to the fact that substances are used to relieve anxiety symptoms. The prevailing chronic conflict has led to more experiences of traumatic life events, including death, destruction, and unemployment, pushing vulnerable individuals into the trap of negative

^b (social worker, media, and pharmacist).

^c multiple responses.

Table 3: Prevalence of co-morbid psychiatric disorders among the substance abusers

	T V	B	(0/)
		Frequency	(%)
Type of disorder ^d			
Schizophrenia		18	(9.1)
Bipolar affective disord	er	51	(25.8)
Antisocial personality d	lisorder	11	(5.6)
Conduct disorder		4	(2.0)
Attention deficit/Hyper	activity disorder	5	(2.5)
Obsessive compulsive of	lisorder	2	(1.0)
Obsessive compulsive p	ersonality disorder	2	(1.0)
Post traumatic stress di	sorder	5	(2.5)
No identifiable psychia	tric disorder	100	(50.5)

d Diagnosis based on DSMIV (Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition) criteria.

coping with the use of illicit substances. This has been facilitated by the poor implementation of licensing laws for the sale of psychotropic drugs in the state (11). In the present study, the fact that all cases were male does not necessarily mean that females were not involved. Lack of awareness, greater stigma attached, and negative cultural attitudes that are intensely guilt-provoking and discriminatory about the usage of illicit substances by females, unlike in the case of males, may prevent females from spontaneously reporting such details (12). As Kashmir is a pre-dominantly Muslim state (95% Muslim, according to the Indian Census 2001), 96% of the respondents were Muslim.

Worldwide there is a rising trend in the number of people who resort to substance abuse at an early age (9,13). In our study too, most of the substance users had started taking drugs between the ages of 11 to 20 years.

Nicotine was typically the first substance of abuse youths encountered. Nicotine is often spoken of as a gateway drug, the use of which serves as a prelude to the use of other psychotropic substances. Research has shown that nicotine users are more likely to progress to the use of other addicting substances (14,15).

Another study from India also revealed nicotine and alcohol as the most common initiating drugs of abuse (16). Exposure of young minds to promotional advertisement of tobacco products and to films that have smoking scenes have been directly associated with the initiation of smoking in adolescents.

Most of our cases came from nuclear families and urban localities, which may be a reflection of the increase in urbanisation, accessibility to

treatment, or a true prevalence of substance abuse in the urban population. The various factors which lead to an increasing number of drug addicts are absence of parental love and care in modern families where both parents are working, disintegration of the old family system, and a decline of moral values in the young generation (17). It has been reported that, after the age of 25 years, the youth of nuclear families are perceptibly more prone to trying out drugs than similar-aged youth from joint families. This may, perhaps, be because of lesser adaptability and lower tolerance levels among people from nuclear families. Such deficits in facing real-life situations may lead the youth from nuclear families to find routes of easy escape in the abuse of drugs (18).

More than half (56%) of the substance abusers were reported to be from lower-middle and poor socioeconomic classes. This did not rule out the presence of substance abusers amongst the affluent class. The Police Hospital is less preferred by upper socioeconomic class people because it is a public hospital.

The majority of our subjects were either school dropouts or irregular attendees at school; this is a finding similar to some earlier reports (19,20). It may reflect the possibility of impaired cognitive function, lower scholastic performance, and school dropout, especially if the substance abuse starts in pre-adolescence.

The commonest reasons for first use in our cases were given as peer pressure and relief from negative mood state, similar to other reports from the valley (21). The majority of our subjects were most commonly abusing nicotine, cannabis, and medicinal opioids, probably reflecting the true drug use pattern in the community.

The high rate of alcohol use in our treatmentseeking patient sample, which contrasts with earlier reports, can be explained by the fact that there has been an upsurge of alcoholic beverage outlets in the valley for the last few years (22).

The main reasons for seeking treatment among the substance abusers were social (97.4%) and medical (89.3%). Results from a study examining the reasons for seeking treatment among addicts validated the 'hitting the bottom' hypotheses, which posits that drug abusers seek help only when they perceive that their addicted life is going out of control. Another follow-up study conducted among treatment-seeking abusers indicated that social and legal problems are effective in promoting the abusers to seek a treatment entry program (23,24).

The presence of co-morbid psychiatric disorders among substance abusers was high (49.5%). Many epidemiological and clinical studies have shown that there exists a high degree of concurrence of substance abuse and psychiatric disorders (25). A family history of psychiatric disorder was present in 23.2% of patients. The presence of psychiatric disorder among relatives of drug abusers is also reported by other studies (26).

In 4.04% cases, a family history of substance abuse was observed. Familial transmission of substance dependence is considered a potential risk factor, and considerable evidence supports the causal role of familiality in substance abuse (27.28).

The other disturbing new trend that is seen in this study is the cases of solvent/inhalant abuse/dependence using such substances as glues, paint thinners, paint removers, dry cleaning fluids, typewriter correction fluids, petrol, adhesives, varnishes, deodorants, and hair sprays. This was revealed to be more common in the adolescent age group (54.5%) because of easy accessibility, cheap price, faster onset of action, and a regular 'high' with such substances. This is a new trend, documented for the first time from the valley. Inhalant use has been identified as the most prevalent form of substance abuse among adolescents by different studies conducted internationally (29,30). An equally disturbing finding in this study is a high percentage of patients showing multiple substance use.

Similarly, the number of cocaine abuser reports in our study is higher than the national survey of 2004 conducted in India. This may be explained by followings points: First, the pattern of drug abuse in our state is different from that

of other parts of India because we are a border region that has had two decades of socio-political unrest, which has led to an increase in drug trafficking and drug abuse. Secondly, our state is an internationally popular tourist destination, hence, a potential market for hard drugs like cocaine, which is supported by the fact that, in our study, cocaine use was seen as more common in subjects dealing with tourism-related businesses. Thirdly, our state, i.e., Jammu and Kashmir, was not included in the National Survey of drug abuse done in India. Fourthly, the study period of this survey is between March 2000 to November 2001, which makes it a 10-year-old study; since then the Indian economy has developed at a very fast rate, and people's buying power has increased (31). This has made a drug like cocaine affordable, particularly to the emerging wealthy population of India.

Many of the patients were brought in and attended to by their relatives (34.3%), which hints at a good social support system, reflecting the traditional Kashmir society. Many cases were also referred by private doctors (27.2%), showing the reluctance of patients to come directly to hospital. This could be because of a fear factor or the legal connotation attached to visiting the police hospital.

Conclusion

Use of volatile substances by adolescents could be a pointer towards changing trends of substance abuse in Kashmir. Poly-substance abuse with co-morbid psychiatric disorder(s) also forms a major challenge for our health care providers. Since more youth are becoming engaged in drug abuse, which increases the risk to the community, it is important to evolve and apply preventive, curative, and rehabilitative strategies before it is too late.

Limitation

The study was primarily based on a treatment seeking population, which is possibly different from the community where substance use is still not thought to be a disease, but only a social or legal problem.

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Conflict of Interest

None.

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Authors' contribution

Conception and design: YHR, WB, AAS

Analysis and interpretation of the data: YHR, AAS

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Critical revision of the article for the important

intellectual content: AAS Statistical expertise: MA

Final approval of the article and administrative,

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References

- Ortiz A. Development of a system for registry of information of drug use in Mexico. Bull Pan Am Health Organ. 1990;24(1):46-53.
- Ray R. Drug abuse monitoring system. World Health Organisation, India. National Drug Dependence Treatment Centre, AIIMS. New Delhi (IN): WHO Biennium Project; 2006–2007.
- Medina ME, Tapia R, Rascon ML, Solache G, Otero B, Lazcano F, et al. Epidemiological status of drug abuse in Mexico. Bull Pan Am Health Organ. 1990;24(1): 1–11.
- Sharma HK. Substance Abuse in India–A Socio-Cultural Perspective. In: Paul Mc, editors. *Drugs and substance abuse problems, interdisciplinary studies of cause, consequences and preventions*. New Delhi (IN): Mittal Publication; 2005. p. 193–208.
- 5. Singh H. 'Drug Abuse': A book comprising the summaries of research studies sponsored by the Ministry of Welfare, Govt. of India. New Delhi (IN): National Institute of Social Defence; 1992.

- 6. Margoob MA, Dutta KS. Drug abuse in Kashmir—experience from a psychiatric disease hospital. *Indian J Psychiat*. 1993;**35(3)**:163–165.
- 7. Margoob MA, Dutta KS. Some peculiar features of cannabis abuse in Kashmir. *J Indian Soc Health Admin*. 1992;**3(1)**:62–63.
- 8. Margoob MA, Dutta KS. 10-15 years' retrospective study of 50 patients of MDP for seasonal Variations. *Indian J Psychiat*. 1988;**30(2)**:253–256.
- 9. Margoob MA, Abdul M, Arshid H, Zaid AW, Akash Y, Yasir AM, et al. Changing socio-demographic and clinical profile of substance use disorders patients in Kashmir valley. *JK Practitioner*. 2004;**11**(1):14–16.
- Mahajan BK, Gupta MC. Textbook of preventive and social medicine. 3rd ed. New Delhi (IN): Jaypee Brothers Medical Publishers (P) Ltd; 1995. p. 134– 135.
- Margoob MA. The Menace of Drug Abuse in Kashmir. Trend, Tradition or Trauma? 1st ed. Srinagar J&K (IN): Valley Book House; 2008. p. 231–232.
- Murthy P. Women and Drug Abuse: The Problem in India. In: Murthy P, editor. Women and Drug Use in India:Substance, Women and High-Risk Asessement Study. Regional Office for South Asia: United Nations International Drug Control Programme, and Ministry of Social Justice and Empowerment, Government of India. 2002. p. 5–6.
- Venkatesan J, Stelina SD. Substance dependence: Decades apart in a teaching hospital. *Indian J Psychiat*. 2008;50(2):100–105.
- 14. Henningfield JE, Clayton R, Pollin W. Involvement of tobacco in alcoholism and illicit drug use. *Br J Addict*. 1990;**85(2)**:279–291.
- Lindsay GB, Rainey I. Psychosocial and pharmacological explanations of nicotine's 'gateway drug' function. J Sch Health. 1997;67(4):123–126.
- 16. Sahoo S, Baxi NPS, Khess CRJ. The role of gateway drugs and psychosocial factors in substance dependence in Eastern India. *Int J Psychiat Med.* 2007;**37(3)**:257–266.
- 17. Harpham T. Urbanization and mental health in developing countries: A research role for social scientists, public health professionals and social psychiatrists. *Soc Sci Med.* 1994;39(2):233–245.
- 18. Saroj P. *Drug abuse and society*. 1st ed. New Delhi (IN): Ashish Publication House; 1993. p. 141.
- Seth R, Kotwal A, Ganguly KK. Street and working children in Delhi, India, misusing toluene: An ethnographic exploration. Subst Use Misuse. 2005;40(11):1659–1679.
- 20. Waraich BK, Chavan BS, Raj L. Inhalant abuse: A growing public health concern in India. *Addiction*. 2003;**98(8)**:1169.

- 21. Margoob MA. Intense psychosocial stress and changing pattern of psychiatric disorders over the past eleven years in Kashmir valley of Indian sub continent. XVII World Congress of World Association for Social Psychiatry; 2001 Oct 27–Oct 31. Agra (IN);2001.
- 22. Times of India. National Conference wants Jammu and Kashmir to go dry [Internet]. India (IN): Jamme&Kashmir.com; 2008 [cited 2012 Jan 28]. Available from: http://www.jammukashmir.com/archives/archives2008/kashmir20080128b.html.
- 23. Chung YY, Shek DT. Reasons for seeking treatment among young abusers in Hong Kong. *Int J Adolesc Med Health*. 2008;**20(4)**:441–448.
- 24. Hser YI, Maglione M, Polinsky ML, Anglin MD. Predicting drug treatment entry among treatment seeking individuals. *J Subst Abuse Treat*. 1998;15:213–220.
- 25. Kranzler HR, Rounsaville BJ. Dual diagnosis and treatment: substance abuse and comorbid medical and psychiatric disorders. 1st ed. New York (NY): Marcel Dekker; 1998. p. 114.
- Guillem E, Pelissolo A, Vorspan F, Bouchez-Arbabzadeh S, Lepine JP. Sociodemographic profiles, addictive and mental comorbidity in cannabis users in an outpatient specific setting. *Encephale*. 2009;35(3):226-233.

- 27. Bierut LJ, Dinwiddie SH, Begleiter H, Crowe RR, Hesselbrock V, Nurnberger JI, et al. Familial transmission of substance dependence: alcohol, marijuana, cocaine, and habitual smoking: a report from the Collaborative Study on the Genetics of Alcoholism. Arch Gen Psychiat. 2002;59(2):153.
- 28. Merikangas KR, Stolar M, Stevens DE, Goulet J, Preisig MA, Fenton B, et al. Familial transmission of substance use disorders. *Arch Gen Psychiatry*. 1998; **55(11)**:973–979.
- Neumark Y, Delva J, Anthony JC. The epidemiology of adolescent inhalant involvement. Arch Pediatr Adolesc Med. 1998;152(8):781–786.
- Wu LT, Ringwalt CL. Inhalant use and disorders among adults in the United States. *Drug Alcohol Depen*. 2006;85(1):1–11.
- 31. Ray R, Mondal AB, Gupta K, Chatterjee A, Bajaj P. The extent, pattern and trends of drug abuse in India: National Survey. New Delhi (IN): United Nations Office on Drugs and Crimes, and the Ministry of Social Justice and Empowerment, Government of India, 2004.