

Socio-demographic and Clinical Profile of Treatment-seeking Drug Abusers Attending a Hospital in South Kashmir: A Cross-sectional Hospital-based Study

SEEMA BATOOL SHAH¹, MANSOOR AHMAD DAR², PINKI KUMARI³,
JAVID AHMAD SHIEKH⁴, ZAIN BIN MUSHTAQ⁵, JUNAID AHMAD TAILIE⁶



ABSTRACT

Introduction: Substance abuse is one of the major public health problems in the present world, and so in Kashmir. The geographical location of Kashmir and the prevailing conflict has made the population vulnerable to drug abuse. Data from different areas of Kashmir has pointed out the changing pattern of substance abuse, and the rising trend of opioid use. However, there have been no studies from southern Kashmir.

Aim: To study the socio-demographic and clinical profile of treatment-seeking drug abusers attending General Psychiatric Outpatient Department (OPD) at the newly established Government Medical College, Anantnag, Kashmir, India.

Materials and Methods: This cross-sectional, hospital-based study was conducted from January 2020 to June 2021. A total of 213 treatment-seeking drug abusers were included in the study. Diagnosis of substance dependence was established by applying the International Classification of Disease version 10. The clinical and socio-demographic variables were studied using

a semi-structured proforma, and the variables were presented as frequency and mean. The data were analysed using Epi Info software version 7.0.

Results: The mean age of the study population was 23.4 years. Young adults were the most common population using substances. Opioids (25.3%) were the predominantly used drug, although polysubstance formed the majority at 48.8%. More than 60% of patients were intravenous drug users. Peer pressure and curiosity were the most common specified reasons for initiation of substance (47.4% and 12.2%, respectively). More than 50% of cases had past failed attempts at abstinence. Craving was still the most common reason for relapse (42.8%).

Conclusion: The present study results reiterate the presence of a hazardous pattern of substance use in the young population. The intravenous drug use and the secondary infections arising out of that are alarming. The results encourage the conduct of large scale community-based studies and robust policy making and law enforcement.

Keywords: Craving, Opioid, Peer pressure, Relapse, Substance related disorders

INTRODUCTION

The menace of substance use is a matter of great concern not only for its social and economic consequences but also for its association with Psychiatric and physical morbidities. The problem is not merely that of an individual or a community, and a substance, but involves interaction between the triad. [1]. Due to the multiplicity of factors associated with substance abuse and their inter-relatedness, substance use is a complex problem [2]. Knowledge of the trends and patterns of drug abuse is very important to formulate effective and appropriate interventions that need to be delivered in countries facing substance abuse problems.

As per World Health Organisation (WHO), in 2018, an estimated 269 million people had used a drug atleast once in the previous year, equivalent to 5.4% of the global population aged 15-64. Assuming no change in the global prevalence of drug use, considering solely the projected increase in the global population would result in the global number of people who use drugs rising by an estimated 11%-299 million people by 2030 [3]. The use of traditional drugs like opium, charas, bhang, and ganja has been existing for ages in India, and it has not invited many sanctions from society. These drugs are used both in leisure and religious activities [4]. As per National Mental Health Survey (2015-2016), around 5% of Indians are suffering from one or other substance use disorder [5]. A national study conducted by All India Institute of Medical Sciences (AIIMS), New Delhi in 2019 showed that substance abuse is prevalent across most age groups and the variety of substances used is diverse [6].

The geographical location of Jammu and Kashmir makes the transit and supply of drugs easy in the territory. The ongoing conflict in Kashmir has worsened the drug scenario and opiates like heroin are serious public health issue. In the early 1980s the use of opiates was less than 10%, and it had already increased to more than 70% by 2002 [7]. The situation has further worsened in Kashmir as reported in the nationwide survey, which extensively studied substance prevalence throughout the Union Territory of Jammu and Kashmir [8]. There are studies that have addressed the alarming issues of substance abuse in South Kashmir but these studies have not been directly carried out from a facility located in southern Kashmir [9-11]. Since 2019, the Government Medical College, Anantnag, has started functioning as the first and only tertiary care centre in South Kashmir. Hence, this research was carried out with the aim to study the socio-demographic and clinical profile of treatment-seeking drug abusers attending this hospital.

MATERIALS AND METHODS

This was a cross-sectional hospital-based study conducted at the outpatient clinic of the Department of Psychiatry, Government Medical College (GMC) Anantnag, Kashmir, India, which caters to a significant population of South Kashmir. After getting the Institutional Ethical Committee Clearance no. (ECI/GMCA/Psy 07). The study was conducted from January 2020 to June 2021.

Inclusion criteria: The 213 treatment-seeking patients, diagnosed according to the International Classification of Diseases version 10 for substance dependence, were included in the study [12].

Exclusion criteria: Those with severe mental retardation, serious medical conditions or unwillingness to participate were excluded.

All participants were asked to fill out the consent form prior to being enrolled in the study. A semi-structured proforma was used to elicit the socio-demographic variables and other clinical details regarding substance abuse. Socio-economic status was determined using modified Kuppaswamy scale for socio-economic status [13]. The interview was carried by psychiatrists and the confidentiality was always maintained.

STATISTICAL ANALYSIS

The data were analysed using Epi Info software version 7.0. Categorical variables were summarised as frequency and percentage. Continuous variables were summarised as mean and standard deviation.

RESULTS

Out of 213 patients, 212 (99.5%) were males, whereas only one was female. The mean age of the population was 23.4±5.6 years. The majority of them belonged to the age group of 10-20 years in which 82 (38.4%) followed by patients who were in the group of 21-30 years, 64 (30.0%). The majority of the patients were unmarried 119 (55.8%). Overall, 54.4% of patients were educated up to the secondary level, 18.3% were unemployed, and 18.7% were students. Out of 213 patients, 54 (25.3%) had a positive family history of substance abuse. Socio-economic distribution was almost uniform throughout different classes [Table/Fig-1].

Socio-demographic variables	Values, n (%)
Age distribution (years)	
<10	1 (0.4)
10-20	82 (38.4)
21-30	64 (30)
31-40	48 (22.5)
41-50	18 (8.4)
Sex	
Male	212 (99.5)
Female	1 (0.5)
Educational status	
Illiterate	25 (11.7)
Upto primary level	40 (18.7)
Upto secondary level	116 (54.4)
Graduate	20 (9.3)
Postgraduate	5 (2.3)
Professional degree	7 (3.2)
Occupation	
Unemployed	39 (18.3)
Salaried	21 (9.8)
Labourer	25 (11.7)
Skilled worker	25 (11.7)
Student	40 (18.7)
Buisnessmen and other professionals	63 (29.5)
Marital status	
Unmarried	119 (55.8)
Married	82 (38.4)
Divorced	12 (5.6)
Socio-economic status (modified kuppaswamy scale)	
Upper	19 (8.9)
Upper middle	61 (28.6)
Lower middle	71 (33.3)
Upper lower	39 (18.3)
Lower	23 (10.7)

[Table/Fig-1]: Socio-demographic profile of the patients (N=213).

As seen in [Table/Fig-2], the majority of the patients 126 (59.1%) stated that the current attempt at abstinence was not their first attempt. When asked about reasons for starting drugs majority reported peer pressure as the trigger (46.9%) while 12.2% reported curiosity about drug effects as the reason. The 24.4% quoted stressors as the reason while 16.4% could not specify any particular reason. Regarding patients who had failed in previous abstinence attempts, craving and peer pressure almost contributed equally (42.8% and 40.4%, respectively).

Variables	Values, n (%)
Type of substance used predominantly	
Cannabis	26 (12.2)
Opioids	54 (25.3)
Benzodiazepines	15 (7)
Alcohol	14 (6.5)
Polysubstance	104 (48.8)
Intravenous drug use	
Yes	133 (62.4)
No	80 (37.5)
Associated mental illness, 24 (11.2%)	
Bipolar affective disorder	14 (58.3)
Schizophrenia	6 (25)
Personality disorders	4 (16.6)
Family history of substance use	
Yes	54 (25.3)
No	159 (74.6)
Cause for initiation	
Peer pressure	100 (46.9)
Curiosity	26 (12.2)
Family stress	25 (11.7)
Academic stress	27 (12.6)
Unspecified	35 (16.4)
Attempts at quitting	
1 st attempt	87 (40.8)
2 nd or 3 rd attempt	126 (59.1)
Reason for relapse after previous attempts, 126 (59.1%)	
Craving	54 (42.8)
Persistent stressors	21 (16.6)
Peer pressure	51 (40.4)
Associated medical condition, 15 (7%)	
HBV	4 (26.6)
HCV	11 (73.3)

[Table/Fig-2]: Clinical profile of the patients (N=213).

HBV: Hepatitis B virus; HCV: Hepatitis C virus

The most common individual substance used was opioids (25.3%), followed by cannabis (12.2%), however, the majority of these cases were polysubstance users (48.8%). Intravenous drug use was seen at an alarming 133 (62.4%). Just 6.5% reported alcohol use. Regarding the medical complications, 7% were affected, out of which 11 patients had been infected with hepatitis C and 4 patients had an active hepatitis B infection. Overall, 11.2% had associated mental illness, with 14 (58.3%) patients having the bipolar affective disorder, and 6 (25%) patients suffering from schizophrenia and 4 (16.6%) patients with a personality disorders.

DISCUSSION

Worldwide, there is a serious rising trend in the number of people who resort to substance abuse at an early age [14]. In the present study too, most of the substance users had started taking drugs between the ages of 11-20 years. It has been observed that the

younger age group is the most vulnerable to substance use. It is also consistent with the drug abuse monitoring system, where the majority of substance users were less than 40 years of age [10]. Studies in the area, spanning over a period of more than two decades, have observed that young age group substance users comprised the predominant population. Over decades the predominance of substance users belonging to the young age group has not changed much [7,9,15].

The male predominance among treatment-seekers has also been observed in other studies in the region [7,16,17]. This disparity can be explained by male predominance with respect to substance use as well as societal pressures causing shame and embarrassment. However, the substance use by females cannot be ruled out [18]. Hence, the young male population should be the focus of planners and strategists to curb the menace of drug abuse.

The uniformity in the distribution of educational and socio-economic achievements in the present study is a reflection of the population distribution across different strata. Also substantiated by other researchers, it indirectly implies the havoc of drug abuse throughout society regardless of socio-economic class [7,9,19]. A significant percentage of 39.3 was engaged in business or engaged in other government/private professional jobs in concordance with the study conducted by Ziaddini H et al., who reported that the majority of the patients were employed. Since substance use comes with the high financial burden, the preponderance of earning population could be an indicator of the same. In the present study, more than half of the patients were unmarried (55.8%), which is consistent with the observation by Ziaddini H et al., who reported 52% as unmarried. It is consistent with the fact that substance abuse is a disease for young and most of the present study participants were in the young age group [20]. If the subsequent marriage of these young people changes the drug abuse pattern is an area of further exploration.

Polysubstance use was the most predominant pattern of substance use in the present study. Patients who were actively using drugs of two or more different classes were grouped in the polysubstance use category. This was followed by pure opioid use and cannabis dependence. The actual proportion of opioid users could have been higher if the number of people using opioids among polysubstance users is added. This observation is significantly important as the trend for opioid use has been on the higher side as reported by other studies from Kashmir [10,11,21].

An alarming 62.44% of drug users were using drugs through the intravenous route. This observation is consistent with studies conducted by Gul D et al., and Avasthi A et al., who reported intravenous routes in 66.2% and 46.6% respectively [19,22]. A recent study by Rather YH et al., also reported an intravenous drug use of more than 50% [9]. This is an indicator of a serious change in the pattern of substance use in this part of the world. As per United Nations Office on Drugs and Crime (UNODC) report 2021, the number of intravenous drug abusers in 2019 was 11.2 million worldwide (0.22% of the population aged 15-64) [12]. The higher use of an intravenous substance is a disturbing trend and could pose a serious financial and medical burden in the future [23,24].

Among the participants, 7% had hepatitis C virus or hepatitis B virus infection. Although this is less than what has been observed from other studies carried out on drug abusers (14.4%), it is significantly higher than the community based prevalence of parenteral hepatitis in Kashmir (1.9%) [25,26]. This rate of seroconversion is nonetheless a worrisome trend and the development of another life consuming illness puts these patients in another whirl of no end [27]. The UNODC report 2021 suggested that as many as two out of five new hepatitis C infections (or about 43%) globally could be prevented if the risk of transmission through injecting drug use was removed [12,28]. These observations call for urgent public awareness and strategic planning to mitigate this issue.

The present study reports peer pressure as the most common triggering agent for the initiation of drug use. A significant association between peer pressure and with the use of drugs is well established globally [29,30]. Also, the majority of the index patients had previously more than one attempt at quitting (59.1%) and reported continuous craving (42.8%), and peer pressure (40.4%) as the reasons responsible for relapse. Stohs ME et al., observed that an elevated craving score at the time of dismissal from residential treatment and 3 months later is a significant predictor of relapse [29]. Continuous craving has also been reported as a major reason for dependence and relapse by Kumar N et al., [23]. So, peer pressure and craving are important areas of intervention in the primary and subsequent prevention of substance abuse.

Limitation(s)

The study was carried out at a single hospital, and the selection of patients was done only among treatment-seeking people. If the study was carried out at a community level, the results might significantly differ. The study was conducted in the routine General Psychiatry OPD, and due to the lack of a separate facility, many substance users were reluctant to seek treatment. This study observed the patients cross-sectionally, and it does not give details regarding the course of their treatment in the facility.

CONCLUSION(S)

The findings of the present study imply that younger age groups are involved in serious substance use like opioids. Substance use is prevalent regardless of occupational or educational competence. The intravenous drug use and the secondary infections arising out of that are alarming. Peer pressure and curiosity are still the triggering factors and people usually have multiple failed attempts out of craving. Since a huge number of employed people and students are into this menace, it will have hazardous social and economic consequences. There is a need for a multidisciplinary and sustained approach to tackle this huge issue. Similar studies at a larger scale and community level could be of immense help to policymakers and planners.

REFERENCES

- [1] Ortiz A. Development of a system for registry of information of drug use in Mexico. *Bull Pan Am Health Organ.* 1990;24(1):46-52.
- [2] Quello SB, Brady KT, Sonne SC. Mood disorders and substance use disorder: A complex comorbidity. *Science Practice Perspectives.* 2005;3(1):13-21.
- [3] UNODC, World Drug Report 2020, booklet 2, Drug Use and Health Consequences (United Nations publication, 2020). https://www.unodc.org/res/wdr2021/field/WDR21_Booklet_2.pdf. Accessed 2022 Feb 22.
- [4] Basu D, Malhotra A, Varma VK. Cannabis related psychiatric syndromes: A selective review. *Indian J Psychiatry.* 1994;36(3):121-28.
- [5] National Mental Health Survey of India, 2015-2016 Prevalence, Patterns and Outcomes, Supported by Ministry of Health and Family Welfare, Government of India, and Implemented by National Institute of Mental Health and Neurosciences (NIMHANS) Bengaluru: In Collaboration with Partner Institutions; 2015-2016.
- [6] Magnitude of Substance Use in India, 2019. National Survey on Extent and Pattern of Substance Use in India. New Delhi: Ministry of Social Justice and Empowerment, Government of India; 2019. Available: https://socialjustice.nic.in/writereaddata/UploadFile/Magnitude_Substance_Use_India_REPORT.pdf. Accessed 2022 Feb 22.
- [7] Rather YH, Bashir W, Sheikh AA, Amin M, Zahgeer YA. Socio-demographic and clinical profile of substance abusers attending a regional drug de-addiction centre in chronic conflict area: Kashmir, India. *Malays J Med Sci.* 2013;20(3):31-38.
- [8] Ambekar A, Agarwal A, Rao R, Mishra A, Khandelwal SK, Chadda RK. National Survey on Extent and Pattern of Substance Use in India. Magnitude of Substance Use in India. New Delhi: Ministry of Social Justice and Empowerment, Government of India; 2019. Available: <http://socialjustice.nic.in/writereaddata/UploadFile/Survey%20Report636935330086452652.pdf>. Accessed 2022 Feb 22.
- [9] Rather YH, Bhat FR, Malla AA, Zahoor M, Ali Massodi PA, Yousuf S. Pattern and prevalence of substance use and dependence in two districts of Union Territory of Jammu & Kashmir: Special focus on opioids. *J Family Med Prim Care.* 2021;10(1):414-20.
- [10] Din NU, Khan AW, Suhaff AA, Hussain Z, Ganai AM, Ahmad MS. Socio-demographic & clinical profile of patients with substance use disorders seeking treatment: A hospital-based study. *Res Med Eng Sci.* 2019;7(4):808-14.
- [11] Bhat BA, Dar SA, Hussain A. Sociodemographic profile, pattern of opioid use, and clinical profile in patients with opioid use disorders attending the de-addiction center of a tertiary care hospital in North India. *Indian Journal of Social Psychiatry.* 2019;35(3):173-78.

- [12] The ICD-10 classification of mental and behavioural disorders: Clinical descriptions and diagnostic guidelines. Geneva: World Health Organization; 1992. World Health Organization. <https://apps.who.int/iris/handle/10665/37958>. [Accessed on: 12 June 2022].
- [13] Saleem SM. Modified Kuppaswamy socioeconomic scale updated for the year 2019. *Indian J Forensic Community Med.* 2019;6(1):01-03.
- [14] GLOBAL OVERVIEW: DRUG DEMAND DRUG SUPPLY 2021. Available: https://www.unodc.org/res/wdr2021/field/WDR21_Booklet_2.pdf. Accessed 2022 Feb 22.
- [15] Margooob MA, Dutta KS. Drug abuse in Kashmir—experience from a psychiatric disease hospital. *Indian J Psychiatry.* 1993;35(3):163-65.
- [16] Prajapati BB, Dedun MR, Jalfava H, Shukla A. A study of socio-demographic profile and pattern of drug use among substance abusers attending mind care de-addiction center in Ahmedabad. *Int J Community Med Public Health.* 2019;6(1):286-89.
- [17] Arora H, Gupta S, Kajal KS, Padda P, Monga S, Devgan S, et al. Evaluation of socio-demographic profile of the drug abusers visiting drug deaddiction centre at Faridkot, Punjab. *J Adv Med Dent Sci Res.* 2016;4(2):135-41.
- [18] Murthy P. Women and drug abuse: The problem in India. Women and drug use in India: Substance, women and high-risk assesment study. In: Murthy P, editor. Regional Office for South Asia: United Nations International Drug Control Programme, and Ministry of Social Justice and Empowerment, Government of India; 2002. pp. 5-6.
- [19] Gul D, Sharma N. Sociodemographic profile and pattern of substance abuse among patients presenting to a deaddiction centre in a teaching hospital of Punjab. *Int J Med and Dent Sci.* 2017;6(2):1504-08.
- [20] Ziaddini H, Nasirian M, Nakhaei N. Comparison of the efficacy of buprenorphine and clonidine in detoxification of opioid-dependents. *Addict Health.* 2012;4(3-4):79-86.
- [21] Farhat S, Hussain SS, Rather YH, Hussain SK. Sociodemographic profile and pattern of opioid abuse among patients presenting to a de-addiction centre in tertiary care Hospital of Kashmir. *J Basic Clin Pharm.* 2015;6(3):94-97.
- [22] Avasthi A, Basu D, Subodh BN, Gupta PK, Malhotra N, Rani P, et al. Pattern and prevalence of substance use and dependence in the Union Territory of Chandigarh: Results of a rapid assessment survey. *Indian J Psychiatry.* 2017;59(3):284-92.
- [23] Kumar N, Kanchan T, Unnikrishnan B, Thapar R, Mithra P, Kulkarni V, et al. Profile of substance use among patients attending de-addiction centres in a coastal city of Southern India. *PLoS One.* 2013;8(2):e57824.
- [24] Cranston K, John B, Fukuda HD, Randall LM, Mermin J, Mayer KH, et al. Sustained reduction in HIV diagnoses in Massachusetts, 2000-2014. *Am J Public Health.* 2017;107(5):794-99.
- [25] Ambekar A, Rao R, Mishra AK, Agrawal A. Type of opioids injected: Does it matter? A multicentric cross-sectional study of people who inject drugs. *Drug Alcohol Rev.* 2015;34(1):97-104.
- [26] Shah NA, Kadla SA, Singh J, Khan BA, Shah AI, Sheikh SA, et al. Genotypes distribution of hepatitis C virus in Indian administered Kashmir; A cross sectional study. *J Hepatol Gastroenterol.* 2017;1(1):003.
- [27] Ward Z, Stone J, Bishop C, Ivakin V, Eritsyan K, Deryabina A, et al. Costs and impact on HIV transmission of a switch from a criminalisation to a public health approach to injecting drug use in eastern Europe and central Asia: A modelling analysis. *The Lancet HIV.* 2022;9(1):e42-53.
- [28] Trickey A, Fraser H, Lim AG, Peacock A, Colledge S, Walker JG, et al. The contribution of injection drug use to hepatitis C virus transmission globally, regionally, and at country level: A modelling study. *Lancet Gastroenterol Hepatol.* 2019;4(6):435-44.
- [29] Stohs ME, Schneekloth TD, Geske JR, Biernacka JM, Karpayk VM. Alcohol craving predicts relapse after residential addiction treatment. *Alcohol Alcohol.* 2019;54(2):167-72.
- [30] Nicolas C, Zlebnik NE, Farokhnia M, Leggio L, Ikemoto S, Shaham Y. Sex differences in opioid and psychostimulant craving and relapse: A critical review. *Pharmacol Rev.* 2022;74(1):119-40.

PARTICULARS OF CONTRIBUTORS:

1. Senior Resident, Department of Psychiatry, Government Medical College, Anantnag, Jammu and Kashmir, India.
2. Assistant Professor, Department of Psychiatry, Government Medical College, Anantnag, Jammu and Kashmir, India.
3. Senior Resident, Department of Psychiatry, Government Medical College, Anantnag, Jammu and Kashmir, India.
4. Consultant, Department of Psychiatry, Government Medical College, Anantnag, Jammu and Kashmir, India.
5. Junior Resident, Department of Psychiatry, Government Medical College, Anantnag, Jaamu and Kashmir, India.
6. Junior Resident, Department of Psychiatry, Government Medical College, Anantnag, Jaamu and Kashmir, India.

NAME, ADDRESS, E-MAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Mansoor Ahmad Dar,
Assistant Professor, Department of Psychiatry, Government Medical College,
Anantnag, Jammu and Kashmir, India.
E-mail: Gaashmansoor@gmail.com

PLAGIARISM CHECKING METHODS: [Jain H et al.]

- Plagiarism X-checker: Oct 19, 2021
- Manual Googling: Mar 08, 2022
- iThenticate Software: May 10, 2022 (22%)

ETYMOLOGY: Author Origin**AUTHOR DECLARATION:**

- Financial or Other Competing Interests: None
- Was Ethics Committee Approval obtained for this study? Yes
- Was informed consent obtained from the subjects involved in the study? Yes
- For any images presented appropriate consent has been obtained from the subjects. NA

Date of Submission: **Oct 18, 2021**
Date of Peer Review: **Dec 07, 2021**
Date of Acceptance: **Mar 11, 2022**
Date of Publishing: **Jul 01, 2022**