

Sociodemographic profile and pattern of opioid abuse among patients presenting to a de-addiction centre in tertiary care Hospital of Kashmir

Abstract

Background: The substances abuse has become one of the major public health problems of present society. Recently there has been an increase in the incidence of substance abuse including that of opioids throughout the world. The proper assessment of the current trends and pattern of opioid abuse can be helpful in more effective intervention of this menace.

Materials and Methods: To find out various socio-demographic variables and pattern of opioid abuse, a predevised questionnaire was administered to 200 opioid patients who presented to de-addiction center for treatment.

Results: Majority of the participants (75%) were of young age group (20–30 years) and the mean age of subjects was 27.6 years. More than half of participants (55%) were abusing the opioid substances for < 3 years followed by 30% of the abusers who were using the opioids for 4–6 years. Oral route was the most common route (35%) of substance administration followed by chasing (13%) and intravenous (11%) routes. Diverted pharmaceuticals emerged as one of the common substances of abuse, and peer pressure was found to be the main reason to start substance abuse.

Conclusion: A comprehensive preventive program targeting young adults needs to be formulated and strict laws against sales of diverted pharmaceuticals to be implemented.

Key words:

Drug abuse, opioid, pattern, prescription drugs

Introduction

Dependence to opioids can lead to increased rates of morbidity and mortality secondary to different infections, and it can also increase the criminal consequences for the individual using the substance as well.^[1] Heroin users are also at high risk for abusing other substances including benzodiazepines, alcohol and cocaine.^[2]

According to world report-2013 published by United Nations office on drug and crime (UNODC), about 16.5 million, or 0.4% of world adult population (15–64 years of age), used illicit opioids in year 2011.^[3] Illicit drug use in India is also quite serious, with a population of over 1 billion people; millions of victims of different kinds of drug abuse are estimated.

Although opioid-dependence has become one of the most prevalent psychiatric illnesses during recent years, but very few studies have looked into the profiles of opioid-dependent patients in this part of the world.^[4]

Geographical location of Jammu and Kashmir is such that the transit of drugs is possible across the state. Prevailing turmoil has worsened the drug scenario, and over the past few years opiate preparations including that of heroin have become most serious problem in Kashmir. In comparison to 9.5% use of opiate based preparations during 1980 in Kashmir it had increased to 73% (out of the total addicts), in 2002 and is worse now.^[5] The present study was undertaken to determine the

**Samina Farhat, Syed Sajad Hussain, Yasir Hassan Rather¹,
Syed Karrar Hussain¹**

Department of Pharmacology, ¹Department of Psychiatry, Institute of Mental Health and Neuro Sciences, Government Medical Collage Srinagar, Jammu and Kashmir, India

Address for correspondence:

Dr. Syed Sajad Hussain,
Department of Pharmacology, Government Medical
Collage Srinagar, Jammu and Kashmir, India.
E-mail: sajadsafvi@gmail.com

Access this article online	
Website: www.jbclinpharm.org	Quick Response Code 
DOI: 10.4103/0976-0105.160751	

socio-demographic profile and pattern of opioid-dependence in patients attending the de-addiction centre in a tertiary care hospital in Srinagar, Kashmir. The reason to start substance abuse and the motivation for seeking treatment was also taken into consideration during the trial.

Materials and Methods

It is a cross-sectional target population based study that was conducted at de-addiction Centre of Institute of Mental Health and Neurosciences, Government Medical College, Srinagar, between March 2013 to August 2014. Two hundred treatment seeking subjects, fulfilling American Psychiatric Association's Diagnostic and Statistical Manual of Mental Disorders - IV-TR criteria for opioid-dependence were included in the study.^[6] All the participants were required to sign a written informed consent approved by the institutional ethical committee before being registered. Participants having evidence of a serious psychiatric or medical illness and those using substances of abuse other than opioids were excluded from the study. Psychiatric interview and medical history taking was performed by the Consultant Psychiatrist at the start of study and subjects were interviewed as per self-designed semi-structured proforma. Questionnaire recorded information on age, gender, marital status, status of education and pattern of substance abuse. All the subjects were cooperative.

Statistical analysis

The analysis of data was performed using SPSS (version 20. Armonk, NY, USA: IBM Corp.) The mean and standard deviation are presented for continuous variable. The number and percentage of subjects practicing a particular conduct are presented for categorical variables.

Results

The majority of the participants (86%) were literate and among them 52% were undergraduates and 40% were middle class passed. Considering the employment status most of the participants (64%) were employed (mostly running their own private business). Large percentage (66%) of our subjects were unmarried, which can be because of their young age. The majority of the participants (75%) were of young age group (20-30 years) and the mean age of subjects was 27.6 years [Table 1]. Considering the duration of abuse, majority of the studied participants (55%) were abusing the drugs for <3 years followed by 30% of the abusers who were using the opioids for 3-6 years [Figure 1]. Oral route was the most common route (35%) of drug administration followed by chasing (13%) and intravenous (11%) routes. A good percentage (41%) of subjects used more than one route of drug administration [Table 2].

Considering the type of abused opioid, diverted pharmaceutical products were the main source of opioid abuse in our studied population and more than half of them used to abuse more than one drug at a time [Table 3]. The present study revealed that 50% of subjects had started to take opioid substances under the influence of their friends who were already taking these substances (peer pressure). Experimentation/pleasure

as the reason for substance initiation was reported by 30% of patients and in 20% of cases it was the use of prescriptional opioids which led to opioid addiction in them. The desire to return to normal life was reported to be reason for seeking treatment in 70% of patients. The other two reasons for seeking treatment were the occurrence of subsequent health issues secondary to opioid addiction (17%) and loss of self-respect of the abusing person (13%).

Discussion

It has been observed that mostly persons of young age group

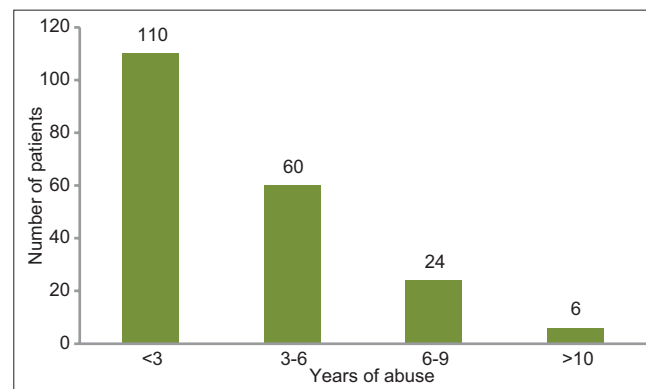


Figure 1: Number of years of opioid abuse of studied population

Table 1: Sociodemographic variables of the study population (n=200)

Variable	Number	Percentage
Education status		
Illiterate	28	14
Middle	70	35
Undergraduate	90	45
Graduate	12	6
Employment status		
Employed	128	64
Un-employed	72	36
Marital status		
Married	60	30
Un-married	132	66
Divorced	8	4
Age in years		
20-29	150	75
30-39	28	14
≥ 40	22	11

Table 2: Routes of administration of abused drugs (n=200)

Route of abused drug	Number	Percentage
Oral	70	35
Chasing + oral	40	20
Intravenous + oral	30	15
Chasing	26	13
Intravenous	22	11
More than two routes	12	6

Table 3: Different types of opioids consumed by the participants (n=200)

Type of abused drug	Number	Percentage
Propoxyphene	34	17
Heroin	26	13
Tramadol	20	10
Pentozocine	10	5
Crude opium	4	2
More than one substance	106	53

are involved in drug abuse because it is the most vulnerable age for it. In the present study, the average age of subjects was 27.64 ± 4.60 years, which indicates that relatively young age group is involved in opioid addiction here also. A community study of drug abusers in Kashmir carried out by Margoob and Dutta reported that most of the abusers were <42 years of age.^[7] Similarly Nigam *et al.*^[8] in their study on Indian population reported the mean age of substance abuse as 28.7 ± 7.2 years in their subjects and in a study conducted by Kalra and Bansal,^[9] mean age for starting of drug use was found to be 25.46 ± 7.613 years. All these results are similar to our results. So it can be said that the most productive years of life are wasted due to substance abuse. Considering gender proportion, out of total study sample, we had only one (0.5%) female patient who was abusing tramadol that too was secondary to prescripational misuse. Low turnover of female respondents for the treatment of any substance abuse is observed in several studies.^[10] The majority of participants in our study were literate (86%), self or government employed (64%), and unmarried (66%). Since the present study was carried out on urban population and majority of our subjects were belonging to relatively young age group, this may justify the higher percentage of literacy, employment and unmarried status of the subjects. Similar results were reported by Ziaddini *et al.*^[11] in their study on Iranian population, who reported that 67.9% of their subjects were employed, and 52% were unmarried and Nigam *et al.*^[8] who reported that 91.7% of the subjects were employed, and 86.1% had education below 10 years. As per the latest report released by UNODC, although the use of opiates has remained constant over the years, but use of opioids including diverted pharmaceuticals has increased over the last few years.^[3] In the present study, also it was found that spasmoproxyvan was the most common substance to be consumed by our patients (17%), followed by heroin (13%). Kalra and Bansal reported that out of their study population, 5% consumed tramadol, 12.5% used codeine and 9% abused spasmoproxyvan (dextropropoxyphene 65 mg, dicyclomine 10 mg, and paracetamol 400 mg).^[9] The main reason for higher proportion of our subjects consuming the diverted pharmaceutical opioids like spasmoproxyvan may be because of their easy accessibility in the black-market. In our study, most of the patients admitted that they were first provided these drugs free of cost by some of their friends, and once they became dependent on these drugs, then they had to pay for it.

From the above data, it can be concluded that there is a trend towards abuse of medicinal drugs. Even among studies done in past decade, Vasvani had reported increasing trend in

abuse of benzodiazepines and other over the counter available drugs.^[12] Sachdev *et al.* has also reported a significant increase in abuse of drugs available over the counter like that of dextropropoxyphene, diphenoxylate, codeine phosphate etc.^[13] As per the current DAMS data, opium and its derivatives (heroin, other opioids) emerged as second preferred drug category as 40% men reported its use (14% each for opium and heroin and 12% for other opioids mainly spasmoproxyvan, Fortwin and norphine etc.)^[14]

The average years of opioid consumption in the present study was 5.73 ± 3.12 years. similar kind of results were reported by Margoob *et al.*,^[15] who carried out an epidemiology study that showed that 41.65% patients took substance for the period of more than 5 years and only 5.94% took medication for <1-year. Nigam *et al.*^[8] reported the average years of consumption to be 4-5 years in their study, and in the study conducted by Ziaddini *et al.*,^[11] the average years of opioid use was reported as 8.0 ± 4.20 years, the results of both of these studies are similar to our findings. The major route of drug administration in our studied population was oral rout. This may be justified by the fact that the diverted pharmaceutical products used by our subjects are available mainly in oral preparations. The other common method of use was chasing, where the abusers used to put opiate powder usually heroin on a piece of aluminum foil, and then place it over burning candle and inhale the smoke produced. This method is popularly called "chasing the dragon."

The present study revealed that in 50% of the cases the opioid addiction had started secondary to peer pressure. This can be explained by the fact that youth are mostly influenced by their peers and that the choice of friends will in part determine their social behaviors or misbehaviors.^[16] Other reason that was cited by 30% of the studied population was for experimentation/enjoyment. Other important thing which came into notice was that 20% of patients had started abusing opioid substance because they were prescribed to them by medical personal (itrogenic cause), which shows that the unethical use of medication is very much contributing to increased prevalence of diverted pharmaceutical substance abuse. A study carried out by Kalra and Bansal reported that 20% of their subjects started addiction for enjoyment/ or experimentation, 9.5% because of peer pressure and in 9% of cases it was secondary to iatrogenic cause. Almost similar findings were seen in another study carried out in adolescents by Naskar *et al.*^[17] In the present study main reason given by the patients for seeking treatment was self-motivation in the majority (70%) of cases. Over the years, most of these patients realized that their life has now been more of driven by the drugs. They were totally dependent on the availability of drugs and at times they had to face embarrassment for this reason. Health related issues (17%) and loss of self-esteem within the society (13%) were the other reasons for seeking the treatment in our studied population. Almost similar results were reported by Kalra and Bansal.

Limitations

Although the present study has got some important finding, but there were few limitations too. It was a monocentric study carried out in a single tertiary care hospital with small

sample size. The majority of our subjects were mainly from urban population because the de-addiction centre is located in city center. In the present study only pure opioid abusers were enrolled, and the sociodemography of other substances of abuse could not be found. Therefore, there is further scope for similar kind of studies to be conducted at multicentric level involving larger proportion of the community with larger sample size.

Conclusion

The findings of the present study showed that a relatively young age group is involved in opioid addiction and, therefore, many years of their productive life are lost in substance abuse. The substance abuse is prevalent in any segment of population irrespective of educational and marital status. We found that a good percentage of our subjects were abusing diverted pharmaceuticals. Therefore controlling the menace of opioid abuse is a multidisciplinary task with law and enforcement agencies having a greater role to play, so that the illegal and unauthorized sales and distribution of prescripational opioid drugs could be brought under control.

References

- Amato L, Davoli M, Perucci CA, Ferri M, Faggiano F, Mattick RP. An overview of systematic reviews of the effectiveness of opiate maintenance therapies: Available evidence to inform clinical practice and research. *J Subst Abuse Treat* 2005;28:321-9.
- Brooner RK, King VL, Kidorf M, Schmidt CW Jr, Bigelow GE. Psychiatric and substance use comorbidity among treatment-seeking opioid abusers. *Arch Gen Psychiatry* 1997;54:71-80.
- World Report. Published by United Nations Office on Drug and Crime (UNODC); 2013. Retrieved from: www.unodc.org/unodc/secured/.../wdr2013/.
- McLellan AT, Lewis DC, O'Brien CP, Kleber HD. Drug dependence, a chronic medical illness: Implications for treatment, insurance, and outcomes evaluation. *JAMA* 2000;284:1689-95.
- Margoob MA. The menace of drug abuse in Kashmir. Trend, tradition or trauma. Srinagar: Valley Book House; 2008. p. 6-8.
- Sadock BJ, Kaplan HI, Sadock VA. Kaplan and Sadock's Synopsis of Psychiatry: Behavioural Sciences/Clinical Psychiatry. Philadelphia: Lippincott Williams and Wilkins; 2007. p. 4-14, 514-21.
- Margoob MA, Dutta KS. Drug Abuse in Kashmir – Experience from a Psychiatry Disease Hospital. *Indian journal of Psychiatry* 1993;35:163-65.
- Nigam AK, Ray R, Tripathi BM. Buprenorphine in opiate withdrawal: A comparison with clonidine. *J Subst Abuse Treat* 1993;10:391-4.
- Kalra I, Bansal PD. Socio-demographic profile and pattern of drug abuse among patients presenting to a Deaddiction Centre in rural area of Punjab. *Psychiatry J* 2012;15:327-31.
- Amieghem, Ehobhayi F. Psychosocial factors affecting adolescent alcohol abuse in Edo state, Nigeria. *Arch Appl Sci Res* 2013;5:88-92.
- Ziaddini H, Nasirian M, Nakhaei N. Comparison of buprenorphine and clonidine in heroin detoxification. *J Addict Health* 2010;2:1-2.
- Vasvani M. Changing trends in drug de-addiction from a laboratory perspective: Abstracts: Annual Conference Jaipur, 1998;31.
- Sachdeva JS, Singh S, Sidhu BS, Goyal RK, Singh J. An epidemiological study of psychiatric disorders in rural faridkot (punjab). *Indian J Psychiatry* 1986;28:317-23.
- WHO Biennium Project Report. Drug Abuse Monitoring System conducted by National Drug Dependence Treatment Centre, AIMS, New Delhi; 2006-2007.
- Margoob MA, Majid AG, Hussain A. Changing socio-demographic and clinical profile of substance abuse in Kashmir valley. *JK Pract* 2004;11:14-6.
- Yusof K. Knowledge, attitudes and perception related to drug abuse in Peninsula Malaysia with additional focus on parents and adolescents. Research Report, Universiti Malaya; 1994.
- Naskar NN, Roy M, Bhattacharya SK. A study of some socioeconomic factors on drug abuse among the undergraduate medical students in Calcutta. *Indian J Comm Med* 2004;29:69-71.

How to cite this article: 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 Pharma* 2015;6:94-7.

Source of Support: Nil, **Conflict of Interest:** None declared.