PATTERN OF OPIOID USE IN HADOTI REGION

Psychiatry

Dr Mahipal Singh	Junior Specialist, Psychiatric Centre, Jaipur.
Dr Siddharth Rathore	Senior Resident, Dept of Psychiatry, SMS Medical College, Jaipur.
Dr Divya Sharma*	Assistant Professor, Dept of Psychiatry, SMS Medical College, Jaipur. *Corresponding Author

ABSTRACT

Opioid addiction is a chronic relapsing brain disease, being a major medical and social problem escalating expeditiously. Repeated drug use arises from the neurobiological changes in the brain reward circuits and behaviors characteristic of addiction. Among illicit substances, opioid dependence has highest contribution to the number of disability-adjusted-life-years lost. The present study was planned to assess socio demographic profile of opioid dependent patients who participated in the OST Clinic of tertiary care hospital. Results and conclusions are discussed in the light of similar previous studies.

Addiction is a chronic, relapsing illness where there is psychological and physical inability to stop consuming a chemical, drug, activity, or substance, even though it is causing psychological and physical harm, characterized by compulsive, difficult to control drug seeking and use(1). Repeated drug use arises from the neurobiological changes in the brain reward circuits and behaviors characteristic of addiction: tolerance, sensitization, dependence, withdrawal and craving. The combination of positive (e.g., euphoria) and negative (e.g., alleviation of dysphoria or withdrawal symptoms) reinforcement may provide a powerful motivational force for compulsive drug taking. (1). The narcotic problem is recognised today as one of the most important medical and sociologic problems confronting the medical profession. And effects of drug use disorders on society are substantial. The economic cost, including everything from lost wages to medical, legal, and mental health implications is in trillions (2).

Opioid addiction is a major medical and social problem escalating expeditiously. At present in the country as per data of MINISTRY OF SOCIAL JUSTICE AND EMPOWERMENT GOVERNMENT OF INDIA 2019, the prevalence of current use of any opioid was 2.06%. Heroin the most commonly used opioid in India (1.14 %). This was followed by pharmaceutical opioids (0.96%) and opium (0.52%). 0.70% of Indians (approximately 77 lakh individuals) are estimated to need help for their opioid use problems. Of the total estimated approximately 77 lakh people with opioid use disorders (harmful or dependent pattern) in the country, more than half are contributed by just a few states: Uttar Pradesh, Punjab, Haryana, Delhi, Maharashtra, Rajasthan, Andhra Pradesh and Gujarat.(3).

In the past decade, several countries are suffering a rise in opioid consumption, not only in its recreative use but also in opioid prescriptions and related misuse and abuse (4–6). Among prescribed substances, opioid dependence has highest contribution to the number of disability-adjusted-life-years lost (9.2 million) and to drug-related deaths (43.5 deaths/million people aged 15–64 years) (7)**.**

Opioid substitution therapy (OST) is a type of harm reduction initiative that offers an alternative, prescribed medicine – most typically methadone or buprenorphine – which is usually administered orally in a supervised clinical setting. There is strong evidence that OST is effective in enabling people to reduce or cease injecting drug use, greatly reducing their risk of HIV infection. OST has also been found to have wider health, economic, psychological and social benefits.

AIMS AND OBJECTIVES
The present study was planned to assess sociodemographic profile of opioid dependent patients in hadoti region.

MATERIALS AND METHODS
The present study was conducted in opioid substitution therapy centre, run by department of psychiatry, govt. Medical college, kota. Approval for this study was taken from Ethical Committee, Govt. Medical College, Kota.

Sample
The sample comprised of 60 opiate dependent patients registered for maintenance treatment as either buprenorphine or methadone at drug de-addiction clinic attached to Department Of Psychiatry, Govt. Medical College, Kota.

Inclusion Criteria
1. Diagnosis of opiate dependence as per ICD-10 criteria.
3. Minimum two failed attempts for achieving abstinence.
4. Feasibility to comply with requirement of daily coming to DTC.
5. 18 years or older.

Exclusion Criteria
1. Hypersensitivity to drugs under study.
2. Uncooperative and unwilling to give consent.
3. Severe hepatic or renal impairment.
4. Severe respiratory dysfunction.
5. Severe dependence on other CNS depressants.

Tools Of Study
A semi structured specially designed proforma that includes sociodemographic details and clinical profile of patients.

Method Of Study:
The patients fulfilling the inclusion and exclusion criteria were included in the study. Patients were assured that information revealed by them would be kept confidential and would be used for research purpose only. After taking informed consent patients were evaluated in detail as per proforma and scales applied. Subjects were thoroughly evaluated on the especially designed proforma, which includes identification data (name, age, sex etc.) and socio demographic details (education, occupation, marital status etc.). Patients, clinical profile was also recorded. Data thus collected were classified, tabulated and analyzed.

Table:-Comparison Of Sociodemographic Characteristics Of Patients

Variables	Data (n=60)
Age group(in years)	Mean age 40.98±10.67
10-20	1
21-30	10
31-40	19
41-50	16
51-60	13
61-70	1
Gender	
Male	59
Female	1

Domicile	
Urban	57
Rural	3
Education	
Illiterate	10
Primary	12
Middle	20
Secondary	5
Senior Secondary	5
Graduate	7
Post Graduate	1
Professional	0
Marital Status	
Married	49
Unmarried	11
Occupation	
Unemployed	1
Retired	1
Govt. Job	0
Housewife	0
Farmer	4
Worker	13
Businessman	0
Self employed	5
Skilled Worker	21
Driver	15
Monthly Income(in rupees)	
<5000	4
5000-15000	51
15001-25000	5
>25000	0
Family type	
Nuclear	26
Extended nuclear	13
Joint	21
Age of Initiation(in years)	Mean age -27.28±8.7
<15	2
15-20	14
21-25	14
26-30	12
31-35	7
36-40	7
41-45	2
46-55	2

DISCUSSION

In the present study the mean age of opioid dependence was found 40.98±10.67, with majority in age group 31-40. M. Kadri et al (2003) who studied the socio-demographic profile of substance abusers who attended de-addiction centre in Ahmedabad and reported that majority (46%) of them were in the age group of 26-35 years (8). Another study by Adityanjee D. M. Et al (1985) who conducted study on drug treated addicts in the AIIMS, New Delhi and found majority of heroin addicts (87.6%) were under 30 years of age (9). Study conducted by Om Prakash Giri et al (2013) at de-addiction centre of tertiary care hospital at BHU, Varanasi reported mean age of opioid dependent was 36 years (10). Another study conducted by Bichitra N. Patra et al (2015) in Drug De-addiction and Treatment Centre (DDTC) of a tertiary care general hospital in North India and reported that mean age of opioid dependence was 31.1 years (SD±9.9) (11). Ambekar A. Et al (2015) done a survey of opioid dependence in Punjab in which 76 % opioid dependant individuals were in the age group of 18 – 35 years (12). Tam T. M. Et al (2012) evaluated methadone maintenance therapy in Vietnam, in which the median age for the study population was 30 years, ranging from 16.6 to 58 years(13). Kumar N. Et al (2013) studied profile of substance abuse patients attending De-addiction centre in south India, in which the mean age of the patients was 41.9 years with nearly one-third of patients (31.3%) were aged between 31 –

40 years, which was similar to our study (14). Fathollahi M. S. Et all (2016) done a study for predictors of one year retention in MMT in Iran, in which mean age of patients was 37.65 years (SD ±10.77) (15). In the present study mean age of starting of opiate abuse is 27.28±8.7. In a study done by Soyka M. Et al (2008) on retention rate and substance use in methadone and buprenorphine maintenance therapy and reported that the mean age of continuous opioid use was 16.35 years (16). Kumar N. Et al (2013) studied profile of substance abuse at de-addiction centres in South India and reported that mean age for initiation of substance use was 20.9 years (14).

Ambekar A. Et al (2015) done a survey of opioid dependence in Punjab in which 99 % opioid dependant individuals were male which is in comparison to our study (98.33%) (17). Tam T. M. Et al (2012) evaluated methadone maintenance therapy in Vietnam, in which the majority of patients were male (95%) (13). Kumar N. Et al (2013) studied profile of substance abuse patients attending De-addiction centre in south India, in which all the patients admitted at the De-addiction centre were male (14). Fathollahi M. S. Et al (2016) done a study for predictors of one year retention in MMT in Iran, in which most of the patients were male (93.8 %) (15).

According to domicile, the present study the majority of patients that is 95% were from urban background. The reason for higher prevalence of heroin dependence in urban population may be due to easy and wide availability of heroin through various sources in urban areas as compared to rural areas. Second, both MMT and BMT are given on daily basis, so for rural patients it may not easy to come to OST and DDC centre, which are situated in urban locality, on daily, due to lack of transportation facility in rural areas of India. Finding of present study is supported by previous study by Biswajit De et al (2002) where 75% of opioid dependent patients were from urban background (18).

The majority of substance users in our study were coming from lower education background, with 70% of them with middle or lower educational background. Viney Kumar et al (2013) studied the prevalence and pattern of substance abuse and dependence in both inpatients and outpatients at De-addiction Centre in Rohtak, Haryana and found that higher proportion of substance abuse patients belongs to lower education groups (19). Swendsen J et al (2009) examined the prospective association between socio-demographic variables and the subsequent of drug dependence using data from the National Comorbidity Survey in the United States and found significant association between low education and the subsequent onset of drug dependence (20). Lakshminarayan et al (2009) studied opium addiction among rural population in Western Rajasthan and found that opium addiction was more common in illiterate population (21). Tam T. M. Et al (2012) evaluated methadone maintenance therapy in Vietnam and found that most patients were at low education level (13).

A study done by Biswajit De et al (2002) on opioid dependent patients found that 50% patients were married which differ from our study, where 81% of substance user were married busting the concept of singles being more prone to drug use (18),while Kumar N. Et al (2013) in his study of substance abuse patients attending De-addiction centre in South India found that the majority of the patients were married (74.7%) (19).

Ambekar A et al (2015) in Punjab found that most of patients were unskilled worker / labourer (27%), farmer (21%) and skilled labourer which was similar to our study result where workers/ labourers 21%, farmers 6%, unemployed 1%, and skilled workers 60% (12). Bhat S. A. Et al (2017) in Kashmir found that most of patients were unemployed (22). Derbas A. N. Et al (2001) studied socio-demographic characteristics among male Bahraini heroin abusers in the Drug and Alcohol Rehabilitation Unit in Bahrain reported that more than half of Bahraini heroin addicts were unemployed and unskilled labourers (23). Soyka M et al (2008) studied retention rate of substance abusers on methadone and buprenorphine therapy and found that 44 % patients were unemployed (16).

Biswajit De et al (2002) studied opioid dependent and found that most of patients belongs to low socioeconomic class, similar to our study with 91% users earning below 15000 per month (18). Also, A. M. Kadri et al (2003) who studied the socio-demographic profile of substance abusers who attended de-addiction centre in Ahmedabad and found that majority (78.6%) of patients belonged to low socioeconomic class (8).

The results of the current study should be interpreted in the background of following limitations of small sample size that included patients coming in Opioid Substitution Therapy Centre in a tertiary care, Government Medical College Hospital, located in urban area, therefore study population may not be the true representative sample of the community and results cannot be generalised. Also only those patients were included in study who had dependence for at least one year and at least two failed attempts for achieving abstinence. Future study should be conducted with large community based sample that include different centres in rural and urban areas and government as well as private sectors, to assess how deeply the opioid pandemic has entrenched our society.

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