Original Research Paper

Volume - 12 | Issue - 08 | August - 2022 | PRINT ISSN No. 2249 - 555X | DOI : 10.36106/ijar

Psychiatry

SOCIO DEMOGRAPHIC AND CLINICAL PROFILE OF INJECTABLE OPIOID ABUSERS IN A HOSPITAL BASED POPULATION

Dr Ripunjoi Khataniar* Senior Resident, Dept Of Psychiatry, Diphu Medical College And Hospital *Corresponding Author

Dr Bobby Hmar Associate Professor, Dept Of Psychiatry, Gauhati Medical College And Hospital

ABSTRACT **Background:** Substance use disorder is a highly prevalent disorder causing both social and personal burden on the individual. Opioid use disorder affects the huge population around the world. **Aim:** To study the socio demographic and clinical profile of injectable opioid users in a hospital based population. **Methods:** It was a cross sectional study. The duration of the study was for 1 year from1st June 2019 to 31st May 2020.100 patients of injectable opioid users with opioid dependence from Out Patient Department and Indoor Patient Department of Psychiatry,Gauhati Medical College and Hospital who fulfilled the selection criteria and gave written informed consent were recruited for the study. **Statistical analysis:** Data were analysed using descriptive statistical method. **Results:** The Mean age of the study sample is 24.72 years. All the study sample were male. Majority of patients (79%) were from Hindu religion.44% of patients were self-employed.76% of study subjects were unmarried.55% of patients were from lower middle socio economic status.77% of patients were from nuclear family. Majority of patients (66%) have tattoo over their body. 59% of patients share needle with partner while taking injectable opioids. 38 % patients started injecting opioids before 18 years of age. Majority of patients (56%) had Hepatitis C Virus reactive status. **Conclusion:** From our study we could able to find out different socio demographic and clinical profile of injectable opioid users. From this study it is also reflected that 38% of study population started heroin injection during their adolescent period. Hence the early detection and treatment of these adolescent heroin abusers need urgent intervention.

KEYWORDS : Hepatitis C virus, Injectable drug users (IDU),Opioid dependence, Opioid use disorder.

INTRODUCTION

Substance Use disorder is constitutes cognitive, behavioural, and physiological symptoms indicating that the individual continues using the substance despite significant substance related problems[1] Substance use disorder is a highly prevalent disorder causing both social and personal burden on the individual. Opioid use disorder affects the huge population around the world. United Nations Office on Drugs and Crime (UNODC) estimates that 0.3 percent of the global population, or more than 15.6 million people, abused opioids in 2009.[2] According to Ministry of Social Justice India 2019 report, nationally, the most common opioid used is Heroin (1.14%) followed by pharmaceutical opioids (0.96%) and Opium (0.52%). Sikkim, Nagaland, Arunachal Pradesh, Mizoram and Manipur have the highest prevalence of opioid use in the general population (more than 10%)[3]Injectable Opioid abusers constitute a high risk group for various infection. To know about their clinical profile along with socio demographic profile is very essential to deal with this group of population for better management and treatment along with the preventive aspect.

AIMS AND OBJECTIVES

To study the socio demographic and clinical profile of injectable opioid users presenting to a tertiary care hospital.

MATERIALS AND METHODS

Place of study:

The study was conducted in the Department of Psychiatry, Gauhati Medical College and Hospital, Guwahati, Assam, India.

Period of study:

The time period of the study was from 1st June 2019 to 31st May 2020. Ethical Clearance: The study was approved by the Institutional Ethics Committee of Gauhati Medical College and Hospital, Guwahati.

Type of the study:

This was a cross sectional study.

Sample size:

Taking into account earlier work [14] where 52% of patients had Hepatitis C Virus infection we had arrived at a sample size of :

P=0.52

Q=1-0.52=0.48

D=10% absolute error=0.1

$4pq/d^2=99.84=100$

Selection of study samples: 100 patients of injectable opioid users with opioid dependence from psychiatric Out Patient Department and Indoor Patient Department who fulfilled the selection criteria and gave written informed consent were recruited for the study. The injectable opioid users were the heroin users in this study.

Selection Criteria:

A.inclusion Criteria

1. Age :18 to 50 years.
2. Sex: Male, female, and transgender.
3. Patient diagnosed with opioid dependence syndrome as per International Classification of Disease(ICD-10) diagnostic criteria using opioid in injectable route with or without other route.
4. Current substance of abuse was opioid.
5. Patients who gave informed written consent.

B. Exclusion Criteria

1. Patient diagnosed with Psychotic disorder.
2. Patient who were actively suicidal.
3. Patient with other medical co morbidity.
4. Patient with Hepatitis B or/and HIV Positive.

Consent:

Written informed consent was taken from the patients before recruiting them in the study.

Materials And Tools Used:

1. Semi Structured Proforma:

Socio demographic and clinical proforma for obtaining patient information **(Appendis I)**

2.ICD-10

3.Modified Kuppuswamy Socio Economic Scale Updated For Year 2018:

Modified Kuppuswamy's scale is widely used to determine the Socio-Economic status of Indian families.**(AppendixII)**

METHODOLOGY:

After fulfilling the selection criteria patients were enrolled for the study from Outdoor Patient Department and Indoor Patient Department of Psychiatry, Gauhati Medical College and Hospital,Guwahati. In our institution the test for Hepatitis B virus, Hepatitis C virus and Human Immune Deficiency Virus are routinely done for injectable opioid users. Pre-test counselling was given before doing the test. The test were done in the Central Clinical Laboratory of Gauhati Medical College and Hospital. The patients were required to give a venous blood sample of 5 ml, which was obtained by trained

laboratory technician using aseptic procedure. The blood sample was tested for hepatitis C antibody using immunoassay test. After getting the report of the patients we had taken only those patients for the study who were not reactive for Hepatitis B Virus infection or who were Human Immuno deficiency Virus negative. The socio demographic and clinical profile were recorded using the semi structured proforma.

Statistical Analysis:

Data were analysed using a master chart. The socio-demographic data were shown using descriptive statistical methods. The software IBM SPSS version 21.0 was used for all statistical analysis. P value less than 0.05 was considered statistically significant in the study.

RESULTS AND OBSERVATIONS

The results of present study are summarised as below:

Table 1: Socio Demographic Profile Of Injectable Opioid Abuser

Age group	Frequency	Percent
18-20 YEARS	26	26
21-24 YEARS	34	34
25-29 YEARS	22	22
30-34 YEARS	8	8
35-39 YEARS	8	8
40-44 YEARS	2	2
45-50 YEARS	0	0
TOTAL	100	100
MEAN AGE AND STANDARD DEVIATION =24.72 + 2.6		
SEX	Frequency	Percent
MALE	100	100
Religion	Frequency	Percent
HINDU	79	79
ISLAM	21	21
Total	100	100
Education	Frequency	Percent
GRADUATE	25	25
HIGH SCHOOL	44	44
HIGHER SECONDARY	27	27
ILLETERATE	1	1
PRIMARY	3	3
Total	100	100
Occupation	Frequency	Percent
DAILY WAGE WORKER	1	1
GOVT EMPLOYEE	2	2
PRIVATE EMPLOYEE	20	20
SELF EMPLOYED	44	44
STUDENT	17	17
UNEMPLOYED	16	16
Total	100	100
Marrital status	Frequency	Percent
MARRIED	24	24
UNMARRIED	76	76
Total	100	100
Socio economic status	Frequency	Percent
LOWER MIDDLE	55	55
UPPER	5	5
UPPER LOWER	20	20
UPPER MIDDLE	20	20
Total	100	100
Locality	Frequency	Percent
RURAL	10	10
SEMI URBAN	3	3
URBAN	87	87
Total	100	100
Family type	Frequency	Percent
JOINT	23	23
NUCLEAR	77	77
Total	100	100

Data shown in Table 1 shows most patients (34%) were from the age group of 21-24 years. All the patients were male. Majority of patients(79%) were from Hindu religion. 94% of patients were educated upto high school. Majority (44%) were self-employed.Majority (55%) of patients were from lower middle socio economic class. 87% of patients were from urban areas.

Table 2: Clinical Profile Of Injectable Opioid Abuser

Tattooing	Frequency	Percent
NO	34	34
YES	66	66
Total	100	100
Duration of injecting opioids	Frequency	Percent
<1 YEAR	10	10
> 1 YEAR	90	90
Total	100	100
Frequency of injection	Frequency	Percent
MORE THAN ONCE A DAY	96	96
ONCE A DAY	4	4
Total	100	100
Numbr of substance abuse	Frequency	Percent
>1Nos	87	87
1 Nos	13	13
Total	100	100
Needle sharing	Frequency	Percent
NO	41	41
YES	59	59
Total	100	100
No of needle sharing partner	Frequency	Percent
<2	38	38
>2	21	21
NONE	41	41
Total	100	100
Age at first injection	Frequency	Percent
<18 YEARS	38	38
>18 YEARS	62	62
Total	100	100
Hep C reactive status	Frequency	Percent
NON REACTIVE	44	44
REACTIVE	56	56
Total	100	100
Stress factor in last 6 months	Frequency	Percent
ABSENT	94	94
PRESENT	6	6
Total	100	100
Any kind of guilt feeling		
	Frequency	Percent
ABSENT	59	59
PRESENT	41	41
Total	100	100
Family history of Psychiatric illness	Frequency	Percent
ABSENT	96	96
PRESENT	4	4
Total	100	100
Family history of substance abuse	Frequency	Percent
ABSENT	85	85
PRESENT	15	15
Total	100	100
Family history of depression	Frequency	Percent
ABSENT	98	98
PRESENT	2	2
Total	100	100
Family history of suicide	Frequency	Percent
ABSENT	95	95
PRESENT	5	5
Total	100	100
Social impact	Frequency	Percent
LEGAL ISSUE BY ARREST	28	28
NONE	72	72
Total	100	100

Data in Table 2 shows that majority of patients (66%) had tattoo marks over their body. 90% of patients had been injecting opioids for more than 1 years.59% of patients shared needle with their partner while taking injectable opioids. 38 % patients started injecting opioids before 18 years of age. Majority of patients (56%) had Hepatitis C Virus reactive status. 28 % patients had legal issue by arrest due to the substance abuse.

DISCUSSION

Socio Demographic Profile Of Injectable Heroin Abuser:
Age distribution : In this study mean age of subject was 24.72 years with a SD of 2.6 years. This finding was consistent with the study done by Yasir Hassan Rather et al (2013) [4] in which mean age was 26.8 years. Whereas Winslow et al (2006) [5] reported mean age of 39.2 years which was more than our findings.

Sex distributions: In this study all 100 patients were male. It was consistent with the study done by Rakesh Mohanty et al (2018)[6] in which also 100% of subjects were male. Winslow et al (2006) [4] also found almost similar findings in which male participants were 90%.

Religion: In this study majority of patients (79%) were from Hindu religion while only 21% are from Islam religion. It was consistent with the study done by Pali Rastogi et al (2018)[7] in which also majority of subjects (73.3%) were from Hindu religion. Rakesh Mohanty et al (2018)[6] in their study also found majority (55%) participants were from Hindu religion.

Educational status:
From this study we found that majority of injectable opioid abusers were literate. 25% of patients were graduate and above. It was consistent with the study done by Rakesh Mohanty et al (2018) [6] in which also 26.3% were graduate and postgraduate. In our study 44% of patients were educated up to high school. However Rakesh Mohanty et al (2018) [6] found 26.3% were educated up to medium and secondary school. In our study 27% of patients were educated up to higher secondary. Whereas Rakesh Mohanty et al (2018)[6] reported 42.5% patients educated up to higher secondary in their study. In our study 3% of patients were educated up to primary school.1% of patients were illiterate. It was consistent with the study done by Rakesh Mohanty et al (2018)[7] in which 5% patients were illiterate and educated up to primary school.

Occupation:
Majority of patients were employed in our study. Only 16% of patients were unemployed. Yasir Hassan Rather et al (2013) [4]in their study also found that 22.2% patients were unemployed. Whereas Piyush Mahajan et al (2016) [8] in their study unemployment was observed in 43.12% of cases and self-employed people were 31.60% .In our study 17% patients were student. It was consistent with the study done by Yasir Hassan Rather et al (2013) [4] in which 20.2% patients were student.

Marital Status:
Majoity (76%) of study subjects were unmarried. It was consistent with the study done by Yasir Hassan Rather et al (2013) [4] in which majority (70.7%) were unmarried. Samina Farhat et al (2015)[9] also found that 66% of subjects were unmarried. However Piyush Mahajan et al (2016)[8] in their study found that majority of patients (60.05%) were married. Rakesh Mohanty et al (2018)[6]also found that 57.5% of patients were married.

Socio economic status:
In this study majority (55%) of patients were from lower middle socio economic status. It was consistent with the study done by Yasir Hassan Rather et al (2013)[4] in which 56% of patients were from lower-middle socioeconomic status.

Locality:
In this study majority of patients (87%) were from urban areas while 10% of patients were from rural areas and only 3% were from semi urban areas. It was consistent with the study done by Rakesh Mohanty et al (2018)[6] in which majority of participants were from urban (81.3%) than rural population (18.8%).

Family type:
In this study that 77% patients were from nuclear family while remaining 23% were from joint family. It was consistent with the study done by Bilal Ahmad Bhat et al (2019)[10] in which also majority of patients (75.68%) were from nuclear family .Yasir Hassan Rather et al (2013)[4] also found that most of the patients (89.9%) were from a nuclear family.

Clinical Profile Of Injectable Opioid Abusers:
In this study 66% of injectable opioid users had tattoo mark over their body. P.K. Chelleng et al (2008) [13] also found that 76.7% patients of opioid abusers had tattoo mark over their body.

In this study 90% of patients had been injecting opioids (heroin) for more than 1 years. Piyush Mahajan et al (2016) [8] in their study found that 68.62 % of patients injected opioids for more than 1 year.

In this study 59% patients shared needle with their partner. Michelle Kermode et al(2016) in their study from Manipur also found that 50.4% of injectable opioid abusers shared needle with their partner.[12]
In this study 38% patients shared needle with less than 2 partners while 21% patients shared needle with more than 2 partners.41% patients did not shared needle with their partner. . Whereas Piyush Mahajan et al (2016) [8] in their study found that 60.95% of patients shared needle with more than 2 partners.

In this study 38 % patients started injecting opioids before 18 years of age. It reflects major group of injectable opioid users from the adolescent age group. Shihab Kattukulathil et al(2018) in their study from Kerala also found majority 22(73.3%) subjects initiated taking opioid in between 11-20 years, 8(26.7%) subjects initiated in between 21-30 years, while 12(40%) subjects initiated in between 16-20-years[11] Whereas Munidasa Winslow et al (2006) in their study found that the mean age at which patients first started intravenous abuse of any drug was found to be 31.2 [standard deviation (SD) 10.5] years.[5] Michelle Kermode et al(2016) in their study from Manipur found that 51.7% had injected opioid for more than 5 years. 58.5% patients were injecting at least once daily. 65.2% of patients started injecting between 20-29 years while 26.8% had started injecting before 20 years of age. Half of the patients (51.7%) had been injecting for more than five years.

In this study 56% of patients had Hepatitis C virus infection. It is consistent with the study done by Saman Zamani et al (2007) [14] in which also 52.0% of patients were infected with Hepatitis C Virus infection.

In this study 15% patients had family history of substance abuse. Munidasa Winslow et al (2006) in their study found that 27% patients had family history of substance abuse[5]

In this study we also found that 28 % of injectable opioid abusers also having legal issue due to the substance abuse. This may be due to other co morbid psychiatric disorders like Personality disorder which were not assessed in our study.

Strength Of The Study
- The present study analysed the socio-demographic and clinical profile of patients of injectable opioid abusers that can help us to find out different factors associated with injectable opioid abusers.
- Sample size of the study was adequate.

Limitations Of The Study:
- It was a cross sectional study and hence patients were not followed up.

CONCLUSION
The study helps us to evaluate various factors associated with injectable opioid abusers. Early diagnosis and treatment is very crucial to avoid the serious complications including legal issues. From this study it is also reflected that 38% of study population started heroin injection during their adolescent period. Hence the early detection and treatment of these adolescent heroin abusers need urgent intervention by the concerned authorities.

Financial support and sponsorship : Nil.

Conflicts of interest: There are no conflicts of interest.

APPENDIX-I
SOCIO DEMOGRAPHIC & CLINICAL DATA PROFORMA
1. CASE NUMBER
2. REFERAL DEPARTMENT- WARD/OPD
3. HOSPITAL NUMBER
4. MRD NUMBER
5. NAME
6. AGE
7. SEX
8. RELIGION
9. EDUCATION: ILLITERATE/PRIMARY/HIGH SCHOOL/ HIGHER SECONDARY/ COLLEGE &ABOVE
10. OCCUPATION: STUDENT/SELF EMPLOYED/GOVT

EMPLOYEE/PRIVATE EMPLOYEE/UNEMPLOYED/ HOMEMAKER/DAILY WAGE WORKER
11. MARRITALSTATUS: SINGLE/MARRIED/WIDOW/ WIDOWER/SEPARATED/DIVORCED
12. SOCIO ECONOMIC STATUS: UPPER/UPPER MIDDLE/ LOWER MIDDLE/UPPER LOWER/LOWER
13. LOCALITY: RURAL/SEMI URBAN/URBAN
14. FAMILY TYPE: NUCLEAR/JOINT/EXTENDED
15. TATTOOING: YES/NO
16. DURATION OF INJECTING OPIOIDS: < 1 YEAR/> 1 YEAR
17. FREQUENCY OF INJECTION: ONCE A DAY/MORE THAN ONCE A DAY
18. NUMBER OF SUBSTANCE ABUSE: 1≥1
19. NEEDLE SHARING: YES/NO
20. NO OF NEEDLE SHARING PARTNER: ≤2>2
21. AGE AT FIRST INJECTION: ≤18>18
22. HEPATITIS C REACTIVE STATUS: REACTIVE/NON REACTIVE.
23. STESS FACTOR IN LAST 6 MONTHS: PRESENT/ABSENT
24. ANY KIND OF GUILT FEELING: PRESENT/ABSENT
25. FAMILY HISTORY OF PSYCHIATRIC ILLNESS SUGGESTIVE OF SCHIZOPHRENIA/BPAD/MDD: YES/NO
26. FAMILY HISTORY OF SUBSTANCE ABUSE: PRESENT/ ABSENT
27. FAMILY HISTORY OF DEPRESSION: PRESENT/ABSENT
28. FAMILY HISTORY OF SUICIDE: PRESENT/ABSENT
29. SOCIAL IMPACT: SEPARATED/DIVORCED/ABANDONE BY FAMILY MEMBER/LOSS OF JOB/LEGAL ISSUE BY ARREST/JAIL

REFERENCES

1. American Psychiatric Association. Diagnostic and statistical manual of mental disorders (DSM-5®). American Psychiatric Pub; 2013 May 22.
2. Sadock BJ, Sadock VA, Ruiz P. Comprehensive textbook of psychiatry 10th edition:3485-3538
3. NDDTC,AIIMS submits report "Magnitude of Substance use in India' to M/O Social Justice & Empowerment [Internet]. [cited2019 Feb]. Available from: https:// /pib.gov.in/ PressReleaseIframePage.aspx?PRID=1565001
4. 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. The Malaysian journal of medical sciences: MJMS. 2013 May;20(3):31.
5. Winslow M, Ng WL, Mythily S, Song G, Yiong HC. Socio-demographic profile and help-seeking behaviour of buprenorphine abusers in Singapore. ANNALS-ACADEMY OF MEDICINE SINGAPORE. 2006 Jul 1;35(7):451.
6. Mohanty R, Senjam G, Singh NH. Psychiatric comorbidities among opioid-dependent patients attending department of psychiatry, regional institute of medical sciences hospital, Manipur. Indian Journal of Social Psychiatry. 2018 Apr 1;34(2):132.
7. Rastogi P, Rastogi D. Profile of OPIOID Dependent Patients. International Journal of Innovative Research in Medical Science. 2018 Apr 25;3(03):1876-to.
8. Mahajan P, Singh M, Garg A, Garg PD, Singh G. Prevalence of hepatitis-C viral infection among opioid dependent injectable drug users: A study conducted at Swami Vivekananda drug de-addiction and treatment centre, amritsar. Dual Diagnosis Open Access. 2016 Jan 1;1(2).
9. 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. Journal of basic and clinical pharmacy. 2015 Jun;6(3):94.
10. 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 Jul 1;35(3):173.
11. Kattukulathil S, Cholakottil A, Kazhungil F, Kottelassal A, Thovarayi R, Narippatta MS. PSYCHIATRIC COMORBIDITY IN PATIENTS WITH OPIOID DEPENDENCE. addiction.;3(8):11.
12. Kermode M, Nuken A, Medhi GK, Akoijam BS, Sharma HU, Mahanta J. High burden of hepatitis C & HIV co-infection among people who inject drugs in Manipur, Northeast India. The Indian journal of medical research. 2016 Mar;143(3):348.
13. Chelleng PK, Borkakoty BJ. Risk of hepatitis C infection among injection drug users in Mizoram, India.
14. Zamani S, Ichikawa S, Nassirimanesh B, Vazirian M, Ichikawa K, Gouya MM, Afshar P, Ono-Kihara M, Ravari SM, Kihara M. Prevalence and correlates of hepatitis C virus infection among injecting drug users in Tehran. International Journal of Drug Policy. 2007 Oct 1;18(5):359-63.