



Socio-demographic Trends in Patients Consuming Crude Opium Attending Psychiatry Clinic of a Tertiary Care Hospital in Mumbai

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ABSTRACT

Background: "Bhukki" (poppy husk) consumption amongst truck drivers and many professions is a common and often culturally sanctioned form of substance abuse noted in India. There was a sudden surge of these patients undergoing withdrawal of opium due to a police crackdown on illegal smuggling of opium.

Objectives: This study was a retrospective chart analysis to study the trend and socio-demographic profile in these patients.

Materials and Methods: Study involved analysis of all outpatient department papers of patients presenting with history of crude opium consumption attending the psychiatry outpatient clinic during the period from June 2014 to September 2014. For the purpose of analysis truck drivers and non truck drivers were analyzed separately.

Results: The total number of patients analyzed were 265 (264 males & 1 female). The age ranged from 19 to 85 years. About 44% were using only *Bhukki*, 25% *Afeem* and 30% both. 67% had no other comorbid substance use. There was statistically significant difference in mean age ($p = 0.027$) and education status ($p = 0.001$) amongst truck driver and non-truck driver groups.

Conclusion: The study emphasizes the need to look into the socio-cultural aspects of opium addiction in India.

Keywords: *bhukki*, *afeem*, truck drivers, cultural, opium, India.

INTRODUCTION

Opium has been used since ancient times by mankind many wars have been fought over opium with the Indian ancient medical system describing it as a remedy for many ailments.¹ Opium has been cultivated in India as well being imported via the ancient trade routes passing through India. United Nations Office on Drugs and Crime (UNODC) has recently shown the production as well as dissemination of opioids to be on a rise.² This rise also holds true for naturally acting opioids as well as

synthetic opioid compounds.³ The major source of supply seems to be from the opium fields of Rajasthan and Madhya Pradesh. This is despite the fact that under Section 8 of the NDPS Act, 1985, a mechanism was established to destroy illicit poppy fields and control the production in demarcated tracts of land in the three states of Rajasthan, U.P. and M.P.⁴ *Bhukki* is the poppy husk derived from the opium plant and is consumed as a dry ground powder, or as a concentrate prepared by dissolving *bhukki* in boiled water. *Bhukki*, referred to as com-

mon man’s addiction was found to be used by patients from rural as well as urban background.⁵

Recently, India witnessed a police crackdown on opioid peddlers and suppliers, which lead to disruption of supply and fuelled the demand for opioids, particularly *bhukki*.⁵ Also there was a rise in price to buy *bhukki* in black market, many of them decided to quit this habit. Thus, a multifold rise in the number of patients visiting the de-addiction centers was noted. So there was a sudden surge of these patients in the psychiatry outpatient clinic in a tertiary hospital of Mumbai. Hence, this study was planned to assess the socio-demographic profile of patients attending the opioid de-addiction O.P.D. at a tertiary care teaching hospital.

METHODOLOGY

A specialty opioid deaddiction outpatient clinic was started daily at a tertiary care teaching hospital in Mumbai, India to cope with the surge in these patients due to the opioid crackdown by the police. All patients attending this clinic were first assessed by a psychiatry resident. Each case was then discussed with senior consultant in the patients were evaluated for any psychopathology associated or comorbid with opioid use and appropriate management was prescribed. A copy of the first

consultation report and case record was then retained in the clinic database. All the case records of patients attending the specialty clinic and diagnosed with opioid use disorder as per DSM-5 criteria ⁶ during a period of 4 months (June 2014-September 2014), were included in the analysis. A semi-structured proforma was developed to gather data on (1) socio-demographic factors, (2) opioid consumption patterns and (3) psychiatric and medical comorbidity. Data was then analyzed using computerized software and appropriate statistical tests. Institutional ethics committee clearance was obtained prior to the start of the study.

RESULTS

Demographic details

The sample of 265 patients, (264 males & 1 female), had the mean age 44.35 ± 12.70 years (19-85years). Number of years spent in education was 8.13±3.45 years (0-15 years). 91.3% of patients were married while 8.7% were unmarried. Majority had only 90.2% had one or more children. 243 (91.7%) of them were employed in work related to the transport industry. 209 (78.8%) of them were truck drivers while 25 were related to garage work or jobs in transport companies and 7 of them were taxi drivers.

Table 1: Various parameters according profession

| Parameter | Truck drivers (n=209) | | Non-truck drivers (n=56) | | t value, P value |
|-----------------------------------|-----------------------|----------|--------------------------|---------|------------------|
| | Mean ± SD | (Range) | Mean ± SD | (Range) | |
| Age in yrs. | 45.24 ± 12.636 | (20-80) | 41.02± 12.479 | (15-85) | 2.225, 0.027* |
| Education (in yrs.) | 7.77 ± 3.26 | (0-15) | 9.48 ± 3.83 | (0-15) | 3.355, 0.009* |
| Number of children | 1.93 ± 1.06 | (0-5) | 1.80 ± 1.09 | (0-5) | 0.810, 0.418 |
| Duration of consumption (in yrs.) | 17.03 ± 10.284 | (0.5-50) | 11.39 ± 9.353 | (1-40) | 3.712, <0.01* |

*significant

Table 2: Type of opioid and other substance consumption according to profession

| Substance use | Truck drivers (n=209) (%) | Non-truck drivers (n=56) (%) | P value |
|-----------------------------|---------------------------|------------------------------|---------|
| Type of opioid consumed | | | |
| Bhukki | 95 (45.45) | 23 (41.07) | 0.232 |
| Afeem | 48 (22.97) | 19 (33.93) | |
| Both | 66 (31.58) | 14 (25) | |
| Other substance consumption | | | |
| Alcohol | 46 (22.01) | 13 (23.21) | 0.608 |
| Tobacco | 10 (4.78) | 2 (3.57) | |
| Alcohol & Tobacco | 10 (4.78) | 5 (8.93) | |
| Cannabis | 1 (0.48) | 1 (1.79) | |
| Nil | 142 (67.94) | 35 (62.5) | |

P > 0.05 not significant. Chi square test used in the analysis

Details of Substance use

It was observed that 44% were using only *bhukki* (poppy husk), 25% only *afeem* and 30% were using both. The median duration of opioid consumption was 15 years (Mean = 15.75±10.34 years, range 6 months to 50 years). The average quantity of *bhukki* consumed was 2.6 kg/month and *afeem* was 300gm/ month by the patients, though exact amount was not being taken by each patient. 88 of them (33.3%) had one or more comorbid substance use. It was also found that 59 were using alcohol, 12 were taking tobacco while 15 had both alcohol and tobacco consumption. Only 2 patients were taking cannabis. Occupation did not affect the preference to the type of opioid ($\chi^2 = 27.153, P = 0.131$) or the co-morbid substance use ($\chi^2 = 48.913, P = 0.158$).

Table 1 show that truck drivers were significantly older in age, less educated and had more duration of consumption compared to non-truck drivers. There was no statistically significant difference in opioid and other substance use patterns in two groups (Table 2).

DISCUSSION

Literature has shown that, there is a downward trend in use of opium, and the use of poppy husk (*bhukki*) has almost doubled.⁷ A recent study conducted in de-addiction centre of Punjab has shown that 178 of the patients reporting to a de-addiction centre were abusing *bhukki* and more than 2 kg of *bhukki* was consumed per month by the patients.⁸ These figures are much similar to our study. Erratic working hours, long solitary driving, prolonged periods of staying away from the family; demands to reach and deliver on time and low job satisfaction have been identified as predictors of psychiatric disorders in truck drivers.^{9, 10}

Also in our study, patients said that use of *bhukki* and *afeem* allowed them to keep themselves awake, so they could drive the vehicle with more concentration and this habit was culturally accepted amongst truck drivers. This view has also been mentioned in the book on opium use wherein the users of *bhukki* had said following statements, "Till the time the landlords distribute poppy husk, how can we work in the scorching sun? Our quota is fixed", "I started working in the kiln four years ago and ever since have been using *bhukki* as it helps me work for longer hours".¹¹ Commonly observed psychological and psychiatric disorders included depression, loneliness and substance abuse.^{12, 13} Prevalence of alcohol use disorder was 48% and opioid use was found to be 2.5% among truck drivers.¹² Drivers travelling farther had a higher risk of substance use.¹⁴ Depression and substance use among truck drivers has been linked with a road traffic accident or a near miss.¹⁵

CONCLUSIONS

It is thus apparent, that opioid use, in pure as well as adulterated form is prevalent in Mumbai, and particularly in truck drivers and those in transport related occupations.

RECOMMENDATIONS

Further studies in similar demographic strata across India are warranted. Cultural impact on substance use should be explored. Truck drivers often drive long routes, tackling dangerous roads

and weather conditions. Considering this, opioid intoxication as well as withdrawal for a truck driver can have catastrophic sequelae. Multiple nationwide opioid replacement facilities should be available with proper observation and monitoring to address this issue in truck drivers.

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