

Substitution Treatment for Drug Addicts through Opioid Assisted Treatment Clinics in Punjab

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Abstract

The outbreak of substance abuse among youth has taken an alarming proportion in Punjab. The rapidly growing population of people who inject drugs in Punjab have posed new challenges to the treatment and care of these injectors. The Punjab government established Outpatient Opioid Assisted Treatment clinics to treat the addicts. Through these clinics, it was decided to substitute the use of illicit drugs with orally prescribed opioids, such as buprenorphine. This medication is administered in these clinics to bring this segment of population back into society. This study assesses the feasibility and effectiveness of substitution treatment for drug users in Punjab through OOAT clinics. The study is based on primary data gathered from six public owned OOAT clinics in three districts of Punjab. Using inclusion and exclusion criteria a sample of 114 addicts visiting OOAT clinics on the day of the field visits was covered in the exit interviews using a pre-structured questionnaire. The early onset of drug use among Punjabi youth is a cause for concern. They usually had lower levels of education, lower socio-economic status and precarious employment. Drug addicts consumed more than one kind of drug prior visiting these clinics. To live an opioid-free life, addicts need to take medication on a regular basis. However, among 80 per cent of them the use of medication was erratic. **There was a lack of emphasis on one-to one counselling.** The outcomes for living a normal life after starting treatment in these clinics are not very promising. Only one out of every ten drug addicts said that they were able to lead a normal life, while others still had difficulty leading a normal life. To enhance the situation, it is recommended that the interaction between the doctors and drug users must be more private. This would foster confidence between the service providers and recipients. It would also help reduce the retention rate of drug users at these clinics by encouraging them to pursue a normal social life.

Key words: Substance abuse, opioid dependence, OOAT clinic, young adults, Punjab

INTRODUCTION

Substance abuse is becoming a global phenomenon that affects every country in varying degrees. About 275 million people worldwide have used drugs in the past year, while more than 36 million have experienced substance use disorders. The latest global data indicate that about 5.5 per cent of the population aged 15 to 64 have used drugs at least once in the past year, while 36.3 million people, or 13 per cent of the total number of people who use drugs, suffer from drug-related disorders (World Drug Report, 2021).

India in general and Punjab in particular are caught in this vicious cycle of drugs, and the number of drug addicts is growing every day. The Union Ministry of Social Justice and Empowerment report states that about 2.1 per cent of the country's population (2.26 million people) use opioids which includes opium (or its variants like poppy husk known as *doda/phukki*), heroin (or its impure form- smack or brown sugar) and a variety of pharmaceutical opioid (synthetic drugs). Punjab is one of the states with a high prevalence of drug use, including sedatives, cannabis, alcohol, opioid, people who inject drugs (PWID), cocaine, and amphetamine type stimulants (ATS) (Ambekar et al., 2019). The survey shows

that Punjab has more opioid users than the north-eastern region. Punjab suffers from a high prevalence of current use of opioid use and opioid disorders. The rapid growth of the injecting drug user's population in Punjab also poses new challenges in the treatment and care of these users.

In this regard, Opioid substitution therapy (OST) is an evidence-based intervention for people who are addicted to opioids that replaces illicit drug use with orally prescribed opioids such as buprenorphine and methadone. OST reduces HIV risk taking behaviours and harms associated with injecting, overdose and involvement in criminal activity, thereby improving the quality of life and health of injecting drug users (IDUs). It is approved by United Nations Programme on HIV and AIDS (UNAIDS), United Nations Office on Drugs and Crime (UNODC) and WHO as one of a comprehensive set of interventions for IDU programs that collectively maximize the impact for HIV prevention and treatment (Armstrong et al., 2010).

OST is currently available in 77 countries, most of which use methadone as an OST drug, followed by buprenorphine. OST in India has been available since the early 90s, when buprenorphine began to be used in some government hospitals and NGOs (Rao, et. al. 2014). India's OST programme has made significant progress under the National AIDS Control Programme (NACP) since 2008. Methadone was the first and currently the most commonly used opioid used as an OST drug. Methadone is a pure opioid agonist that can be administered orally in fluid or tablet form. Buprenorphine is a partial opioid agonist which can be used as a sublingual pill. This is the world's second most widely used OST drug.

The Punjab Opioid Dependence Survey (PODS) was commissioned by the Union government to study people addicted to opiates in Punjab and carried out in February-April 2015 by the NGO Society for Promotion of Youth and Masses (SPYM) and experts from AIIMs. It revealed that there were about 2.32 lakh people addicted to opiates in Punjab. This means that 1.2 per cent of the adult population is drug user. For 'opioid users', the survey estimated the number to be 8.6 lakh, which means that 4.5 per cent of the total Punjab's adult population has at least 'used' drugs. The state has three times the number of users as compared to all the corresponding figures for India as a whole. Based on the recommendations of this PODS study, the Punjab Government decided to launch the Opioid Agonist Therapy (OAT) because it is an effective, safe and cost-effective modality for managing opiate dependence. Among all pharmacological agents used as substitution substances in the management of opioid dependence, it was decided to use buprenorphine in comparison with other options available in heroin dependence (Standard Operating Procedures, 2017). This medication must be administered in clinics and is generally well-tolerated by people who use drugs. Individuals can continue to do potentially dangerous work, such as driving or operating machines. Precautions should be taken primarily in the early days during the induction of dose or during the increase in doses (Rao et al., 2014).

The Government of Punjab initiated a plan to expand OAT services through existing Drug De-Addiction & Rehabilitation and public health facilities at district, sub-divisional and block levels. For ease of implementation, "Outpatient Opioid Assisted Treatment (OOAT)" clinics have been created (Standard Operating Procedures, 2017). The objective of setting up these clinics was to bring the segment of drug-addicts back into society.

The OOAT clinics programme was rolled out in three districts of the State (Amritsar, Moga and Tarn Taran) in October 2017 and eventually expanded to other districts. These are mainly intended for outpatient treatment of all types of drug users. OOAT centres also have inpatient facilities, but they are rarely used because of the permission hurdle faced by drug addicts and their family members. Admission to an OOAT centre for treatment requires written authorization from the medical officer, which is not possible at odd hours in emergency. Such procedures are also often not known by the general public who come to admit family members (Ghuman, et.al. 2019). The purpose of establishing public health clinics was to reintegrate the addicted population into society. The purpose of this study is to highlight the effectiveness of these OOAT clinics, largely through the experience and perspectives of drug users in achieving their goal.

Objectives

The present paper assesses the feasibility and effectiveness of substitution treatment for drug addicts in Punjab through OOAT clinics. The study attempts to identify the socio-economic background of addicts receiving treatment at OOAT clinics. It also traces the history of substance abuse among people who consumed drugs and the length of treatment sought in these clinics. The study also attempts to ascertain the status of counselling services offered and to measure the level of satisfaction of addicts with the services offered in these OOAT clinics.

Methodology

The study is based on primary data gathered from six public owned OOAT clinics in three districts in the state of Punjab. A multistage sampling design was adopted to select districts, OOAT clinics and drug addicts at these clinics. In the first stage, three districts namely Amritsar, Gurdaspur and Barnala were selected at random. The next phase consisted of selecting OOAT clinics in each of these three districts. Two OOAT clinics, one located at the district headquarters, and the one at the CHC, were selected at random from each of the three districts. The sampled CHCs included Manewala in Amritsar, Kalanaur in Gurdaspur and Dhanaula in Barnala district. The next step was to select the substance abusers. In each of these six sampled OOAT clinics, a fixed number of 20 drug addicts were to be interviewed. As it turned out, these beneficiaries were under enormous psychological, mental, financial

and social pressure and were struggling with their addiction problem. The magnitude of this pressure has led to reluctance on the part of addicts to share their experiences on this issue. They often avoid an interaction due to paucity of time or have tried to hide the information by claiming that they do not take drugs. The authors visited the OOAT clinic and interacted with these substance users to make them feel comfortable to share the information. After completing the inclusion and exclusion criteria, a sample of 114 addicts visiting OOAT clinics on the day of the field visits was taken into consideration for analysis. A pre-structured questionnaire was used to gather information during exit interviews about different aspects of drug recipients in these clinics, as well as their sociodemographic variables. Statistical assessment of the data was carried out using SPSS software.

Profile of respondents

A snapshot of the profile of drug users interviewed indicated that all were males. Interaction with OOAT clinic staff revealed that the number of female drug users registered in these clinics was almost insignificant. Because of the stigma associated with female substance abusers their behavior in seeking treatment was very different from that of their counterparts. Women stayed out of rush hours while visiting these clinics. However, this substance abuse treatment may not be an indicator of gender representativity.

The median age of drug abusers was 33.5 years. Seven out of every ten drug addicts were between ages of 25 and 45 years. The drug users did not have a high level of education. Nine out of every ten drug addicts have less than a high school education. Over half of the drug addicts were labourers. Overall, a large number of drug addicts had lower educational attainment, lower socio-economic status and precarious jobs.

Brief drug addiction history

It is pertinent to know the history of opioid addiction among people who use drugs, as this would help develop appropriate substitution therapies to achieve better outcomes. A brief history of substance abuse is presented in Table 1. Clearly, about a quarter of them had started using drugs before they were 18 years. Most of them began using drugs between the ages of 18 and 28 (58 per cent). The average age for drug users was 20 years. This early onset of youth drug abuse is an area of concern.

All drug users were asked why they were most inclined to use drugs. Over half of them (52 per cent) had started using drugs under peer group pressure. Their peer group friends were already drug users who motivated or coerced them to move in that direction. Thirty-eight per cent of patients stated that they initially began taking a small amount of drug to improve their work performance. It was claimed that after using these drugs they could work for long hours

without taking breaks. Workers and truckers stated that drug consumption has made them more productive economically. But, overtime their drug dependency has increased. These people have become habitual users of drugs. Other reasons why they started to use drug include trying to bring excitement into life and trying to use drugs at an early stage in their lives after losing a close family member. They eventually turned to these OOAT clinics for treatment.

Table1
Brief Drug Addiction History of Drug Users, Punjab

Addiction history	Response rate (in per cent) (N=114)
Age when first drug was taken (in completed years)	
<18	23.7
18-28	57.9
28-38	16.7
38+	1.8
Median age	20.0
Initial reason of taking drug	
Peer group	51.8
To enhance work performance	37.7
Other family members	8.8
Others	1.8
Last drug taken before visiting the OOAT clinic	
Heroin/ <i>Chittan</i>	33.3
Poppy/ <i>Phukki/Dhoda</i>	22.8
Tramadol/Capsule/Tablet	25.4
Opium/ <i>Afeem</i>	18.4
Money spent on drugs per month before coming to OOAT clinic (in Rupees)	
<3 thousand	14.9
3-6 thousand	41.2
6-9 thousand	20.2
9-12 thousand	10.5
12+ thousand	13.2
Average of money spent (in Rs.)	6830.0

Source: Field Survey, 2022.

People who were addicted to drugs used more than one drug. All the drug users were questioned about the last drug they had used before visiting OOAT clinics to seek treatment. One-third had consumed heroin/*Chittan*, one-fourth had tramadol/capsule/tablet, about one-fourth used poppy/ *Phukki/Dhoda* and one-fifth used opium/*Afeem*.

The money spent by drug users to organise drug use differed according to the type of drug and the quality of the drug used. It ranged under three thousand rupees to over thirty thousand rupees a month. On an average about 7000 rupees were spent per month to arrange different

types of drugs prior to visiting the OOAT clinics. Interestingly, two respondents stated that they used to spend about a thousand rupees a day, which amounts to 30 thousand rupees a month on organising the drug at that time.

Duration of treatment

Two-fifths of the drug users had been visiting OOAT clinics for last two years, 31 per cent for last one year and 23 per cent for more than three years. They were still being treated in these clinics. All the drug users were asked from which source they became familiar with the treatment offered in the OOAT clinics. Seven out of every ten drug users were guided by their friends who were also seeking treatment in these clinics. In addition, 26 per cent of drug addicts were guided to these clinics by family members. In half of the cases, OOAT clinics were the first option to eliminate drug abuse. Some had tried both government and private de-addiction centres for getting rid of this addiction. However, despite the fact that they stayed in these centres, the addiction problem did not go away. The search for treatment at these OOAT clinics was one of their options.

Health staff who initially interact with drug addicts at the OOAT clinic play a central role in establishing a relationship and continuing treatment from these clinics. Table 2 shows that nine out of every ten drug users were attended by the counsellor at the time of their first visit to these clinics. Remaining ones were attended by medical officers.

Eighty per cent of the drug users were registered in the same clinic where they collected drugs on the day of field visit. The remaining 20 per cent were enrolled in other clinics located in the vicinity. Registered drug users at OOAT clinics located in the CHCs must visit the OOAT clinic located at the district hospital head office each month to take one-week medication.

Before starting the treatment, health staff at these OOAT clinics should have information on the extent and pattern of opioid use among these addicts. In accordance with government guidelines, a new patient should be assessed by both the counsellor and the medical officer. The realities of the field are not on the intended lines. Only 36 per cent of the drug users were assessed both by the counsellors and medical doctors as per the established protocol. The remaining 47 per cent were evaluated solely by the counsellor and 17 per cent by the medical officer. This was largely due to vacant positions of counsellors and medical officers at many of the OOAT clinics.

For protocol is to get consent form signed from patient before initiating the treatment at these clinics. For minor drug users the consent form is to be signed by their guardians. Staffs in these clinics have not strictly complied with this rule. Only 37 per cent of the drug users had met this requirement by signing the consent forms. Another aspect of the protocol is to test

urine before treatment begins at those clinics. This is done in order to set the appropriate dose of BPN medicine to be given to these drug addicts. Less than half of the drug users reported having their urine tested before starting the treatment. The reason for lack of urine testing was largely the unavailability of the required number of urine test strips in the clinics. In such cases, health staff treating drug users believed the history of drug use provided by drug users. The dose of medication was decided on the history provided by them rather than deciding it on a scientific basis.

Table2
Initiation of Treatment at OOAT Clinics, Punjab

Initiation of treatment at OOAT clinic	Response rate (in per cent) (N=114)
Health personnel attending and interacting initially at the centre	
Counsellor	92.1
Doctor	7.9
Registered at this centre	
Yes	79.8
No	20.2
Health personnel assessing before initiating the treatment	
Counsellor	47.4
Medical Officer	16.7
Both counselor and medical officer	36.0
Consent form signed before initiating the treatment	
Yes	36.8
No/Don't know	63.2
Urine tested before initiating the treatment	
Yes	47.4
No	52.6

Source: Field Survey, 2022.

OPD visits

After registering drug addicts at these OOAT clinics, they are required to go to the OPD clinic to obtain their BPN tablets on a regular basis. Table 3 shows the response of drug addicts attending the OPD at these OOAT clinics. Initially the drug addicts are put on a daily dose schedule for few days followed by weekly doses. One-third of the drug users visited OPD of OOAT clinics each day, while three-fifths visited once a week. Drug users who collected daily dose of drugs were divided into two types of users – one receiving a high dose of daily tablets and the other eligible for home doses but had not received written authorization from the district hospital. This pattern of use was largely peculiar for drug users receiving their doses from CHCs. Only 17 per cent of drug users reported that their presence was marked at OPD at these clinics when they went to receive their dose.

Table3
OPD Visit Details of Drug Users, Punjab

OPD visit details	Response rate (in per cent) (N=114)
Usual number of times clinic visited in a month	
Daily	33.3
One a week	58.8
Once in 10 days	0.9
Once in two weeks	7.0
Attendance marked whenever clinic attended	
Yes	16.7
No	83.3
Regularity in visiting clinic	
Never missed	20.2
Rarely missed	48.2
Sometimes missed	25.4
Stopped and initiated again	6.1
Clinic gave a reminder regarding medicine or any other thing	
Yes	1.8
No	98.2
Free medicines	
Yes	100.0
Free medical tests/examination at clinics	
Yes	65.8
No	34.2
Urine examination done at regular intervals	
Yes	1.8
No	98.2

Source: Field Survey, 2022.

To live a life without opiates, drug users must use medication on a regular basis. Just 20 per cent reported that they had never failed to visit the clinic to take medication. In the remaining cases, the dose of medication was used irregularly. This was obvious to truckers and labourers who often travel from their usual place of residence. They received weekly home dose. However, in many cases, they are forced to buy elsewhere, in case they could not come back to the OOAT clinics after about a week. A negligible proportion of drug users (1.8 per cent) received reminder calls from these clinics concerning medicine or any other issue. A positive situation has been found concerning the free distribution of medication through these clinics. All drug users reported that they had not been charged for drugs in these clinics. However, not every drug user has benefitted from free testing at these clinics. The OOAT clinics were not fully equipped to conduct tests. Drug users went through these medical tests in nearby medical laboratories at nominal rates.

Access to OOAT Clinics

Since drug users need to travel frequently to receive their dose of medication, it is essential that OOAT clinics are not located remotely. All the drug users were asked about their trips to these clinics to procure medicine and the results are presented in Table 4. On an average, an addict travelled 12 kilometers to obtain the medication. As regards the mode of transport, three out of every five drug users used two wheelers and one out of every five used auto/tempo. Twelve per cent walked to those clinics to get their medication. On an average, a drug user took half an hour to visit these clinics. The average cost of each trip was 66 rupees. Sixty-three per cent attended these clinics alone and 36 per cent were accompanied by friends.

Table4
Travelling Details of Journey of Drug Users to the OOAT Clinics, Punjab

Travelling details	Response rate (in per cent) (N=114)
Distance of clinic from home	
<10 km	38.6
10-20 km	49.1
20+ km	12.3
Mean distance	12.3
Usual mode of transport used to reach the clinic	
On foot	12.3
Rickshaw/Tonga	0.9
Auto/Tempo	21.1
Bus	4.4
Bicycle	5.3
Scooter/motorcycle/two-wheeler	57.0
Mean amount of time taken to reach the clinic from home (in minutes)	31.6
Mean amount of money spent on making to and fro journey (in Rs.)	65.8
Money reimbursed by clinic or any other	
No	100.0
Usual personnel accompanying for clinic visit	
Family member	0.9
Friend	36.0
Nobody	63.1

Source: Field Survey, 2022.

To minimize travel time and costs to procure medication from these clinics, all drug addicts were interested in receiving home doses of medication. At the time of the field-visit, two-thirds of drug users were taking home doses while others were taking daily doses. Interaction with patients revealed that everyone wanted to receive home dose for two to three weeks to minimize their loss of wages. On the other hand, health staff felt that the drug users were likely to misuse the BPN tablets, so they were not very keen to provide a dose of medication for a longer period of time.

Counselling

Counselling plays an important role in helping addicts recover, as recovery from addiction is not just about breaking down the physical dependence on a drug. Counselling offers additional benefits to facilitate recovery by identifying situations that can contribute to the drug abuse. It provides direct support for substance abuse and concurrent mental health disorders, allows peer support, introduces new behavior strategies for recovery, and reduces the risk of relapse. More than half of the substance abusers (57 per cent) received group counselling. The frequency of individual and group counselling was not fixed and patients were informed as and when clinic staff wanted to do so. Family counselling was not provided to any addict. In fact, they rarely have family members visiting the clinic. No drug user claimed to have ever attended a yoga or prayer session in a clinic. The drug users were not interested in coming back in the evening to attend yoga and prayer sessions.

Impact of treatment

The goal of setting these OOAT clinics in public health facilities of Punjab is to help addicts live a normal life. The idea is to get them integrated with the mainstream society. All addicts were asked whether they were able to lead a normal life after beginning treatment in these clinics. The results are not very promising in that respect. Only one out of every ten drug addicts reported that they could lead a normal life. Others people were still struggling for a normal life. All the drug users would continue to receive treatment at these OOAT clinics, primarily because they receive free medication.

Patient satisfaction

Patient satisfaction is an important indicator that is frequently used to measure the quality of care. Patient satisfaction provides information on the provider's success in meeting client expectations and is a key determinant of a patient's perspective behavioral intention. All the patients were asked to rate the services according to their level of satisfaction including availability of health staff at these clinics, time given to attend them, response of medical staff to reply their queries, quality of treatment provided, behaviour of the staff and overall services, received at the OOAT clinic from where they were currently pursuing treatment (Table 5).

Weighted averages were calculated for each of the parameters of patient's satisfaction with OOAT clinic services for better depiction of the results so as to provide a meaningful comparison. This is calculated as follows: The beneficiaries (in this case the drug addicts who are taking BPN tablets/medicine from clinic) are classified according to their level of

satisfaction with assigned codes (Highly satisfied =1, Satisfied =2, Somewhat satisfied=3, Not satisfied =4 and Very dissatisfied =5). The responses from patients on the parameter of attention given by doctor/health staff in listening to their problems is calculated as follows:

$$2 \times 1 + 30 \times 2 + 55 \times 3 + 12 \times 4 + 1 \times 5 = 280$$

The numbers of responses 2, 30, 55, 12 and 1 as above have been taken for example. The total number of patients equals 114. So, the weighted average is $280/114 = 2.46$. Similarly, the weighted averages were calculated on all the individual parameters for measuring level of satisfaction of patients. The values of weighted average ranged from 1 to 5. Lower the value better is the satisfaction level in the present case.

Table5
Satisfaction of Drug Users with Services Provided at OOAT Clinics, Punjab

Services	Highly satisfied	Satisfied	Somewhat satisfied	Not satisfied	Very satisfied	Weighted average
Availability of health personnel during prescribed timings	15.0	73.0	12.0	0.0	0.0	1.97
Provided basic information to the patient and family members about the treatment process	1.0	44.0	54.0	1.0	0.0	2.55
Time given	0.0	18.0	71.0	11.0	0.0	2.93
Attention given in listening to problems	2.0	30.0	55.0	12.0	1.0	2.80
Response of queries	2.0	29.0	57.0	11.0	1.0	2.80
Competence in understanding problems	3.0	28.0	56.0	12.0	1.0	2.80
Explanation given to tackle problem in future	2.0	30.0	53.0	15.0	0.0	2.81
Treatment going in right direction	5.0	49.0	41.0	5.0	0.0	2.46
Privacy maintained at time of treatment	0.0	1.0	28.0	69.0	2.0	3.72
Cordial behavior	3.0	24.0	59.0	13.0	1.0	2.85
Overall rating of services provided	3.0	23.0	62.0	11.0	1.0	2.84

Source: Calculated by the authors.

Satisfaction among the drug users was highest as regards the availability of health personnel during prescribed timings (1.97) followed by treatment going in right direction (2.46) and provided basic information to the patient and family members about the treatment process (2.55). Satisfaction was lower for privacy maintained at time of treatment (3.72). Overall, these services had a satisfaction rating of 2.84.

Conclusions

One area of concern that emerged is the early onset of substance abuse among youth in Punjab. About 60 per cent of them began to use these between the ages of 18 and 28 years. More than half started to use drugs under peer group pressure. Their peer group friends were

already drug users who motivated or compelled them to go that way. Usually these addicts had lower levels of education, lower socio-economic status and precarious employment.

Drug addicts consumed more than one kind of drug. Prior to visiting OOAT clinics, one-third had consumed heroin (*Chittan*), one-fourth had tramadol/capsule/tablet, about one-fourth used poppy (*Phukki/Dhoda*) and one-fifth opium (*Afeem*). On an average about 7,000 rupees were spent per month to arrange various types of drugs prior to visiting OOAT clinics. Half of the addicts did not have access to a doctor to get counselling.

Less than half of the addicts were tested for urine, which is necessary to determine the dose of the medication. The dosage of medication among the remaining drug addicts was determined based on the story provided by them rather than deciding on a scientific basis. To live a life without opiates, addicts need to take medication on a regular basis. However, 20 per cent drug addicts did so. In other cases, especially among the truckers and labourers, the use of medication was erratic. On average, a drug addict travelled 12 kilometers to get the medication from those clinics. **There was a lack of emphasis on one-to one counselling. In addition, no family counselling was offered to a substance abuser. None of the drug users claimed that they had ever attended a yoga or prayer session in a clinic.**

The outcomes for living a normal life after starting treatment at these clinics are not very promising. Only one out of every ten drug addicts said that they were able to lead a normal life, while others still had difficulty leading a normal life. Drug users were most satisfied with the availability of health staff during prescribed periods followed by treatment in the right direction. In order to improve the situation, it is recommended that the interaction between the doctors and drug users be more private. Because of the sensitivity of the issue, the addicts may hesitate to talk about personal problems and difficulties in the presence of other people. This would foster confidence between the service providers and recipients. It would also help reduce the rate of retention of drug users in these clinics by encouraging them to pursue a normal social life.

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