

Planning and Designing of Deaddiction Centre

Dr. RK Ranyal^{1*}, Dr. Sameer Mehrotra², Dr. Shiva Devarakonda³,
Dr. Sunil Basukala⁴

ABSTRACT

Substance use estimates, however, are liable to change over time, depending upon diverse factors such as availability and cost of the substances in the community, existing legislations and their implementation, social perception and attitude about use of particular substances, peer pressure and other socio-cultural factors. About 122 drug dependence treatment centres or De-Addiction Centres (DACs) have been established by The Ministry of Health and Family Welfare (MOH&FW), Government of India. While most of these government centres are associated with either general hospitals at the district levels (district hospitals or civil hospitals), some have also been attached with departments of Psychiatry at certain medical colleges. Only a few centres (about 42, mainly those in the north-eastern states of the country) receive recurrent grants from the union health ministry. Most others have been dependent on the state governments for the recurring expenditure (on staff salaries, supplies etc.).

Keywords: *De-addiction, Psychoactive substance, Morphine*

Psychoactive substance abuse in India continues to be a substantive problem for the individual as well as for the society. One of the foremost essential steps to combat this challenge is to document the extent, patterns and trends of substance abuse to appreciate the magnitude and severity of the problem. Numerous surveys have been conducted since the early 1970s at various levels and in various populations in India to assess the level of psychoactive substance abuse. The prevalence estimates ranged from 0.94 per 1000 population in the earlier studies to 350 per 1000 population in more recent ones.

In the largest general population study conducted till date, current prevalence of alcohol use was 21.4 per cent, cannabis 3.0 per cent, heroin 0.2 per cent, opium 0.4 per cent and other opiates 0.1

¹ Additional DGAFMS, Human Resource, Ministry of Defence, New Delhi, India

² Associate Professor, Department of Hospital Administration, AFMC, Pune, India

³ Resident, Department of Hospital Administration, AFMC, Pune, India

⁴ Hospital Administrator, Nepal Army Medical Corps, Nepal

*Responding Author

Received: February 17, 2017; Revision Received: March 26, 2017; Accepted: March 29, 2017

Planning and Designing of Deaddiction Centre

per cent; further, 17-29 per cent of the current users of these substances were found to be using these substances in dependent pattern.

Substance use estimates, however, are liable to change over time, depending upon diverse factors such as availability and cost of the substances in the community, existing legislations and their implementation, social perception and attitude about use of particular substances, peer pressure and other socio-cultural factors.

A study published in a WHO document in 1980 remarked that "...The last point and one which deserves careful consideration is the absence of large-scale heroin or related substance abuse in India". Just four years later, this was contradicted by the same author in view of the rapid increase in heroin dependence in patients attending a de-addiction centre in Delhi. This was followed by newer entrants in the substance abuse scenario: buprenorphine injection, codeine-containing cough syrups, dextropoxyphene and other opioid oral preparations, inhalants, cocaine, and the latest being several "club and rave drugs".

THE GOVERNMENT DE-ADDICTION CENTRES IN INDIA

About 122 drug dependence treatment centres (or De-Addiction Centres —DACs) have been established by The Ministry of Health and Family Welfare (MOH&FW), Government of India. While most of these government centres are associated with either general hospitals at the district levels (district hospitals or civil hospitals), some have also been attached with departments of Psychiatry at certain medical colleges. It is noteworthy that the Union Health Ministry's contribution has been largely limited to providing one-time grants for construction / refurbishment of the buildings. Only a few centres (about 42, mainly those in the north-eastern states of the country) receive recurrent grants from the union health ministry. Most others have been dependent on the state governments for the recurring expenditure (on staff salaries, supplies etc.).

While so far, there is no regular system in place to evaluate the functioning of these centres, the Ministry of Health and Family Welfare has been taking steps to conduct evaluation exercises, mainly through NDDTC, AIIMS and through NIMHANS, Bangalore. In the year 2002 an evaluation exercise was undertaken with support from the World Health Organization (India). Also under the Drug De-Addiction Programme of the MOH & FW, 122 government de-addiction centres in the country have been set up in medical colleges and district hospitals. Evaluation and monitoring exercises have been conducted periodically to examine functioning of these centres as part of a WHO funded activity (in 2002) and as part of a Parliamentary committee query (in 2008). Both the exercises focussed on treatment centre as well as patient characteristics.

Planning and Designing of Deaddiction Centre

Aim and Objectives

1. To study the existing guidelines and standards related to de-addiction centre
2. To recommend the measure of improvement if any

MATERIALS AND METHODS

1. A systematic review of various studies related to de-addiction centre was performed.
2. Certain exclusion and inclusion criteria were framed to select the articles for the study. The standard data bases for searching the articles were used.
3. Guidelines available on the subject and the search material were studied and analyzed.

DISCUSSION

While planning and implementing substance use treatment services, it is essential to ensure that these services are compatible with the existing health care delivery system. A situation is avoided wherein certain policies and procedures of the De-Addiction centre are at odds with the policies and procedures of the associated hospital. It should also be noted that the policies and procedures at De-Addiction centre are sensitive to the local cultural scenario. For this, it is important that patients and their care-givers are involved not only in the process of clinical decision making at an individual level, but their involvement should also be sought for making policies and procedures of the clinic.

The Centre should preferably have a building of its own. The surroundings should be clean. It should be easily accessible from the outside. This facility should be functionally integrated with district hospital for seamless sharing of facilities of district hospital. The building should have a prominent board displaying the name of the Centre in the local language.

Entrance: It should be well-lit and ventilated with space for Registration and record room, drug dispensing room, and waiting area for patients. The doorway leading to the entrance should also have a ramp facilitating easy access for disabled patients, individuals using wheel chairs, stretchers etc.

Registration: At a minimum level all patients attending de-addiction treatment services should be registered in a dedicated register and should receive a unique registration number. This service is linked to record maintenance and thus patients' unique registration number should be reflected in all the records of the patient. While most hospitals (of which the de-addiction centres are a part) are expected to have a central registration system, the de-addiction registration number should be **separate** from the hospital registration as this would be important for monitoring and evaluation purpose.

Waiting area: The waiting area can be calculated by the general thumb rule of 1 sq meters per patient. Taking the approximate number of patients to be 7 new and 25 old (total 32) with scope

Planning and Designing of Deaddiction Centre

for further increase in work load, total waiting area is proposed to be 40 sq meters. In addition to the waiting area the centre should have provision for basic facilities such as drinking water and waiting time entertainment such as a TV with cable connection etc.

Outpatient department: The outpatient department of the centre should be a functionally separate entity from the Outpatient department of the hospital. All patients would be seen both by the doctor and the counsellor/social worker. Hence rooms need to be provided for both, ensuring adequate privacy during interviews of patients.

Doctor's chambers: There should be adequate lighting and ventilation to provide a comfortable environment to the doctor and the patient. The furniture should include one desk and doctor's chair, with one stool and two or three additional chairs.

Toilets: There should be one male and one female toilet (WC + wash basin) for the staff. The toilets for the patients and attendants should be made as separate toilet complexes for males and females. Each of these toilet complexes should have one WC and one Indian style lavatory and one wash basin.

Pharmacy: If the general hospital, of which the de-addiction centre is a part, has a dispensary, the same may be used for de-addiction centre as well. Otherwise, for dispensing of medications from the De-addiction centre an exclusive pharmacy should be established. In either of the cases, there should be provision for at least three cupboards for storing medications out of which at least one should have double lock and key mechanism to facilitate storage of scheduled drugs like Buprenorphine etc.

Dispensing room: Dispensing of medicines Pharmacotherapy plays the central role in the treatment of substance use disorders. All the patients seeking treatment from de-addiction centres should have access to the following medications – free of cost – from the dispensary. If the general hospital, of which the de-addiction centre is a part, has a dispensary, the same may be used for de-addiction centre as well. Otherwise, for dispensing of medications from the De-addiction OPD, a system should be put in place, which allows for monitoring and auditing the dispensing procedure. Only authorized persons (such as a nurse / pharmacist) must be allowed to handle / dispense medicines.

Dispensing room should be a small room located adjoining the exclusive DAC pharmacy to administer drugs to those patients who require the drug to be given under supervision. The drugs and names of patients should be recorded in a separate register and the whole process should be under the supervision of a trained staff nurse or a pharmacist.

Planning and Designing of Deaddiction Centre

Administrative area and stores: There should be a place for the rooms of Administrative officer and accounts personnel, if these staff members are exclusively meant for the centre and are not shared with the district hospital. Two rooms may be provided for administrative usage, and one for accounts and finance department. The stores require a bigger area for storage of medical, general and linen stores.

Record maintenance: Since substance dependence is seen as a chronic non-communicable disease, the patients who report to a centre like this usually expected to have a prolonged outpatient follow-up along with a few inpatient treatment episodes. Thus, maintenance of records remains a very important activity.

EXPECTED PATIENT LOAD

It is envisaged that a district hospital would attract at least 3 to 5 new patients and 25 to 30 old patients in the outpatient clinic on a given day. Based on the above premise concerning the essential requirement for a basic substance abuse treatment centre providing outpatient care, a 10-bedded inpatient facility, minimum laboratory backup and referral system the following staff is recommended.

In- Patient Area Wards: Ten bedded ward can be proposed in the hospital for the De Addiction Centre. These beds should preferably be in an area away from the general traffic to ensure privacy for such patients. At least two beds should have railings and/or provision for restraining violent patients. The ward should have provision for round the clock nursing. There should be a well stocked and equipped nursing station, with file racks, cupboard for storage, water supply, etc. The following is a list of different inclusions in the ward:

S.NO	DEPARTMENTS	SPACE (M ²)
1.	Outpatient Area	
	Consultation chambers	18
	Counselling room	18
	Waiting area	40
	Staff toilets	12
	Patient toilet complex	12
	Pharmacy	36
	Drug dispensing room	24
	Records and registration room	12
	Outpatient registration	12
	Admission office	12
	Medical records office	24
	Storage room	36
2.	Administrative area and stores (only if not shared with the hospital)	
	Room for Officer / Sister in charge	12

Planning and Designing of Deaddiction Centre

	Room for accounts personnel	12
	Store room	36
3.	Wards	
	Beds (8 m ² per bed X 10 beds)	80
	Nursing station with toilet	18
	Interview / treatment room	12
	Doctor's Duty room	18
	Nurses Changing room	12
	Ward store	24
	Patients relatives waiting area with toilet	24
	Sluice room	12
	Group D room	12
	Ward pantry with drinking water facility	12
	Staff toilets	12
	Patient toilet complex	36
	Recreation/rehabilitation/activity room	24
	Subtotal	606
	Add 30% extra for circulation space	182
	Sub Total	788
	Add 10% for walls	80
	Total covered Area	866

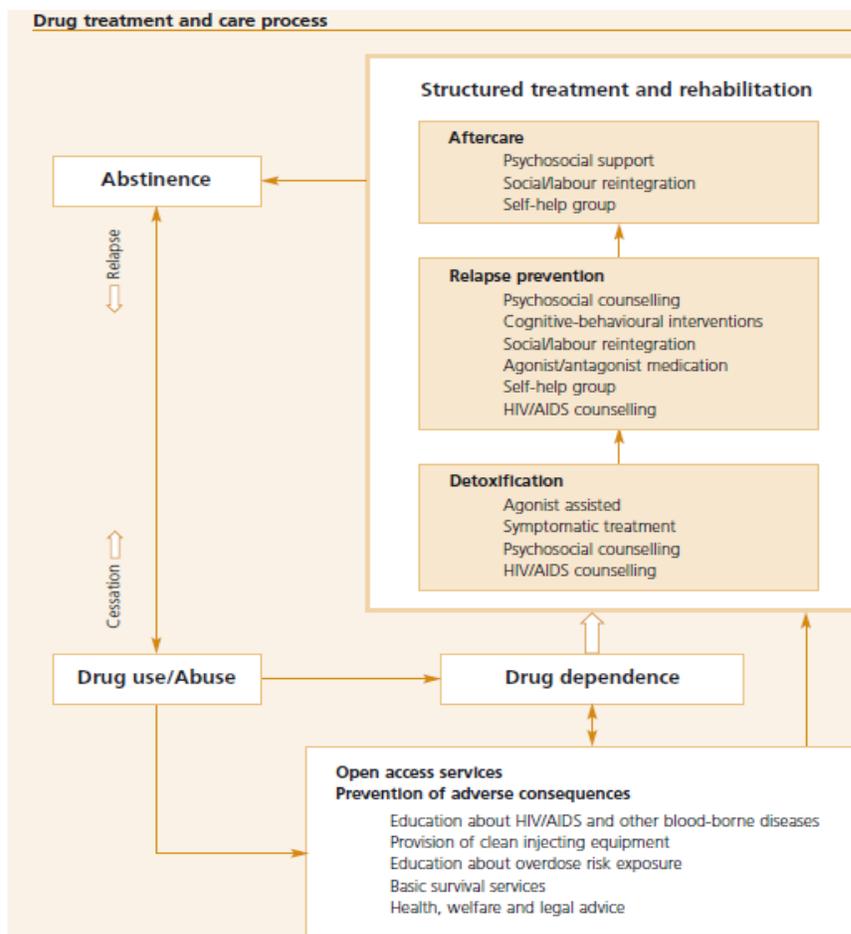
SERVICES

Outpatient services

While these doctors may encounter many patients with substance use disorders in their routine—general clinics, such patients should be referred to / encouraged to attend, the exclusive and dedicated outpatient clinic for substance use disorders. Thus all hospitals with Government De-Addiction centres should offer an exclusive outpatient De-addiction clinic with following care:

1. **Counselling / psychosocial interventions / psycho-education:** All patients (and their attendants, if available and only if the patients agree to involve them) assessed by the trained doctor, should receive Counselling / psychosocial interventions / psycho-education, as per the clinical needs. For this purpose it would be necessary to involve a trained medical social worker / counsellor / psychologist. Succinct categorizations of treatments for substance abuse are surprisingly difficult to develop. In the present section, a summary of the main types of structured treatment are offered. Structured treatment characterizes services that are based on a formal assessment, the development, monitoring and review of individual plans for client care and a programme of medical treatment and/or counselling services. A schematic description of a care process is shown in the box below:

Planning and Designing of Deaddiction Centre



2. **Emergency Services** In those de-addiction centres which are a part of the general hospital, the emergency de-addiction services may be provided by the emergency department of the hospital. While most such emergency set-ups have provision of doctors / nurses and necessary supplies, these should be geared towards providing emergency services related to substance use disorders. The emergency set-ups should be geared to handle emergency situations commonly encountered in the area of substance use disorders viz. acute intoxication / overdose, withdrawal syndromes, adverse drug reactions etc.
3. **Laboratory services:** All the de-addiction centres should have access to basic laboratory services. It is not necessary that these services be established exclusively for de-addiction patients but these services may be incorporated with laboratory services of the general hospital. Toxicology Laboratory should be established with all the other routine laboratory tests required for the treatment.
4. **Psychosocial interventions:** All centres should be equipped with facilities to provide psychosocial interventions at both the levels of care: Outpatient and In-patient and in both the settings: in group settings and in individual settings. Family members must also be involved in psychosocial interventions as much as possible. While the specialized psychotherapies may be out-of-scope for most of the centres, trained manpower and other facilities must be available for the following psychosocial services:

Planning and Designing of Deaddiction Centre

1. Basic psycho-education about the nature of illness, important of treatment adherence
2. Motivation Enhancement
3. Reduction of high-risk behaviour
4. Brief Interventions
5. Relapse Prevention
6. Counselling for occupational rehabilitation

5. Referral / Consultation / Linkages While a comprehensive treatment programme should address multiple needs of the patient, no single de-addiction centre alone can provide all the services a patient requires. Consequently, it is imperative for the centres to establish and maintain referral and consultation linkages with other facilities and services.

Other Special Requirements of the Centre

Water supply: The centre should have provision for 24 hours water supply. The bathrooms, wherever provided should be fitted with geysers and/or other equipments as required to ensure supply of hot water during cold season.

Waste management: All necessary steps should be taken to ensure proper segregation and disposal of bio medical waste in the centre. The disposal of Bio medical waste may be clubbed with Bio Medical Waste management in the rest of the hospital.

Security services: Security must be adequately provided both in wards and in outpatient area. Some of such patients can turn violent at times and the security personnel need to be trained in handling such outbursts. The work of the security service should be augmented by intelligent facility design as had been suggested earlier to minimize chances of illegal substance trafficking, patients escaping from the ward or breakage of ward property by violent patients.

Signage and Publicity: Prominent signage and publicity boards should be put up to make the public aware of such services in the hospital.

Shared services: The following services are proposed to be shared with the main hospital:

1. Emergency
2. Laboratory and Radio diagnostic services
3. Kitchen / dietary services
4. Laundry services
5. Housekeeping and other support services

Furniture: The centre must be adequately furnished so that the minimum standards of services can be maintained. The table 2 provides a suggestive list of furniture. This list has been guided by the Indian Public Health Standards (IPHS) list of furniture.

STAFFING

General Physician / General Duty Medical Officer (GDMO)

Due to a dearth of psychiatrists in the prevailing circumstances, any qualified physician with specific training in substance abuse treatment can be a team leader. A Psychiatrist is more equipped to be a team leader for a de-addiction unit, because of the professional training he/she would have received. His/her job will be to diagnose and treat substance use disorders, coordinate the services, manage the team, liaison with other agencies including NGOs and provide care at the OPD and in-patient levels. If the leader happens to be psychiatrist he/she would be equipped to recognize and deal with psychiatric co-morbidity too.

Nursing personnel

Indian Nursing Council norms require 1 staff nurse for every 5 beds in a non-teaching hospital. For a 10 bedded unit of a district hospital, this translates into 2 staff-nurses. However, at least 3 staff-nurses are required for round the clock patient cover in a dedicated unit, with 1 leave reserve. One of these could be nurse in-charge who is expected to look after administrative responsibilities like making duty rosters, keeping leave records, addressing grievances of patients and nurses and coordinating the treatment plan of the patients with the entire health delivery unit. The additional staff nurse for leave reserve will be present in the OPD for any procedures including dispensing medicines, doing dressings and giving injections when not in the ward. Thus, 24-hour coverage of the ward will be done in the ratio of 1:1:1 + 1 in-charge. In the ward the nurses are expected to carry out various functions including dispensing medicines, keeping a record of various patient parameters, ensuring cleanliness and provide basic counselling. While the nurses from the general pool of nurses at the hospital can also be posted at the DAC, it would be advisable to post only those nurses who have received specific training on substance use disorders.

Social workers/counselors

Social workers and counsellors are the very important category of staff at the DAC. Their primary duties would include counselling and other psycho-social interventions at the outpatient and inpatient level. Additionally, they can also be involved in generating community awareness by holding public meetings and interacting with community leaders. They would form the mainstay of the psycho-social interventions and would also be responsible for the motivation of patients and their psychological rehabilitation. They could also be involved in making education material including posters and leaflets.

Security staff

The above mentioned category of the staff would be required exclusively for the de-addiction centre. Additionally, some other staff members would also be required to help running the centre smoothly. However, all these additional staff can be shared with the district hospital and hence would not be performing exclusive duties at the de-addiction centre

CONCLUSION

In conclusion, the present study highlights that there have been major shifts in the patterns of substance abuse as documented in subjects registered in a public sector drug de-addiction centre in north India over three decades from 1978 till 2008. The number of people registered in the de-addiction centre increased eight-fold. There was a significant increase in emergence of newer substances of abuse, and a significant increase in prescription drugs and poly substance dependence in recent years. The paucity of properly trained professionals and sound physical infrastructures are barrier to the development and delivery of effective treatment services to drug users. The constraints are still more when dealing with special populations like substance using women and adolescents. Building teams of physicians and nurses as well as development of specialized sound infrastructure is the need of current scenario for quality care of patients with drug addiction in the country.

Acknowledgments

The author appreciates all those who participated in the study and helped to facilitate the research process.

Conflict of Interests: The author declared no conflict of interests.

REFERENCES

- American Association of Community Psychiatrists (2000) *Principles for the care and treatment of persons with co-occurring psychiatric and substance disorders*, accessed at <http://www.comm.psych.pitt.edu/finds/dualdx.htm>
- Chakraborty K, Neogi R, Basu D. Club drugs: review of the 'rave' with a note of concern for the Indian scenario. *Indian J Med Res* 2011; 133 : 594-604.
- Colombo Plan (2005), *Guidebook on Minimum Standards; Management of Drug Treatment and Rehabilitation Programmes in Asia*, Colombo Plan Secretariat, Colombo
- Ghulam R, Rahman I, Naqi S, Gupta SR. An epidemiological study of drug abuse in urban population of Madhya Pradesh. *Indian J Psychiatry* 1996; 38 : 160-5.
- Hazarika NC, Biswas D, Phukan RK, Hazarika D, Mahanta J. Prevalence and pattern of substance abuse at Bandardewa, A border area of Assam and Arunachal Pradesh. *Indian J Psychiatry* 2000; 42 : 262-6.
- Mohan D. India: Socioeconomic development and changes in drug use. In: Edwards G, Arif A, editors. *Drug problems in the sociocultural context: a basis for policies and programme planning. Public Health Papers, No.73*. Geneva: World Health Organization; 1980. p. 42-8.
- MOHFW (2006) *Indian Public Health Standards*, accessed at <http://www.mohfw.nic.in/NRHM/iphs.htm>
- MSJE (2008) *Annual Report, 2007-08*, Ministry of Social Justice and Empowerment, Government of India, New Delhi

Planning and Designing of Deaddiction Centre

- NACO (2008) *Standard Operating Procedures (SOP) for implementing Oral Substitution Therapy (OST) with Buprenorphine*, accessed at:
http://www.nacoonline.org/upload/Publication/NGOs%20and%20targetted%20Intervations/Standard%20Operating%20Procedures-Buprenorphine_NACO.pdf
- Nandi DN, Ajmany S, Ganguli H, Banerjee G, Boral GC, Ghosh A, *et al.* Psychiatric disorders in a rural community in West Bengal: an epidemiological study. *Indian J Psychiatry* 1975; 17 : 87-99.
- NQF (2007) *National Voluntary Consensus Standards for the Treatment of Substance Use Conditions: Evidence-Based Treatment Practices* , accessed at
<http://www.rwjf.org/pr/product.jsp?id=20611>
- Panda D (2007) “*Drug De-addiction Programme in India*”, in, Lal R, Gupta S, (ed), *Substance Use Disorders, A Manual for nursing professionals*, NDDTC, AIIMS, New Delhi
- Ray R, Mondal AB, Gupta K, Chatterjee A, Bajaj P. *The extent, pattern and trends of drug abuse in India: National Survey*. New Delhi: United Nations Office on Drugs and Crime (UNODC) and Ministry of Social Justice and Empowerment, Government of India, 2004.
- Saxena S, Mohan D. Rapid increase of heroin dependence in Delhi: some initial observations. *Indian J Psychiatry* 1984; 26 41-5.
- Sharma HK. Sociocultural perspective of substance use in India. *Subst Use Misuse* 1996; 31 : 1689-714.
- World Health Organisation. Nomenclature and classification of drug- and alcohol-related problems: a WHO Memorandum. *Bull World Health Organ* 1981; 59 : 225-42.

How to cite this article: Ranyal R, Mehrotra S, Devarakonda S, Basukala S (2017), Planning and Designing of Deaddiction Centre, *International Journal of Indian Psychology*, Volume 4, Issue 2, No. 95, ISSN:2348-5396 (e), ISSN:2349-3429 (p), DIP:18.01.175/20170402, ISBN:978-1-365-84231-3