Original Article

Home Based Detoxification- A Pilot Study

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Abstract: *Home-based detoxification (HBD) is a unique innovative strategy to provide treatment to the patients of substance use disorders at home. A total of 37 patients of substance dependence as per ICD-10 were included for the detoxification. Majority of the sample was in the age range of 21-40 years of age, educated up to primary level, married, from urban background, having monthly income less than 3500 per month and were of alcohol dependence syndrome, 86.5% of patients were successfully detoxified at home. During follow up 75.6% of sample was maintaining abstinent from primary drug at 1 month, 54.05% at 2 months and 48.6% at 3 months.*

Keywords: Home based detoxification

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The problem of substance abuse has been a feature of all societies. Alcohol and drug use is rising in some of the developing regions of the world and this is likely to escalate substance related problems. In India also, substance abuse particularly alcohol, has become the major public health problem. Issues of poverty, ignorance, migration, and exploitation further complicate the problem of adolescent drug abuse in a developing country like India.

During the past two decades, influential studies into the effectiveness of treatment of problem drinking have suggested that, in certain circumstances, there is no discernible difference in outcome between intensive in-patient programmes and less intense out-patient approaches.[1-4] The emergence of brief interventions consisting of assessment, advice, and follow-up have been demonstrated to be effective towards encouraging positive changes in drinking behaviour for many problem drinkers.[5-9]

The development of community- and domiciliary-based alcohol detoxification services has proved effective in providing accessible and convenient treatment options, which remove many of the barriers in the help-seeking process [10-13]. In a review [14] it is concluded that home detoxification is suitable for those with mild to moderate withdrawal symptoms, strong social support and no medical or psychiatric complications.

Over last 10 years, the authors have been working on designing and evaluating brief and cost effective detoxification strategies with the aim to remove barriers in treatment seeking and reaching out to the patients who refuse hospital based treatment. Our earlier research has documented that camp based detoxification is feasible, cost effective with better retention rate and better outcome than traditional hospital based detoxification[11,15,16]. The authors have also reported effectiveness of brief intervention in the form of one-day community camp approach, especially in identifying the patients and motivating them for the treatment[17].

The main purpose of the study was to provide treatment in the familiar environment of the patient's own house with active support of family, relatives and friends. The Study was planned to evaluate the feasibility and efficacy of Home Based Detoxification in community settings.

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MATERIAL AND METHOD

A community team consisting of medical social worker and staff nurse surveyed the area of Indra Colony and Khuda Alisher for one week. These areas are close to the Civil hospital, Manimajra where the District Mental Health Programme (DMHP) is located. The civil hospital, manimajra has 24 hours emergency service. The DMHP provides regular Psychiatry OPD services along with indoor services at civil hospital, manimajra.

The community team with the help of local community leaders identified the patients of alcohol and drug abuse. The identified patients were interviewed and assessed by the psychiatrist and the patients who fulfilled the following inclusion criteria were included in the study: Patient fulfilling ICD-10 criteria for substance dependence[18], Absence of associated surgical and medical illness; Patient's willingness to stay in the house for initial few days; willingness of atleast one family members to supervise the patient's treatment round the clock.

A total of 37 patients who fulfilled the inclusion criteria were included in the study. The details of Home Based Detoxification (HBD) were discussed with the family member. Informed consent was taken from each patient before he was enrolled in the study. Patient had the option to withdraw the consent at any time during the treatment. The family members were explained about the common withdrawal symptoms and their gradual reduction over next 7-10 days. They were also explained the peak of withdrawal symptoms and excessive craving in first 2-3 days. They were advised to contact community team in case patient experienced unbearable withdrawal. (Contact numbers of the community team as well as DMHP Psychiatry ward were given to family members).

On day one, a psychiatrist from the District Mental Health Programme (DMHP) made a home visit and assessed the identified patients for details of alcohol and drug abuse, mental and physical health of the patients. The detoxification process was initiated with Buprenorphine 0.6 to 1.8 mg S/L or clonidine 0.3 mg for opiate dependence and lorazepam up to 10mg/day and B-complex for alcohol dependence. The treating psychiatrist explained the treatment protocol to the patient as well as to the members of HBS Team. The HBD-team visited these patients on alternate days and dispensed medicines, which were handed over to the family members. The frequencies of home visits were reduced to once in 3-4 days after 10 days of treatment. The HBD-team discussed the progress of detoxification with the psychiatrist on daily basis. The detoxification period lasted up to 2 weeks and after that, the patients were asked to come to the DMHP for further follow-up. During this period, no medicine related severe adverse event was reported. However, few patients had to be admitted either because of lapse/relapse during detoxification or re-emergence of psychiatric illness.

RESULT

In this study, the majority of patients were in the age range of 21-40 years (76%) with the mean age of 26 years. The majority of the patients were educated up to primary (46%), married (54%), urban background (67.5%), with monthly income less than Rs. 3500/-, (67.5%). Majority of the patients were alcohol dependent (51.35%), followed by natural opioid (18.9%), synthetic opioid (16.2%), cannabis (8.1%), inhalant (5.4%). Out of the total sample, 22 patients (59.45%) did not seek any treatment in the past.

10 patients (27.02%) developed co-morbid psychiatric illness during the treatment. Out of the total sample, 20 patients (54%) had family history of psychiatric illness. The aim of the study was to treat patients at home only but 5 patients (13.5%) had to be admitted in the hospital subsequently either because of relapse during

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Table 1 Clinical and Outcome Variable

Variables	No. of patients	%age
Primary Drug		
Alcohol	19	51.35
Natural Opioid	07	18.9
Synthetic Opiates	06	16.2
Cannabis	02	5.4
Inhalant	02	5.4
Nicotine	01	2.7
Past H/O abstinence		
Present	15	40.5
Absent	22	59.45
Co-morbid Psychiatric disorder		
Yes	10	27.02
No	27	72.9
F/H/O Psychiatric Disorder		
Present	20	54.05
Absent	17	45.9
Need for subsequent Admission after detoxification		
Yes	05	13.5
No	32	86.4
Maintenance Treatment		
Yes	12	32.4
No	25	67.5
Abstinence (months)		
0-1 month	28	75.6
1-2 months	20	54.05
2-3 months	18	48.6

treatment or re-emergence of psychiatric illness. Out of the total sample, 25 patients (67.5%) refused for maintenance treatment and 12 patients (32.4%) opted for maintenance treatment in the form of topiramate, disulfiram, buprenorphine.

At one-month follow up, out of 37 cases, 28 patients (75.6%) remained abstinent from primary drug. At two-month follow up, 20 patients (54.04%) remained abstinent, and at three-month follow up 18 patients (48.6%) were still abstinent from the primary drug. Since, it is a brief study; only abstinence was taken as the outcome criteria. The abstinence was determined on the basis of self report of the patient and further corroborated by the family members, in the absence of patient. This strategy was opted so that family members can provide the correct information about substance. Slips or lapses in our study lead to relapse and these patients were treated as relapsed. Because of failure of HBD, these patients were later admitted in the ward.

DISCUSSION

The main objective of the study was to find out the feasibility of Home Based Detoxification for a selected group of patients of alcohol and substance dependence. The subjects included in the study had strong family support. The results of the this study support that majority of the patient (86.5%) can be detoxified at home and patients who had to be referred to hospital suffered from co-morbid psychiatric disorders leading to worsening of withdrawal. Similar findings of feasibility of home-based detoxification have been reported from the West.[19-21]

Approximately 48.6 percent were abstinent at the end of 3 months. Our earlier work from the same catchments area had reported that at the end of 3 months, 69% of alcohol and substance abuse treated in indoor community based camps were abstinent as compared to 41% abstinence in patients treated at the hospital.[15] In a study from west reported that 45% of alcohol users showed good outcome at 60days.[19] An earlier study reported that individuals in home based detoxifications achieved a period of abstinence twice that of those in the minimum intervention group in the form of practical advice and guidance about stopping drinking.[21]

One of the objectives of the study was to examine the feasibility of HBD in patients of substance use disorders and the findings are encouraging in that direction. The patients who had to be referred to hospitals were primarily due to co-morbid psychiatric disorders and if rigorous care can be taken to exclude associated psychiatric disorders, it is possible that large number of patients can be managed through HBD.

It was a innovative approach to treat substance use disorder patients, but had certain limitations. Sample size is small and heterogeneous sample and there is lack of control

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group. No structured instrument was used for measuring the course and outcome. No biological parameter was used to ascertain the abstinence and the abstinence from the primary drug was determined by the self report of the patient, which later on was corroborated by the family members.

In spite of the limitations, the study provides an insight into another cost effective strategy which seems as effective as hospital based detoxification treatment.[11,15,16] The findings are more relevant for the developing countries, which have limited mental health professionals and multiple barriers in treatment seeking.

The current study can be a good alternative to the other treatment options of substance use disorder. The study also highlights the utilization of community resources in the treatment of substance use disorder. The concept of home based treatment for substance use disorders is non-stigmatizing, non-discriminatory, cost-effective and convenient for the patients as well as family.

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