Original Article

Clinical Audit of Women with Substance Use Disorders: Findings and Implications

Kanika Malik, Vivek Benegal¹, Pratima Murthy¹, Prabhat Chand¹, Arun K.¹, Suman L. N.

ABSTRACT

Aim: To examine the socio-demographic, clinical and psychosocial profiles of women seeking treatment for substance use disorders (SUDs) in order to understand their treatment needs. Materials and Methods: The psychiatric case records of 40 women with SUDs who sought consultation between the year 2012 and 2013 were analysed. Results: The mean age of the sample was 38 years (standard deviation, S.D = \pm 7.24). Among these, 52.5% were married and 30% were separated or divorced. Mean age of onset of substance dependence was 28.68 years (S.D. = \pm 7.02) with an average of 9.65 years (S.D = \pm 7.69) of dependence. Alcohol dependence was present in 80% of the patients, followed by nicotine dependence in 54% of the patients. Co-morbid Axis I and Axis II disorders were present in 62.5% and 10% of the patients respectively. Childhood adverse experiences such as abuse and neglect were reported by 20% of the patients. The factors contributing to initiation and maintenance of substance use were marital discord and interpersonal conflicts (70%), influence of significant others (66%), death of a family members (10%) and other stressful life events (25%). Major consequences of substance use were substance-induced physical problems (62.5%) and interpersonal conflicts (40%). Data analysis indicated poor follow up and relapse rate of 50%. Conclusions: Adverse life events and interpersonal conflicts are significant contributing factors to substance use among women. The study has implications for planning gender sensitive, multi-dimensional treatment programmes for women seeking treatment for SUDs in India.

Key words: Clinical audit, follow-up, gender-sensitive, interventions, substance use disorders, women

INTRODUCTION

In India, epidemiological studies till the 1990s suggested that substance use disorders (SUDs) were exclusively prevalent in male.^[1] However, studies in the last decade have challenged this assumption. The recent national surveys have indicated prevalence of SUDs in 2% to 8% of women.^[2-4]

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There are only a few Indian studies that have attempted to examine the pattern of use, clinical conditions and psychosocial issues among women with SUDs. In one community study of women substance users across three urban cities (n = 75), it was found that heroin was the most commonly abused psychoactive substance, followed by propoxyphene, alcohol and tranquilizers.^[5] In a later study, a larger sample (n = 1865) of women substance users across India were surveyed. [6] It was found that alcohol and tobacco were the most commonly abused substances, followed by heroin, dextropropoxyphene and benzodiazepines. High rates of comorbid psychiatric illness and medical problems were present among these women. The findings of these reports^[5,6] also indicated the contributing role of various psychosocial factors such as childhood difficulties, peers/partner(s) influence, physical and emotional

Departments of Clinical Psychology, and ¹Psychiatry, National Institute of Mental Health Neurosciences, Bangalore, Karnataka, India

Address for correspondence: Ms. Kanika Malik

Department of Clinical Psychology, National Institute of Mental Health Neurosciences (NIMHANS), Bangalore - 560 029, Karnataka, India. E-mail: kanika mar3@yahoo.co.in

distress, role transition and lifestyle changes. Both these studies also reported that difficult life circumstances such as financial hardship or domestic violence were frequent among these women.^[5,6]

In addition to community-based research, some studies have also been carried out in hospital settings on women seeking treatment for substance use problems in India. In one of the earliest studies from a hospital in south India, it was found that in a span of more than 10 years (1983-1994), the proportion of women who sought treatment for SUDs was significantly low as compared to men.^[7] However, since the last 2 decades, there has been a gradual increase in women seeking treatment for SUDs across centres in India.[8-12] Recently, two hospital-based audits were carried out on women substance users in a government run de-addiction centre in north India.[10,11] These two audits reported that among women, opioid and tobacco dependence were most common, followed by dependence on alcohol and benzodiazepines. Impairments in family and social domains were commonly seen among these women. In another study from the rural Telangana region of south India,[12] it was found that around 4% of women attending the outpatient services of a general hospital had alcohol dependence. Out of them, 4.4% were found to be pregnant. All these studies reported high rates of medical and psychiatric comorbidity and poor follow-up rate among women with SUDs.[10-12]

Overall, there is paucity of research on women with SUDs in India. The available studies have shed some light on the clinical profiles of women with SUDs but on the whole the role of psychosocial factors has been given limited attention. Obtaining comprehensive clinical and psychosocial profile of women seeking treatment for SUDs would be useful to plan appropriate gender-sensitive interventions for this population. The present study is an attempt in the same direction. It aims to examine the socio-demographic profile, clinical profiles and psychosocial profiles of women seeking treatment for SUDs in a tertiary care neuropsychiatric hospital in India. The information obtained would be used in planning gender-sensitive interventions for this population.

MATERIALS AND METHODS

The psychiatric case records of patients who sought consultation between the year 2012 and 2013 in the de-addiction centre of a tertiary care neuropsychiatric hospital in southern India were examined. The hospital has a dedicated centre for addiction treatment with both in-patient and out-patient services. During this period, around 2,460 patients sought consultation, of whom 80 were women (3.25%). All the patients were

evaluated by the post-graduates trainees and psychiatric residents under the supervision of consultants in the centre. Out of the 80 patients, 20 patients did not report after the first consultation and hence, no detailed records were available for them. Detailed psychosocial information was lacking in records of further 20 patients due to poor follow-up. Hence, for the current audit, only 40 records were selected that contained comprehensive information about the patient's clinical as well as psycho-social status. The detailed procedure for consultation and evaluation at National Institute of Mental Health and Neuro Sciences (NIMHANS) has been described elsewhere. [13]

The data related to socio-demographic, clinical and psychosocial variables were extracted from the 40 case records and tabulated into a data sheet. The data was analysed using descriptive statistics such as range, percentages, mean and standard deviation.

RESULTS

Socio-demographic profile

The socio-demographic variables examined were: age, education, occupation, family type, marital status, locality, family income, number of children and family history of SUDs. The analysis indicated that the age range of the sample was 17 years to 54 years with a mean age of 38 years (S.D = \pm 7.24). Three-fourths (75%) were from urban areas of Karnataka, a state in southern India. Most of them (72.5%) belonged to above poverty line households. History of SUDs among family members of origin and procreation was present in 60% of the cases. The other socio-demographic details are given in Table 1.

Clinical profile

The clinical variables examined were: age at onset of substance use, age at onset of dependence, duration of dependence, the type of substance (s) used and comorbid psychiatric disorder(s). The results revealed that mean age of onset of substance use was 22.70 years (S.D. = ± 7.56). The mean age of onset of dependence was 28.68 years (S.D = ± 7.02). The mean duration of dependence before seeking treatment was 9.65 years (S.D = ± 7.69). The other clinical details are given in [Table 2].

It can be seen from Table 2 that alcohol was the major psychoactive substance of dependence (80%). A small percentage of patients were dependent on benzodiazepines (20%), opioid (10%) and cannabis (5%). In addition, 54% had an additional diagnosis of nicotine depend encesyndrome. Axis I psychiatric disorders were present in 62.5% of the patients with depression being the most common (30%), followed

Table 1: Socio-demographic details

Socio-demographic variables	Frequency in %	
Age		_
Range	17-54 years	
Mean (S.D)	$38 (\pm 7.24)$ years	
Education		
Illiterate	40.0 (n=16)	
School educated	15.0 (<i>n</i> =6)	
High school and above	42.5 (<i>n</i> =17)	
Current occupation status		
Homemaker	37.5 (<i>n</i> =15)	
Student	5.0 (<i>n</i> =2)	
Unemployed	27.5 (<i>n</i> =11)	
Employed	25.0 (<i>n</i> =10)	
Family type		
Nuclear	80.0 (<i>n</i> =32)	
Joint	20.0 (<i>n</i> =8)	
Marital status		
Single	5.0 (<i>n</i> =2)	
Married	52.5 (<i>n</i> =21)	
Separated/divorced	30.0 (<i>n</i> =12)	
Widowed	12.5 (<i>n</i> =5)	
Urban/rural		
Urban	75.0 (<i>n</i> =30)	
Rural	25.0 (<i>n</i> =10)	
Family income		
Below poverty line	27.5 (<i>n</i> =11)	
Above poverty line	72.5 (<i>n</i> =29)	
No. of children		
Range	0-4	
Mode	2	
Family history of SUDs	60	

S.D - Standard deviation; SUDs - Substance use disorders

Table 2: Clinical profile

Clinical variables	Frequency in %
Age at onset of use	
Range	6-40 years
Mean (S.D)	22.70 (\pm 7.56) years
Age at onset of dependence	
Range	15-45.5 years
Mean (S.D)	$28.68 (\pm 7.02)$ years
Duration of dependence	
Range	0.25-31 years
Mean	$9.65 (\pm 7.69)$ years
Type of substance(s) used	
Alcohol	80 (n=32)
Benzodiazepines	20 (<i>n</i> =8)
Cannabis	5 (<i>n</i> =2)
Opioids	10 (<i>n</i> =4)
Co-morbid Axis I disorders	
Psychosis (affective and non-affective)	15 (<i>n</i> =6)
Depression	30 (n=12)
Anxiety disorders and OCD	12.5 (<i>n</i> =5)
Headaches	5 (<i>n</i> =2)
Total	62.5 (<i>n</i> =25)
Co-morbid Axis II disorders	
EUPD	10 (<i>n</i> =4)

S.D – Standard deviation; SUDs – Substance use disorders, OCD – Obsessive compulsive disorder; EUPD – Emotionally unstable personality disorder

by psychotic disorders (15%) and anxiety disorders (12.5%). Comorbid Axis II diagnosis of emotionally unstable personality disorder (EUPD) was present in 10% of the patients.

Psychosocial issues associated with substance use

The psychosocial variables examined were: Childhood adversities, quality of marriage and other interpersonal relationships, details of employment, financial issues, social support, legal problems and stigma. Analysis indicated that 20% of the patients reported presence of childhood adverse experiences (e.g., physical abuse, sexual abuse and neglect). Among them, two reported sexual abuse at the hands of known people. In addition, a number of psychosocial issues experienced in adulthood were found to be contributing to substance use. These are given in Figure 1.

As evident from Figure 1, marital discord and interpersonal conflicts with other family members were common contributing factors for substance use. This included frequent arguments, domestic violence, infidelity issues, perceived lack of support and financial disputes. In 40% of the patients, these were identified as major reasons for initiating substance use and in 70% they were identified as significant maintaining factors. Influence of family members and significant others such as partner or peers contributed to substance use in 66% of the patients. Other significant contributing factors were death of a family member (10%) and stressful life events (25%) such as high workload and financial difficulties. In addition to these psychosocial factors, in 37.5% of the patients, psychoactive substances were used to reduce physical symptoms such as body ache, headache and asthma attacks.

Analysis also indicated that these patients experienced various psychosocial consequences due to substance abuse. These are given in Figure 2.

As can be seen in Figure 2, increased interpersonal conflicts, marital discord and problems in parenting were found to be consequences of substance use among 40% of the patients. Other negative consequences were poor job performance (17.5%), financial losses (5%) and neglect of household chores (12.5%). Experiencing stigma because of substance use was available in records of a small number of the patients (12.5%).

In addition to psychosocial consequences, women also experienced physical and psychiatric consequences due to their substance use. As given in Figure 2, these included substance induced health problems (62.5%) such as weight loss, nutritional deficiency, alcohol liver disease and complicated withdrawal symptoms (12.5%) such as seizures and Delirium Tremens (DT).

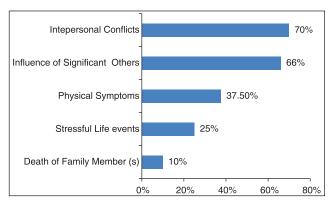


Figure 1: Factors contributing to substance use

Substance-induced psychotic disorders were present in 2.5% of the patients. Around 10% of the patients had engaged in high risk behaviours such as self-harm under the influence of the substances.

Hospitalisation and follow-up

All the patients in the sample were hospitalised for treatment. The average duration of inpatient care was 24 days. The records indicated that after discharge, patients had an average of five follow-up visits per year. Analysis of data revealed that 40% attended three or more follow-ups and 25% attended six or more follow-ups between 2012 and 2013. Half of them (50%) relapsed in this 1-year period. The major reasons for relapse were craving (60%), poor compliance to medications (40%) and stressful life events (30%), such as interpersonal conflicts, loss of loved ones and financial stressors. In most cases, a combination of these factors led to relapse.

DISCUSSION

The number of women seeking treatment in the span of 1 year (2012-2103) is quite large as compared to figures reported in the previous studies from treatment centres in India. [8-11] This indicates a significant increase in women seeking treatment for SUDs. In one of the Indian studies, it was reported that substance use is confined to tribal women, women of lower socio-economic status and commercial sex workers. [14] However, findings of the current audit indicate that substance use is present in women with varied education, employment and socio-economic status.

Compared to the findings of audits from other de-addiction centres in north India, [10,11] the current audit indicates that alcohol dependence is far more common (other than tobacco) among women as compared to dependence on other illicit drugs. However, these findings are in line with other published studies from south India, which generally indicates high prevalence of alcohol dependence among patients

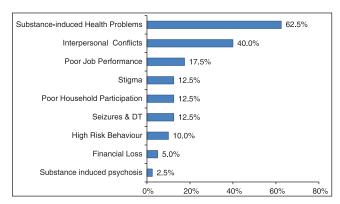


Figure 2: Consequences of substance use DT = Delirium Tremens

seeking treatment for SUDs. [12,13] In the present study, women were found to become dependent on substances at a younger age $(28.68 \pm 7.02 \text{ years})$ as compared to that reported in previous studies.[3,4,11] On an average, a person took around 10 years (9.65 \pm 7.69 years) between the possible development of dependence and consultation. Stigma associated with substance use and lack of awareness about the availability of treatment options are some of the factors that have been suggested in the literature to explain the delay in treatment seeking among women in India.[6,12] Also at the time of consultation, these women had experienced high rates of substance-induced physical problems, psychiatric problems and interpersonal difficulties. Telescoping phenomena^[15] has been frequently used to explain the adverse consequences of substance use among women. Also, the current study sample largely comprised women who received in-patient treatment services. Patients receiving in-patient treatment services are more likely to have greater symptoms severity, comorbid disorders and psychosocial dysfunctions.[16] This could also possibly account for the severity of adverse consequences observed in this group.

High rates of comorbid psychiatric disorders were found among women with SUDs in the current study. Similar to findings of the current study, other studies from India^[6,11] as well as other parts of the world^[17] have also reported frequent co-occurrence of mood and anxiety disorders among women with SUDs. In addition to Axis I disorders, patients also had diagnosis of emotionally unstable personality disorder (EUPD). High prevalence of Axis II conditions especially EUPD among women with SUDs is well-documented in literature. [18] These studies also suggests that the comorbid conditions adversely affect the course and outcome of the SUDs in women.[19,20] Thus, the associated costs and consequences of substance abuse in women make it an important health issue deserving significant attention.

Understanding factors contributing to substance use

is important in planning interventions appropriate for this population. One such set of factors identified in the current audit are those related to interpersonal issues. For example, more than half of the patients had family history of substance use. Three-fourths of the patients were initiated into substance use by their partners or peers. Further, nearly half of them reported interpersonal difficulties and marital discord as major factors contributing to their substance use. In addition, high rates of divorce and separation were also found among these women. These interpersonal difficulties suggest that these women's natural need for connectedness and relatedness is being poorly met, making them further vulnerable to substance related problems.^[21,22]

In addition to interpersonal factors, another common reason for using substances was to deal with adverse life events. Patients reported high rates of childhood adversities, loss of significant others, marital discord (including domestic violence) and financial difficulties. These cumulative adverse life events are likely to give rise to emotional difficulties, which is also partly reflected by the high comorbidity of depression and anxiety disorders in these women. Other studies have also documented higher prevalence of substance use in women with history of trauma and abuse. [6,23] The use of substances to 'numb' the psychological or emotional pain, in the absence of more adaptive coping, has been supported by both national and international studies. [3,24]

The current study has implications for planning interventions for women with SUDs. By and large, there is lack of gender sensitive treatment facilities for women with SUDs in India. However, there has been growing recognition of need for specialised treatment services for women with SUDs. [25] E.g., NIMHANS, Bangalore has recently started a separate inpatient facility for women substance users. In the backdrop of these changes, findings of this audit suggest that when working with women with SUDs, it is important to expand the traditional 'pathology-in-the-patient model' to include other factors that can have a bearing on substance use among women. A multi-dimensional screening and assessment of patients can serve as a useful step in this aspect. The most important domains to screen for when working with women with SUDs are substance use, psychiatric and medical comorbidities, childhood and adulthood adverse life events, marital and interpersonal functioning and occupational difficulties. Based on these assessments, appropriate psycho-social interventions can be planned. The interventions should include components such as psycho-education, individual therapy, group therapy, family therapy as well as psycho-social services for patient's children, if indicated. Implementing such programmes requires

treatment providers to have knowledge and awareness about gender issues as well as the explanatory models of addiction and mental health among women. The treatment environment should foster a sense of safety, respect and dignity for the patients.^[22]

Further, for an intervention be effective it is equally important that the client must stay in treatment long enough to complete the programme. In the current study, out of the 80 women who sought consultation between the period of 2012 and 2013, 50% of those receiving outpatient services defaulted immediately after their first consultation. In contrast to those who received outpatient services only, admitted patients had a relatively better follow up rates post discharge. Poor follow-up rates among women with SUDs have been reported in other Indian studies also.[11,12] Women's caregiver roles, gender expectations and socio-economic hardships are some of the factors that have been suggested in western literature to explain the poor follow up among patients. [26] These factors seems relevant to understand the poor follow-up rates observed in current settings. Hence, it would be important to include components that would strengthen compliance to treatment. For example, strengthening the valence of therapist-client relationship, specialised outpatient consultations, counsellors following up patient's status between visits, and use of other technological aids such as phone calls, e-mails can be useful in this aspect. It would also be important to include family members in the intervention modules as this could decrease interpersonal conflicts, improve social support and strengthen compliance to treatment.[27]

Further research may be planned to examine the effectiveness of the interventions proposed in the current study, once structural changes, manpower training and implementation of psychosocial programmes are carried out. The current study has certain limitations. It is a retrospective review based on a small sample size, carried out in a single centre catering to a certain geographical area. Thus, the findings of this study can be generalized only within these limitations. Nevertheless, the dearth of literature in this area makes this audit a worthwhile effort for planning appropriate gender sensitive interventions for women with SUDs.

CONCLUSIONS

Substance use among women in India is increasing and it has significant impact on their health and well-being. Despite being a fast growing public health problem, SUDs among women has not been examined in detail in the Indian context. The present study is among the few that sheds light on the clinical profile as well as psychosocial factors associated with initiation,

maintenance and consequences of substance use among women. These factors indicate the importance for planning and implementing multi-dimensional gender sensitive interventions for this population. The paucity of adequate data on substance use in women underscores the need for more research in this area.

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