

FACTORS RELATED TO FEMALE SUBSTANCE ABUSE: A HOSPITAL BASED STUDY FROM A TERTIARY CARE DE-ADDICTION CENTER IN INDIA

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ABSTRACT

Introduction: Social and familial stigma and prejudices make treatment-seeking difficult in women substance abusers. An analysis of various social, familial, personal, and other correlates of the treatment seekers can help in an appropriate understanding of the problem and can help in a better assessment, management and prevention of this problem.

Aim: To study the socio-demographic and clinical profile of women attending a de-addiction centre in north eastern Uttar Pradesh, India.

Design and Methodology: Out of the entire charts registered in the de-addiction unit of the psychiatry department of Sir Sunderlal hospital, Institute of Medical Science, Banaras Hindu University, Varanasi. The chart review of women substance abusers was undertaken.

Results: The results indicated that in a period of two years 42 females had sought treatment typically the subjects were more than 21 years of age (76%), urban (69%), married (88.3%), belonging to nuclear family (76%), working (67%), illiterate (50%), and belonging to MSES (82%). The common substances were tobacco 75%, opioids 14.3%, cannabis 7.1%, and alcohol 2.6%. The mean age at onset of substance use was 33.5 years. The common factors associated with initiating use were pain, iatrogenic and positive family history of substance use (60%).

Conclusions: The results suggest that the development of substance dependence in women is a combination of medical, personal, and social vulnerability factors, including the illicit prescriptions.

Key words: Women, Substance abuse, Co morbidity

INTRODUCTION

Substance use includes the use of substances such as alcohol, tobacco, prescription drugs and illicit substances. Substance abuse in women is considered a social stigma with attendants trying to deny and the sufferers trying to hide the problem, thereby limiting treatment-seeking^[1,2]. Considering the changing social milieu the gender gap between the substance users has decreased; however it is easier for the males to have more opportunities of substance intake than their female counterparts^[3,4].

It has been seen that in the circumstances of substance use, dependence is likely to develop in both the genders but women are likely to develop addiction faster than the males.^[5,6] The likelihood of female gender to become dependent on tranquilizers/ sedatives/ hypnotics is higher than on cocaine, heroin, hallucinogens; because of various social, familial and availability factors.^[7]

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Multiple studies have started looking at this vulnerable subgroup of the population, still representative data from across the country is lacking. Early studies like Selvaraj et al^[8] and Ganguly et al^[9] studied women alcoholics and opioid abusers respectively. In the case of women alcoholics it was seen that they became dependent on alcohol faster than their male counterparts and it was highly associated with the positive family history of substance dependence. The opioid intake in the second study was linked to its use as a medication or being encouraged by their spouses.

The initiation and disclosure of substance abuse and its treatment has been found to be highly linked to domestic violence, childhood abuse and substance abuse in the family.^[10] Female substance abusers have been found to have significant psychiatric co morbidity like high levels of depression, anxiety, feelings of powerlessness, and also low levels of self-esteem and self-confidence.^[10] Female substance abusers are faced with a whole range of health related, financial, social and familial problems.^[11,12]

In a vast country like India, with its innate socio-cultural diversity a representative data needs to be generated to address a problem of this magnitude. A

rapid assessment survey by various NGO's gives a serious picture of this condition; across nine states it found that 8.9% subjects suffering from substance abuse were women and most of them were divorced or single, had physical and psychological problems and reported to being subjected to domestic violence,^[7] therefore systematic compilation of data is the need of the hour.

To address the health related and socio familial problems of this subgroup a representative data from all over the country would be helpful in understanding the magnitude of the problem and in forming appropriate treatment and preventive strategies^[14].

Studies have shown that the frequency of tobacco use and abuse is prominent in the females.^[12-14] All the studies reported from our country are either from southern part^[8] or from the northern^[11-13] and western part of the country^[9], studies from eastern part are lacking.

The present study aims to address this gap. However the present study cannot claim to represent the entire eastern India, as the north eastern states are not so widely represented in the patients seeking treatment from our centre.

MATERIAL AND METHODS

The study was retrospective in nature. This was carried at a tertiary care centre situated in the north eastern part of Uttar Pradesh. The institute of medical sciences at BHU is a centre with a huge catchment area of adjoining Bihar, Madhya Pradesh, Bengal, Orissa, Jharkhand, Nepal and Uttar Pradesh.

All the charts between Jan 2013 to Dec 2014 were included. Most patients seen in the de addiction outpatient services of the department of psychiatry come by self-referral or family-referral, and some are referred from other hospitals or other departments of the institute.

The cohort for this study consisted of all women patients registered at the de-addiction outpatient or inpatient between January 2013 and December 2014.

RESULTS

During the study period 42 females with substance dependence and abuse were registered whose data could be accessed. Regarding the socio-demographic profile of the study group, most of the females in the study sample belonged to the age group of above 21 years (76%). Out of 42 subjects, most of them were married (88.3%), homemaker (85.7%) and from nuclear family (53.6%), Middle Socio Economic Strata (MSES

82%) and Urban (69%). Around half of the subjects (50.0%) were illiterate having not attended school at all. The subjects mostly belonged to Hindu religion (96.4%), reported having poor familial and social support (64.3%).(Table 1)

Table 1: Sociodemographic profile (n=42)

Variables	Groups	N (%)
Age distribution	>21 years	10 (23.8)
	<21 years	32 (76.1)
Marital status	Married	37 (88.3)
	Single	2 (4.7)
	Widow	2 (4.7)
	Divorced	1 (2.3)
Occupation	Working	6 (14.3)
	Homemaker	36 (85.7)
Educational status	Illiterate	21 (50.0)
	Upto 5 th grade	4 (10.7)
	Upto 10 th	9 (21.4)
	Above 10 th	8 (17.9)
Religion	Hindu	40 (96.4)
	Muslim	2 (3.6)
Family type	Nuclear	23 (53.6)
	Joint	19 (46.4)
Domicile	Rural	13 (31)
	Urban	29 (69)
Socioeconomic status	MSES (Middle Socio Economic Strata)	34 (82)
	LSES (Lower Socio Economic Strata)	8 (18)
Social support	Poor	27 (64.3)
	Fair/good	15 (35.7)

Looking at the clinical profile most of the study population (75%) started substance abuse at the mean age of 33.5 years; earliest initiation was for nicotine (23.5) followed by alcohol (24.8 years) and opioid subgroups (33.3 years). The commonest used class of substance was tobacco (75.0%), mostly in the limed tobacco form (khaini). All the tobacco abusers came from the socio cultural background where tobacco chewing by women is acceptable.

Table 2: Clinical profile of the sample

Variable	Group	N (%)
Age of onset	Below 25 years	11 (25.0)
	Above 25 years	31 (75.0)
Mean Age of Onset		33.5
Medical history	Present	4 (10.7)
	Absent	38 (89.3)
Psychiatric illness	Present	8 (17.9)
	Absent	34 (82.1)
Substance used	Alcohol	2 (3.6)
	Tobacco	31 (75.0)
	Cannabis	3(7.1)
	Opioid	6(14.3)
	Multiple substance*	3 (7.1)
Family history of substance use	Positive	25 (60)
	Negative	17 (40)

* overlap in figures

We found that our sample had a mean duration of substance use of four years and it took approximately

three years for the addiction to develop. The mean duration of substance use for the whole group was highest for nicotine followed by opioids and alcohol.

Three subjects out of the 42 were having multiple drug dependence like opioids and nicotine; cannabis and nicotine or alcohol and nicotine with benzodiazepines. Benzodiazepines were found to be used in the multiple drug categories, as no subject out of the 42 in the sample reported to using the benzodiazepines as an independent drug.

In four opioid abusers the addiction had followed pain and a prescription of the drug. Two out of them were using pentazocine and these subjects were working in the health department and used opioids due to ease of availability.

On the contrary in the nicotine abusers, the use had started out of curiosity. In 5 subjects, who were not specific to any single addiction group, no initiating factors could be identified, in the rest, the initiating factors were related to physical or psychiatric problems like, pain at various sites (n=2), depression (n=4), psychosis (n=7).

About 60% of the study subjects reported to have a positive family history of substance abuse. Five (17.9%) subjects had a history of co-morbid psychiatric disorders, and 3(10.7%) had a history of co-morbid medical disorders (Table 2).

The subjects referred by other departments were mostly for co-morbid psychiatric or physical disorders.

The follow up data was available for only 2 alcohol and 8 opioid dependent patients. 6 of the females were abstaining after treatment, 2 were continuing their substance dependence and 2 were lost to follow up.

DISCUSSION

The current study was a retrospective chart review with the aim of studying the socio-demographic and clinical profile of women presenting to a de-addiction centre of a tertiary care hospital. The results showed a typical female substance abuser to being more than 21 years of age, married, from MSES family, belonging to a nuclear family and urban background. The subjects were suffering with some physical symptoms like abdominal colic, back pain, tooth ache (in nicotine dependence), or psychiatric ailment like anxiety, depression, psychosis, and somatization at initiation.

Studies on female substance abusers from our country are few, and limited to some geographical areas^[8,9,10,12]. The profile of treatment seekers and the study subjects is more or less same as that reported in the other studies like Selvaraj et al^[8] and Grover et al^[10]. The study on female alcohol abusers^[8] gives a similar profile like our

study i.e. young to middle aged females having a significant family member (more often spouse) who is a current abuser. The females are not highly educated and belong to nuclear family, urban, MSES family background. The subgroup of female opioid abusers are somewhat similar to the studies from west^[9] and from the north^[11].

The age of onset of substance dependence was usually the fourth decade of life and there was significant positive family history of substance dependence in the study group (60%). Nicotine was the commonest substance abused and the chewable tobacco was frequently taken. Multiple substance abusers were the ones who had significant physical distress at the time of initiation and the use of substances began for iatrogenic reasons. The study group reported to have a poor familial and social support system.

The nicotine abusers have been profiled by the author in a previous publication^[14] and the nicotine abusers in this subgroup differ to some extent, the difference can be attributed to the area of study viz. community Vs hospital based. In the study mentioned the nicotine abusers were studied in the community setting and two distinct group of users emerged, one being older with family history of nicotine use as positive and the other being younger having dental problems and using nicotine as 'gul' meaning the tooth paste variety of nicotine^[11].

A rapid assessment survey conducted by NGOs has reported that most of the female substance users were divorced or single, had physical and psychological problems and reported to being subjected to domestic violence^[7]; however in our study we found that most of the females were married, and only 3% had physical illnesses, and 17.9% had psychiatric illnesses. The difference in the results can be due to the type of study design i.e. survey method and the site of study i.e. nine de addiction centers in the community.

Two studies from the same centre in north India gave a somewhat similar picture as is seen in our study, like most of the females in the previous study were abusing nicotine as the commonest substance, were married, illiterate, had poor social support, came from MSES and urban background.^[11,12]

The summary of the studies done so far, reveal that female drug abusers as a subgroup need a different outlook than their male counterparts; as the possibility of physical and psychiatric co morbidity is higher and the inter relationship with domestic violence, abuse and poor support system is high.^[7,8]

The report of support system was purely subjective; hence a proper study needs to systematically evaluate

this aspect. The follow up data was available for the opioid abusers and alcohol abusers and sample size is too small (10) to make meaningful interpretation of the data.

The results suggest that the development of substance dependence in women is an interaction of medical, personal, and social and iatrogenic factors. Care needs to be taken when prescribing opioids and hypnotic sedatives, and long term use should be curbed. Comorbidity is also a common feature. The adverse impact of drug use on families is tremendous. Relationships suffer, financial sources get depleted, health costs increase^[11,12]. There are greater employment problems and increase emotional stress. The non drug using partner may also take to drugs or alcohol for solace. Sexual relationship can become adversely affected. Drug use is often associated with domestic violence, which in turn aggravates the vulnerability, role transition and life style changes, all appear to increase risks of drug use independently and also through complex interconnections^[12].

LIMITATIONS

The present study has its limitations like being retrospective in design, being a single centre study. The small sample size and high dependence on the recorded facts are significant limitation. The subjective assessment of social support and functioning also needs to be addressed in future studies. In future prospective well designed studies using standardized tools would be able to give a clearer picture of this problem. As a future direction studies can compile data from the hospital based and communities based studies and formulate a comprehensive treatment strategy for management and prevention of this disorder. Female addiction has serious effects on the child rearing and child birth^[13], hence it needs to be addressed with utmost seriousness. Studies like the previous ones and the present one can help the treatment agencies to prepare themselves in managing such cases.

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