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ORIGINAL CONTRIBUTIONS

SUBSTANCE-DEPENDENT WOMEN ATTENDING A DE-ADDICTION CENTER IN NORTH INDIA: SOCIODEMOGRAPHIC AND CLINICAL PROFILE

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ABSTRACT

BACKGROUND Treatment-seeking is limited in women substance abusers. Studying the sociodemographic and clinical profile of treatment-seeking substancedependent women can help us to understand the problem better and respond appropriately in terms of primary and secondary prevention strategies. AIM To study the sociodemographic and clinical profile of women attending a de-addiction centre in North India. DESIGN AND METHODOLOGY Retrospective structured chart review of 35 women substance abusers. RESULTS The results indicated that a typical subject was urban (86%), married (63%), nuclear family (60%), based housewife (57%), educated up to school completion (54%), and having poor social support (57%). The common substances were opioids (60%), followed by alcohol (17%), and tobacco and benzodiazepines (11.5% each). The mean age at onset of substance use was 30.5 years, the mean duration of use was 9 years and mean duration to develop dependence was 5.5 years. The common reasons for initiating use were medical (63%) and curiosity (34%). Comorbidity profile was: physical illness (34%), psychiatric illness (23%) and dependence on another substance (14%). Only 20% had a family history of substance dependence. The social impairment ranged from 77% for social to 40% for financial and none for legal aspects. A typical subject had followed up 4.2 times in 8.4 months, while 54% were abstaining, 40% were continuing their substance dependence at the last follow up. CONCLUSIONS The results suggest that the development of substance dependence in women is a combination of genetic, personal, and social vulnerability factors, including the drug culture of the social milieu and the poor social support. Comorbidity and impairment are common features.

KEY WORDS: substance dependence; women

Although gender differences in drug abuse have narrowed over the last few decades,^{[1]–[3]} substance abuse in women still attracts greater social stigma than in men, with attendant efforts by women to hide the problem and by the caregivers in not recognizing the problem, thereby limiting treatment-seeking.^{[4],[5]}

Although men are more likely than women to have opportunities to use drugs, when given the first opportunity to use drugs both men and women are equally likely to do so and women tend to progress faster to addiction.^[6] Although vulnerability to addiction to cocaine, heroin, hallucinogens, tobacco and inhalants is similar, women are more likely to become dependent on tranquillizers/sedatives/hypnotics, and less likely to abuse alcohol and marijuana.^[7]

Although a large amount of data has accumulated from the western countries, data from India is scarce. Selvaraj et al.^[8] studied 18 women alcoholics who sought treatment over a 1-year period and reported that compared to men, women had become dependent on alcohol more rapidly. More than half of the women reported being initiated into drinking by family members; alcoholism in women was associated with heavy drinking among key family members. More often than their male counterparts, the women cited psychosocial stressors as the maintaining factors for their drinking. While physical and

Correspondence Dr. D. Basu Consultant Psychiatrist Merseycare NHS Trust Hesketh Centre 51-55 Albert Road Southport – PR9 0LT England E-mail: db_sm2002@yahoo.com psychiatric complications were more frequently seen in women, they suffered relatively less drinking-related social complications.

In an ethnographic report, Ganguly et al.^[9] noted that many women from Rajasthan using opioids were initiated by their husbands, or they had started these as medication for trauma or for ailments. In another study,^[10] 75 drug-using women (25 each from Aizawl, Mumbai and Delhi) were interviewed. The sample comprised mainly of treatment seekers at Aizawl, commercial sex workers in Mumbai, and working women in Delhi. Primary drugs of abuse were opioids, alcohol, and sedatives; 30 were injecting-drug-users.

However, in India the women-specific magnitude of substance use/abuse, and factors associated with initiation, continuation, and discontinuation have not been well reported. In the context of a social response to managing the substance use/abuse in the general population or specific subpopulations, these factors need to be taken into account when formulating demand-reduction strategies and organizing therapeutic services. Hence the need for the present research that aims to study the sociodemographic and clinical profile of women attending a de-addiction centre.

MATERIAL AND METHODS

The study was conducted at the Drug Deaddiction and Treatment Centre (DDTC) in a tertiary-care medical centre with a large catchment area comprising of several states in North India. Most patients come by self-referral or family-referral, whereas some are referred from other hospitals or other departments of

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286

285

our Institute. The DDTC services include outpatient, inpatient, laboratory, aftercare, liaison with other governmental and nongovernmental agencies, and self-help groups.

The cohort for this study consisted of all women patients registered at the DDTC between September 1978 and December 2003 (a little over 26 years). Substance dependence was diagnosed as per ICD-9^[11] until December 1992 and later ICD-10^[12] by a consultant psychiatrist after direct interview with the patient and her relatives. Following detailed evaluation, the treatment consisted of detoxification, symptomatic treatment, treatment of medical complications, if any and psychosocial counselling of patients and their families. Regular (usually monthly) follow ups were done by a psychiatrist when patients' drug use profile, social and occupational functioning, and physical and psychological problems were monitored and documented.

For this chart-review study, we found that for the 56-women subjects registered (seven in 2003), the case records were available only for 35 subjects.

Measures

The following measures were considered in this study.

Socio-demographic information profile A semistructured proforma was used to record sex, age, marital status, educational level, occupation, income, family type, religion, and locality. One variable named 'family/social support system' was added to this section. 'Poor support' was rated when there was either unavailability of, or lack of assistance from, key care-giving and supervising figures in the family (usually spouse, but also parents, sibs or children), or in society (peer group, colleagues, job supervisor, self-help groups, religious-spiritual affiliations, etc.). 'Good/fair' support was rated when there was availability and assistance from at least one member each from both these sources. As the social support of an individual could vary over time, the inference about the same was drawn from cumulative evaluation of the patient, from the first contact to the last contact.

Information on clinical and substance-use profile This included type of predominantly used substance, duration of dependence (onset marked from the year in which the patient first met criteria for dependence as per ICD-9 or 10), relapses, treatments, and hospitalizations in the past (before the index treatment episode), detailed physical and psychiatric comorbidity, and other substance use. The information about the physical and psychiatric comorbidity was inferred from the history, clinical and laboratory evaluation, and monitoring of the patient throughout the contact period.

Impairment in various areas of functioning Four levels of drug-related complications were operationalized (Appendix).^[13] These covered areas of functioning such as health, occupation, finance, family, marital, legal and social areas. The severity of complications at the first presentation (nil, mild, moderate and severe) was extracted from the case records using a standardized guideline as mentioned in the Appendix. Status at last follow up Abstinence, lapse or relapse was considered as the primary outcome measure. Abstinence was defined as no substance intake. Lapses were defined as using the substance less than that for relapse. Relapse was defined as re-emergence of substance dependence as per the ICD-9 or 10.

Duration of follow up –This was calculated in number of months from first visit to the last visit to the hospital.

RESULTS

Sociodemographic profile [Table 1]

Of the 35 subjects, most came from an urban background (85.7%), were married (62.9%), housewives (57.1%) and from a nuclear family (60.0%). A little over half of the subjects (54%) were educated for less than or up to the tenth standard. Four subjects were medical professionals, three doctors, and a nurse, who all used opioids. Out of the six subjects using alcohol, four had their husbands using alcohol and they introduced three subjects to alcohol. Fifty-seven per cent of the subjects had poor social support.

Clinical profile [Table 2]

The commonest used class of substances was opioids (60%), and the commonest used opioid was pentazocine (15). In 19 out of 21 opioid abusers, and three out of four benzodiazepine abusers the addiction had followed medical/ therapeutic administration, whereas in all six alcohol abusers and two out of four nicotine abusers, the use had started out of curiosity. All the tobacco abusers came from the sociocultural background where tobacco smoking by women was an accepted norm.

Table 1: Sociodemographic profile (n = 35)

Variables	n (%)
Marital status Married Single Remarried Widow Divorced	22 (62.9) 5 (14.3) 1 (2.9) 4 (11.4) 3 (8.6)
Occupation Working Housewife	11 (22.9) 20 (57.1)
Educational status Up to tenth standard Above tenth standard	21 (54.3) 16 (45.7)
Mean monthly income (in rupees)	4177.14 (range: 0-20 000)
Religion Hindu Sikh Others	17 (48.6) 16 (45.7) 2 (05.8)
Family type Nuclear Non-nuclear	21 (60.0) 14 (40.0)
Locality Urban Rural	30 (85.7) 5 (14.3)
Social support Poor Fair/good	20 (57.1) 15 (42.9)

In 19 subjects, no antecedent precipitating factor could be identified; in the rest, the antecedent factors were, pain at various sites (n = 9), depression (n = 3), psychosis and somatization (n = 1 each), and interpersonal problems at home (n = 2). Out of 35 subjects, five had attempted suicide.

The mean age at first use of substance for the whole group was 30.5 years, being the lowest for nicotine (20.5 years) followed by alcohol (24.8 years), and the highest for benzodiazepines (33.1 years) and opioids subgroups (33.3 years).

287

288

Table 2: Clinical profile (n = 35)

	Opioids*	Alcohol	Tobacco	Benzodiazepine	All
Substance type Age at first use in years	(<i>n</i> = 21)	(<i>n</i> = 6)	(<i>n</i> = 4)	(<i>n</i> = 4)	(<i>n</i> = 35)
Mean ± SD Range	33.3 ± 9.55 20–59	24.8 ± 13.97 8–44	20.5 ± 10.78 8–30	33.1 ± 13.4 20–48.5	30.51 ± 11.19 8–59
Duration of illness in months Mean ± SD Range	76 ± 72.20 12–240	175.2 ± 118.67 96–384	270 ± 327.09 48–756	49.5 ± 33.36 18–96	108.17 ± 138.57 12–756
Duration to develop dependence in months Mean ± SD	46.28 ± 55.93	64.8 ± 34.57	213 ± 258.55	39.75 ± 31.68	66.94 ± 104.2
Comorbid physical illness n (%)	7 (33.33)	3 (50)	1 (25)	1 (25)	12 (34.29)
Comorbid psychiatric illness n (%)	4 (19.05)	0	1 (25)	3 (75)	8 (22.86)
Self-referral n (%)	8 (38.09)	0	1 (25)	2 (50)	11 (31.43)
Positive family history n (%)	5 (23.81)	0	2 (50)	0	7 (20)

The mean duration of substance use for the whole group was 108,17 months being the highest for nicotine (270 months), followed by alcohol (175.2 months), opioids (76 months) and benzodiazepines subgroups (49.5 months).

For all substances considered together, the mean duration required to develop dependence was 66, 94 months, being the lowest for benzodiazepines (39.75 months), followed by opioids (46.28 months), alcohol (64.8 months) and nicotine (213 months).

While 11 subjects had self-referred, 12 were referred by other treating agencies, 10 by the relatives, and 2 by other agencies. None of the 21 alcohol abusers had self-referred. In comparison, 8 out of 21 opioid abusers and two out of four benzodiazepines abusers had self-referred, while three out of four tobacco abusers were referred by the physicians.

The subjects referred by the physicians were mostly referred for physical complications (alcoholic liver disease and recurrent cough), or comorbid psychiatric or physical disorders. Only 12 out of 35 subjects had comorbid physical illness at presentation – 7 out of 21 opioid abusers presented with some form of pain, including two pentazocine abusers who had developed deep vein thrombosis. Three out of six alcohol abusers had developed complications: alcoholic liver disease in two and withdrawal seizures in one.

Only 8 (22.9%) subjects had a lifetime history of comorbid psychiatric disorders, the most common being 'Neurotic, Stress-related and Somatoform disorders' (ICD-10 codes F40-48, present in five cases). Five subjects, dependent on two or more substances included four subjects who were co-dependent on opioids and benzodiazepines.

Only 20% subjects had a positive family history of substance dependence; none of the alcohol and benzodiazepine abusers had a positive family history.

Impairment/burden [Table 3]

Most subjects had a mild impairment in all domains, except financial and legal. The impairment was more often in social (77%) followed by physical and family domains (68.5% each). Severe impairment was seen in family domain in only one subject using benzodiazepines. Most subjects had no financial burden and none had any legal problems.

Outcome

The mean duration of follow up was 8.40 months (SD: 28.38, range: 0–168), opioid abusers following up for the longest duration (10.56 months, SD: 36.34; range: 0–168). The mean number of follow-up hospital visits was 4.17 (SD: 4.66, range: 1–29). While 54% subjects reported abstinence at the last follow up including two thirds of opioid abusers and three fourths of benzodiazepine abusers, 40% subjects were continuing substance abuse, and 3% each reported a lapsing or relapsing pattern.

Table 3: Impairment in various dimensions [n (%)]

Impairment	Severity None	Mild	Moderate	Severe
Physical	11 (31.4)	19 (54.3)	5 (14.3)	_
Occupational	13 (37.1)	19 (54.3)	3 (8.6)	_
Financial	21 (60)	9 (25.7)	5 (14.3)	-
Legal	35 (100)	-	-	_
Family	10 (28.6)	18 (51.4)	6 (17.1)	1 (2.9)
Marital	13 (37.1)	16 (45.7)	4 (11.4)	2
Social	8 (22.9)	16 (45.7)	11 (31.4)	-

Correlations

Correlation analysis was carried between the status at last follow up and duration of follow up and number of follow ups. Subjects with higher number of consultations had significantly a higher chance of being abstinent (Spearman's rho 0.389; P < 0.05). Subjects with greater social impairment had significantly longer duration of follow up (Spearman's rho 0.340; P < 0.05), higher number of hospitalizations (Spearman's rho 0.339; P < 0.05), and significantly more occupational impairment (Spearman's rho 0.478; P < 0.01). Subjects with higher physical impairment had significantly lower number of follow ups (Spearman's rho 0.355; P < 0.05), significantly more family impairment (Spearman's rho 0.383; P < 0.05), and significantly more marital impairment (Spearman's rho 0.365; P < 0.05). The negative correlation of physical impairment and follow up could either be a chance occurrence or due to the fact that subjects with more physical impairment had been using the drugs for long and were poorly motivated. No other sociodemographic, social support, and outcome variables were correlated.

DISCUSSION

The current study was a retrospective chart review with the aim of studying the sociodemographic and clinical profile of women presenting to a de-addiction centre of a tertiary care hospital. The profile of treatment seekers can help the treatment agencies to prepare themselves in managing such cases. Sociodemographic profile

Over the 26 years, 56-women subjects

289

290

registered, with seven reporting in the last 1 year indicating an increase in recognition and need for treatment. Increase in the number of cases in recent years and most cases coming from urban nuclear families with poor social support reflect the transitional nature of Indian society - alterations in lifestyle and the changing roles increase the stress and bring many new problems, drug abuse being one of them. Four out of 35 subjects belonging to medical profession reflect the easy availability leading to high vulnerability of this profession. Approximately half of the subjects having completed schooling are in line with the findings of multicentric Rapid Assessment Study, which found more educated women drug abusers.[14]

Clinical profile

Opioids The majority of the sample were opioid dependent, most of them using IV pentazocine, although some preferred dextropropoxyphene. Only one woman was using smack (street heroin). Use of IV opioids in 42% of subjects is in line with the previous reports from other parts of India.^[10] The most common antecedent for opioid use was pain leading to consultation with the local doctors who prescribed opioids. Only one of the subjects had antecedent depression. These findings support Ganguly et al.,^[9] whose ethnographic study from Rajasthan reported that many of the opioid-dependent women had graduated to dependence only after initial use of opioids as medication. Further, in our study the most common opioid was pentazocine rather than heroin; the reason for this difference could be the geographic location or the type of sample (in the UNDCP study,^[10] the subjects were nontreatment seekers). Overall, the findings of this study suggest that opioid analgesics should be used for the shortest possible duration and only for specific indications, rather than as a general analgesic.

Alcohol Out of the six subjects using alcohol, four came from families where a key member was drinking, including three who were introduced to alcohol by their husbands; these findings are in line with the other studies from India.^[8] In all the subjects, reason for starting alcohol was curiosity. None of the subjects self-referring reflects either, nonrecognition of their dependence, or avoiding treatment seeking due to social stigma. Three out of six subjects had associated complications. None of the subjects had family history of drug dependence or other substance abuse. Only one subject had antecedent depression.

Benzodiazepine Only four subjects were dependent on benzodiazepines; three having become dependent following medical use either for depression or for adjustment problems with the spouse, and the duration to develop dependence was shorter. Despite the small numbers, these findings suggest that benzodiazepines should be either unused or used for the shortest possible duration.

Nicotine Most of our women nicotine users came from sociocultural background where it was acceptable and none sought treatment at their own initiative.

Impairment/burden The majority of the sample had only mild impairment in most of the domains, probably indicating that the subjects in the sample were less-severely ill.

Outcome Most of the subjects abstaining from the drugs after appropriate treatment may appear to suggest that appropriate treatment helps most of the subjects to leave the drugs; however, the short follow up does not support this finding very strongly, while a positive correlation between abstinence and the number of follow ups indicates the need to follow up these subjects for as long as possible.

Limitations of the study

The small potential sample size of this study was made still smaller by the availability of case notes on only 35 out of the 56 identified cases. The study was based on a retrospective chart review where data had to be inferred from the recorded facts/narratives. Some of the instruments and definitions used for some of the assessments (e.g. social support, impairment, burden, and outcome) were study/ centre specific and have not been evaluated for their reliability. Various substancesubgroups were too small for any definitive conclusions. Some of the statistically significant correlations between some of the clinical and outcome variables could be a possible chance occurrence. Lastly, being based on a single centre catering to a certain geographic area, the study did not represent the diverse (substance use) cultures of India. The findings of this research can be generalized only within these limitations.

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APPENDIX

Operational criteria for substance-related impairments (complications) in various areas of life functioning.^[13]

Area of functioning	Severity of complications	Mild	Moderate	Severe
Health	No complications	At least one health related complications	Two health- related complication	>2 health- related complication
Occupation	No problem	Irregularity/inefficiency /absenteeism	Job changes/transfer /delayed or blocked promotion	Suspensions, dismissal, chronic joblessness
Finance	No problem	Spending up to 25% salary or income on alcohol-related expenses	Spending more than 25% income	Serious debts, losses, misappropriation, theft, embezzlement, robbery
Legal	No problem	Public intoxication	Caught for drunk driving or violent brawls	Imprisonment or public prosecution due to alcohol- related offence
Family	No problem	Strained interpersonal relation (IPR)	Disrupted family functioning	Family ties broken, disowned by family
Marital	No problem	Strained IPR	Episodes of separation	Divorce
Social	No problem	Impaired IPR	Restriction of social circle	Social ostracism