

## Conclusion

The organisation of mental healthcare in Serbia has many advantages, as well as disadvantages. The main advantages are a balanced territorial coverage of psychiatric departments in general hospitals, well-educated professionals, as well as a relatively low proportion of institutionalised patients at the onset of the mental healthcare reform. Of special importance is a long tradition of psychosocial orientation, with day hospitals in clinics of all larger towns.

However, there is insufficient cooperation between primary, secondary and tertiary healthcare. This is exacerbated by a lack of catchment areas and patients' legal right to choose their own doctor (often by affinity or reputation of doctors), as well as lack of skills of general practitioners in mental healthcare. Stigma in relation to mental illness is prevalent among the public, which hinders early recognition and treatment. Furthermore, there is a lack of cooperation between the psychiatric and the social welfare institutions, a lack of community mental healthcare centres and other out-patient psychiatric services in the community (rehabilitation and professional orientation services), as well as insufficient information systems for registering and monitoring mental disorders.

The ongoing psychiatric reform certainly represents a challenge and opportunity for mental health professionals. The process of reform is not easy, especially in a country facing social transition, so it is expected that the implementation of the national strategy and action plan will take time.

## References

- International Monetary Fund (2008) *World Economic Outlook (WEO): Financial Stress, Downturns, and Recoveries*. Available at <http://www.imf.org/external/pubs/ft/weo/2008/02/weodata/index.aspx> (accessed October 2009).
- Lecic Tosevski, D. & Draganic Gajic, S. (2005) The Serbian experience. In *Disaster and Mental Health* (eds J. J. Lopez-Ibor, G. Christodoulou & M. Maj, et al), pp. 247–255. Wiley.
- Lecic Tosevski, D. & Pejuskovic, B. (2005) Mental health care in Belgrade – challenges and solutions. *European Psychiatry*, **20**, 266–269.
- Lecic Tosevski, D., Curcic, V., Grbesa, G., et al (2005) Mental health care in Serbia – challenges and solutions. *Psychiatry Today*, **37**, 17–25.
- Lecic Tosevski, D., Pejovic Milovancevic, M., Pejuskovic, B., et al (2006) Burnout syndrome of general practitioners in postwar period. *Epidemiologia e Psichiatria Sociale*, **15**, 307–310.
- Lecic Tosevski, D., Pejovic Milovancevic, M. & Popovic Deusic, S. (2007) Reform of mental health care in Serbia: ten steps plus one. *World Psychiatry*, **6**, 51–55.
- Ministry of Health of the Republic of Serbia (2007) *Strategy for the Development of Mental Health Care*. Available at <http://www.imh.org.rs> (accessed October 2009).
- Pejovic Milovancevic, M., Lecic Tosevski, D., Popovic Deusic, S., et al (2009) Mental health care of children and adolescents in Serbia: past steps and future directions. *Epidemiologia e Psichiatria Sociale*, **18**, 262–265.
- Priebe, S., Gavrilovic, J., Schützwohl, M., et al (2002) Rationale and method of the STOP study – study on the treatment behaviour and outcomes of treatment in people with posttraumatic stress following conflicts in ex-Yugoslavia. *Psychiatry Today*, **34**, 133–160.
- Priebe, S., Jankovic Gavrilovic, J., Schützwohl, M., et al (2004) A study of long-term clinical and social outcomes after war experiences in ex-Yugoslavia – methods of the 'CONNECT' project. *Psychiatry Today*, **36**, 111–122.
- Priebe, S., Bogic, M., Ajdukovic, D., et al (2009) Mental disorders following war in the Balkans – a study in five countries. *Archives of General Psychiatry* (in press).

ORIGINAL PAPER

# Alcohol dependence syndrome in women: an Indian perspective

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The estimated prevalence of alcohol misuse among Indian women is less than 5%. Misuse has been associated with the upper socio-economic classes, primitive tribal cultures and certain rural traditions. The problem of substance misuse in India has been underdiagnosed and underreported, but various health agencies and media reports suggest it is increasing.

The term 'abuse' has been used interchangeably in the literature for both dependence and harmful use; this is due to a lack of clarity in the diagnostic criteria used in most of the studies quoted in this article. However, the results of

the current study are described only in terms of the ICD–10 criteria for dependence. In this paper we present findings which may contribute to our understanding of the prevalence of alcohol dependence in women in India.

## Literature review

Indian studies that have looked at the prevalence of alcohol misuse in males (Mohan et al, 1978; Sethi & Trivedi, 1979; Agarwal, 2004) have reported rates ranging from 19% to

82.5% (the wide range might be attributable to cultural differences across geographical locations as well as differences in methods and definitions). There has, however, been little mention of use or misuse of alcohol among females (Murthy & Chand, 2005), although Neufeld *et al* (2004) reported that men were 9.7 times more likely than women to use alcohol regularly. Epidemiological surveys reported that the early 1980s saw negligible drug misuse (including of alcohol), which by the 1990s was a predominantly male phenomenon. Recent data from treatment centres show that only 1–3% of those seeking help are female (Murthy & Chand, 2005).

In a study conducted at the National Institute of Mental Health and Neurological Sciences, Bangalore, India, one of the largest addiction treatment centres in India, only 77 females qualifying for an ICD–9 diagnosis of alcohol dependence, with a mean (s.d.) age at onset of alcohol intake of 32 (9) years, sought treatment within a span of 11 years. The male:female ratio was 57:1. The majority of females were single and were from families of lower socio-economic status. The duration of dependent alcohol use before first contact with a treatment agency was 4.5 (3.8) years, and there were high rates of family (64.9%) and spousal (65.8%) alcohol dependence. Two-thirds were introduced to alcohol by friends or family. Psychiatric morbidity preceding alcohol dependence was present in 33.8% of the women – 28.6% had depression – and up to 68.7% had a concurrent physical disorder (Murthy & Benegal, 1995).

From 14 urban sites of the 1999 Rapid Assessment Survey (RAS) on substance misusers in the community, 371 women were identified, giving a prevalence rate of 8%. Alcohol was misused by 4.8% of the entire population. Separate data on alcohol misuse by women were not available (Ray, 2004). There was a trend for misuse to be seen more commonly in single, educated women (Murthy & Benegal, 1995).

A study from rural India indicated that most of these women were not formally educated, were engaged in unskilled work, started drinking because they liked the feeling of being drunk and drank at home (Kumar & Parthasarathy, 1995).

The Focused Thematic Study (FTS) on drug misuse in women had a sample of 75 women, and found that opiates, alcohol and minor tranquillisers were the main drugs of misuse. No specific alcohol-related data were obtained.

A global status report on alcohol misuse from the World Health Organization (2004) gave the rates of heavy and hazardous drinking among females as 0.4% and 1.4%, respectively ( $n = 9540$ ). There was a variable pattern in women's drinking habits wherein two divergent patterns of drinking were seen: a 'traditional' pattern, in rural settings, featured bingeing and intoxication, usually not within social contexts; the other pattern, in affluent, educated, urban women, generally younger than the former group, featured drinking primarily in social settings.

## Method

The present study was conducted at Kasturba Medical College, Manipal, a university hospital that serves a catchment area with rural, suburban and urban populations as well as the university student population. The study was a retrospective chart review of females presenting to the Department of Psychiatry between September 1999 and September 2005 with an ICD–10 diagnosis of alcohol

dependence syndrome (ADS). Those with both primary and secondary dependence were included. A total of 1539 charts were reviewed, of which 38 were women's.

## Results

The male:female ratio was 39.5:1. Women presenting to the hospital with a diagnosis of ADS represented 2.5% ( $n = 38$ ) of all patient registrations for ADS. Their mean (s.d.) age at presentation to the hospital was 48.3 (12.9) years, mean age of initiation of alcohol use 30.7 (10.8) years, and mean duration of dependent alcohol use before their first contact with a treating agency 39.0 (11.1) years. Mean overall duration of alcohol use was 17.6 (11.6) years and mean duration of dependence 9.3 (7.6) years. The mean number of ICD–10 criteria fulfilled was 3.7 (0.8). Past psychiatric illnesses were seen in six women (16%).

A majority of the 38 women (22; 58%) were married; 30 (79%) were first-born children. Twenty-one (55%) were Hindus and the other 17 (45%) were Christians; none was from the Muslim community. Twenty-six (68%) had had some sort of formal education and 21 (55%) were classified as urban.

Twenty-eight (74%) had a family history of ADS and 4 (11%) a history of other psychiatric disorders; there was a history of spousal substance misuse in 21 of the 22 (95%) married women. Thirty-three (87%) had been introduced to the substance of misuse by a family member or spouse (Table 1). Six (16%) had a history of psychiatric illness.

**Table 1** Variables related to family and occupation of women diagnosed with alcohol dependence syndrome

Variable	Frequency ( $n = 38$ )
<i>Demographic</i>	
Family type	
Nuclear	30 (79%)
Extended	8 (21%)
Head of the family	
Patient	20 (53%)
Other	18 (47%)
Income source	
Patient	25 (66%)
Other	13 (34%)
Occupation	
Homemaker	14 (37%)
Professional	24 (63%)
<i>Clinical</i>	
Family history of alcohol use	28 (74%)
Family history of psychiatric illness	4 (11%)
Substance misuse in the spouse	21 (55%)
Who introduced the person to alcohol? <sup>a</sup>	
Family	20 (53%)
Spouse	13 (34%)
Peer	3 (8%)
Experimentation	4 (5%)

<sup>a</sup> The total is more than 38 as there is an overlap between some variables.

**Table 2** Distribution of psychiatric comorbidities

Psychiatric comorbidity <sup>a</sup>	Frequency ( $n = 38$ )
Primary depression	25 (66%)
Substance-induced depression	4 (11%)
Organic psychiatric syndromes	4 (11%)
Tobacco dependence syndrome	16 (42%)
Benzodiazepine dependence syndrome	1 (3%)
Opioid dependence syndrome	1 (3%)
None	2 (5%)

<sup>a</sup> The total is more than 38 as there is an overlap between some variables.

Symptoms of craving and tolerance were reported by all 38 women, withdrawal by 29 (76%), use despite knowing it would do harm by 24 (63%), loss of control by 8 (21%) and narrowing of repertoire by 2 (5%). Twenty-two (58%) had a diagnosable medical problem, with alcoholic liver disease (fatty liver disease, hepatitis or cirrhosis) in 23 (61%), hypertension in 9 (24%), anaemia in 5 (13%), diabetes mellitus in 4 (11%), peripheral neuropathy in 2 (5%), pancreatitis in 1 (3%) and migraine in 1 (3%).

A coexisting ICD-10 psychiatric syndrome was seen in 36 women (95%). A primary mood disorder was seen in 25 (66%), followed by other substance misuse in 18 (47%) (Table 2). None qualified for a personality disorder; however, an abnormal personality trait – anankastic 9 (24%), anxious avoidant 3 (8%) or emotionally unstable 2 (5%) – was seen in 14 of the 38 women.

A factor precipitating the onset of alcohol use was identifiable in 24 (63%), and 30 (79%) women had an ongoing stressor in their life. The majority (37, 97%) had overlapping psychological (36, 95%), physical (30, 79%), social (13, 34%), financial (5, 13%) or legal (1, 3%) problems secondary to alcohol use/dependence.

## Discussion

The current study is one of the few of its sort conducted in India. Despite changing socio-economic conditions, the present study, with its limitations, might serve as a window to the important issue of alcohol dependence in women and its relation to a selection of variables. The biggest problem we faced was reviewing the scarce literature, which lacks clarity in definitions, with the terms 'use', 'abuse' and 'dependence' being used interchangeably.

The following causes can be suggested for the scarcity of reports: gender stereotypes manifesting in the attitudes of health professionals, leading to low identification rates in clinics; underreporting as a result of stigma; a lack of structured data entry; and overall low attendance rates of female clients in tertiary care centres in India. The figure of 38 females over 6 years is in stark contrast to the 1501 males seeking treatment for an addiction from the same centre, which is a reflection of gender role discrepancies.

Women with ADS had a later age at onset, presenting to the hospital around their 40s, with secondary alcohol dependence. The male:female ratio of individuals seeking help was 39.5:1, as against a comparable figure of 57:1 in the only other study in the Indian setting (Murthy & Benegal, 1995). The rate of 2.5% is in keeping with the figure reported by the World Health Organization (2004). The sociodemographic profiles of the study women are consistent with those in these two other reports (Murthy & Benegal, 1995; World Health Organization, 2004), but the family history of alcohol use was significantly higher than the figures quoted by Murthy & Benegal (1995).

Interestingly, a majority of the women with dependence belonged to a nuclear family set-up and contributed to the family income, and indeed a significant number (20, 53%) acted as head of family. This could be attributed either to their 'single' status, with the absence of a male member who might interfere with decision making, or to the matrilineal system of inheritance prevalent in the southern Indian states.

The striking presence of precipitating factors and stressors validates the importance of exogenous factors and corresponds with Indian literature (Ray, 2004) that has hinted at the importance of dysphoria-related craving and the self-medication hypothesis (Khantzian, 1985). A look at the nature of the stressors might have given us further important insights.

Dependence was seen only in Hindus and Christians. This demographic finding, along with the later age at onset of alcohol dependence, and later age of presentation to the hospital for help, is similar to the study done at the National Institute of Mental Health and Neurological Sciences (Murthy & Benegal, 1995) and points to a higher probability of late-onset secondary alcohol dependence in females, where exogenous non-genetic factors form an important link. We also saw a rural-urban divide. Despite the catchment area covering divergent populations, the primary urban representation was from the university, which suggests the possibility of stigma interfering with help-seeking in local urban dwellers, unlike in the rural population from the same catchment area. Future studies focusing on the causes of the postulated differences between the help-seeking behaviours of these communities might have some interesting findings. The above results to some extent validate the two divergent patterns of alcohol misuse proposed earlier for the Indian female population (World Health Organization, 2004).

Future research has to be planned with a few important factors in mind, including lack of uniformity in records, definitions used and most importantly the bias in collecting data. The current study gives, we believe, an underestimate of the actual problem and highlights the gender bias in the approach of healthcare professionals and society in general. Investigations into the reasons for fewer women seeking treatment, the pattern, course and outcome of misuse/dependence, comorbidities and stressors might help us to understand alcohol dependence in women in India.

## References

- Agarwal, S. P. (2004) *Mental Health: An Indian Perspective 1946–2003*. Ministry of Health and Family Welfare. Reed Elsevier India.
- Khantzian, E. J. (1985) The self-medication hypothesis of addictive disorders: a focus on heroin and cocaine. *American Journal of Psychiatry*, **142**, 1259–1264.
- Kumar, U. G. S. & Parthasarathy, R. (1995) Alcohol drinking in rural areas: some observations. In *Indian Journal of Psychiatry* (supplement, *Alcohol Dependent Female: A Clinical Profile*), **37**, 2–18.
- Mohan, D., Sharma, H. K., Drashan, S., et al (1978) Prevalence of drug abuse in young in rural males in Punjab. *Indian Journal of Medical Research*, **68**, 689–694.
- Murthy, P. & Benegal, V. (eds) (1995) *Alcohol Dependent Female: A Clinical Profile*. Supplement, *Indian Journal of Psychiatry*, **37**.
- Murthy, P. & Chand, P. (2005) Substance use disorder in women. In *Substance Use Disorder: Manual for Physicians* (eds R. Lal, R. Rao & I. Mohan), pp. 170–177. National Drug Dependence Treatment Centre, All India Institute of Medical Sciences.
- Neufeld, K. J., Peters, D. H., Rani, M., et al (2004) Regular use of alcohol and tobacco in India and its association with age, gender, and poverty. *Drug and Alcohol Dependence*, **77**, 283–291.
- Ray, R. (2004) *National Survey of Extent, Pattern and Trends of Drug Abuse in India*. Ministry of Social Justice and Empowerment, Government of India & United Nations Office of Drug and Crime, Regional Office for South Asia.
- Sethi, B. B. & Trivedi, J. K. (1979) Drug abuse in rural populations. *Indian Journal of Psychiatry*, **21**, 211–216.
- World Health Organization (2004) *WHO Global Status Report on Alcohol*. WHO.