

Co-morbidity in women with alcohol dependence syndrome (ADS) in Eastern Nepal

Joshi RG¹, Shakya DR², Shyangwa PM³, Pradhan B⁴

1. Associate Professor, Department of Psychiatry, BPKIHS, Dharan, Nepal 2. Additional Professor, Department of Psychiatry, BPKIHS, Dharan Nepal 3. Professor, Department of Psychiatry, BPKIHS, Dharan, Nepal 4. Professor, Department of Internal Medicine, BPKIHS, Dharan, Nepal

E-mail *Corresponding author: rinkugautam@hotmail.com

Abstract

Introduction: Women with ADS may have psychiatric comorbidities along with physical comorbidities. Societal attitudes towards women and alcohol are barriers to the detection and treatment of their alcohol related problems.

Objective: To explore the magnitude of co-morbidity among women with ADS in Eastern Nepal.

Method: This is a hospital based cross-sectional study of women with ADS. Those who scored two or more than two in T-ACE questionnaire were enrolled. The diagnosis was made according to ICD-10 criteria. Consultation with concerned physician was done to assess physical condition.

Result: Fifty one patients with ADS were enrolled. Among them, 21.6% had no comorbidity, 52.9% had single comorbidity (psychiatric or physical) and 25.5% had both psychiatric and physical co-morbidity. In psychiatric comorbidity, mood disorder in 35.29% was the commonest followed by nicotine use in 26.47%. Among mood disorders 83.3% had depression. In physical comorbidity, disease of gastrointestinal tract and hepatobiliary system in 50.9% was the commonest followed by hypertension in 11.5%.

Conclusion: Psychiatric as well as physical co-morbidities are common in women with ADS. The finding points to the importance of exploring comorbidities and their optimal treatment.

Keywords: Alcohol, Comorbidity, Nepal, Women

INTRODUCTION

Comorbidity refers to the presence of more than one illness in a person. These illnesses can be medical or psychiatric, as well as drug / substance use disorders. Comorbid illnesses may occur simultaneously or sequentially, but it does not necessarily imply that one is the cause of the other, even if one occurs first. An understanding of comorbidity is essential in developing effective treatment and prevention strategy. Similarly, in alcohol dependence syndrome (ADS), identification and management of the comorbid conditions are of great importance.¹

The toxic effects of alcohol can have adverse effects on different system of the body. In

women along with those systemic effects, the alcohol use may result in breast cancer, amenorrhoea, anovulation, early menopause and Fetal Alcohol Syndrome (FAS) of the infant if consumed during pregnancy.^{2,3} Women with alcohol-use disorders may have co-occurring psychiatric disorders such as major depression, anxiety, panic disorder, bulimia, post traumatic stress disorder (PTSD), or borderline personality disorder. They are more likely to have physical or sexual abuse and domestic violence. This trauma can lead to higher instances of PTSD, depression, anxiety, and alcohol dependence.⁴ Even with the evidence that alcohol use has a devastating effect on women, societal attitudes stigmatize women with alcohol drinking habit

and these are barriers to the detection and the treatment. Until this perception persists, women will continue to suffer and fail to present themselves for treatment. Fear of stigmatization may lead women to deny their suffering, they hide their drinking habit and drink alone.⁵ This study was conducted to explore the comorbidity among the women with ADS.

MATERIAL AND METHOD

This was a hospital based cross sectional descriptive study. The participants were consecutive women with ADS seeking psychiatry services of BPKIHS, Dharan. Those who gave informed written consent to participate in the study, who scored two or more than two in T-ACE questionnaire^{6, 7} and age group of 16 years and above were enrolled. Patient with multiple substance dependence, or who were severely ill and could not give informed consent and did not have reliable care taker to give consent were excluded. The aim of the study was to explore the co-morbidity among the women with ADS. The psychiatric diagnosis was made according to ICD-10 criteria. Consultation with concerned physician was done to assess physical condition. The relevant investigations were done. The study duration was from 2009 - 2010. The ethical approval for the study was obtained from the Institute's Ethical Board. The data was analysed using SPSS version 14.0.

RESULT

A total of 51 female patients with ADS participated in the study.

Table no. 1: Distribution Of ADS according to Presentation

Diagnosis		Frequency (n)	Percent (%)
ADS	Active use	16	31.37
	Abstinence	6	11.76
	Uncomplicated WD	16	31.37
	Complicated WD	13	25.49
Complicated WD	DT alone	9	69.23
	Seizures alone	1	7.69
	Both DT and Seizure	3	23.08

Table no. 2: Distribution of Comorbidity

Diagnosis		Frequency (n)	Percent (%)
Character	Category		
ADS with	No comorbidity	11	21.6
	Single (either psychiatric or physical) Comorbidity	27	52.9
	Both (psychiatric and physical) Comorbidity	13	25.5
Psychiatric Comorbidity	Present	29	56.9
	Absent	22	43.1
Physical Comorbidity	Present	24	47.1
	Absent	27	52.9

Table no. 3: Distribution of Psychiatric Comorbidity#

Character	Category	Frequency (n)	Percent (%)
Psychiatric Comorbidity	Mood Disorders	12	35.29
	Substance Use	9	26.47
	DSH	2	5.88
	Amnesic Syndrome	3	8.82
	Schizophrenia	2	5.88
	Anxiety NOS	1	2.94
	OCD	1	2.94
	Post partum psychosis	1	2.94
	Panic Attacks	1	2.94
	Persistent Somatoform Pain Disorder	1	2.94
	Substance Induced Mania with Psychosis	1	2.94
Mood Disorders	Depression	9	75
	RDD	1	8.33
	BPAD current Mania	2	16.67
DSH	Hanging	1	50
	OPC poisoning	1	50
Other Substance	Nicotine	8	88.88
	Cannabis	1	11.12
Total #		57	100

Multiple response category - one respondent may have one or more responses

Majority (31.37%) ADS cases presented in active use and uncomplicated withdrawal and 69.2% had delirium tremens (Table 1).

More than half (52.9%) had single comorbidity and one fourth (25.5%) had both psychiatric and physical comorbidity. Psychiatric comorbidity was in 56.9% and physical comorbidity was 47.1%. (Table 2)

In psychiatric comorbidity, mood disorder was common 35.29% where depression was in 83.33%. (Table 3)

In the physical comorbidity, the diseases of gastro-intestinal tract and hepatobiliary system were the most common(50%). (Table 4)

Table no. 3: Distribution of Physical Comorbidity#

Character	Category	Frequency (n)	Percent (%)
GIT/ Hepato-biliary	Total	26	50
	Cholelithiasis	7	13.46
	UGI bleed	5	9.62
	Alcoholic Liver Disease	4	7.69
	Fatty liver	4	7.69
	Chronic Liver Disease	3	5.77
	PUD	3	5.77
CVS	Total	9	17.31
	Hypertension	6	11.54
	Anemia	2	3.85
	Angina	1	1.92
CNS	Total	3	5.77
	Hepatic Encephalopathy	2	3.85
	CVA	1	1.92
Respiratory	Total	3	5.77
	Aspiration Pneumonia	1	1.92
	CAP	2	3.85
ENT	Total	2	3.85
	CSOM	1	1.92
	Otitis Externa	1	1.92
Urinary System	Total	5	9.61
	Nephrolithiasis	1	1.92
	UTI	4	7.69
Others	Total	4	7.69
	DM	2	3.85
	Aphthous Ulcer	1	1.92
	Tendoachillis Injury	1	1.92
Grand Total #		52	100

Multiple response category – one respondent may have one or more responses

DISCUSSION:

In this study, more than half had psychiatric comorbidity (56.9%) which is similar to the finding of 60% in Sweden⁸ and in USA⁹, but higher in India¹⁰ (75.3%) and previous study in Nepal¹¹ (70%). In a study by Shakya DR¹² which enrolled both male and female ADS cases, 80.4% psychiatric comorbidity inclusive of axis I (62.7%) and axis II disorders (51%) were found.

In psychiatric comorbidities, mood disorder was common (35.3%). Among mood disorders, depression was seen in 83.3%. Depression was 17.5% of the total psychiatric comorbidities which is similar to Korean¹³ (18.61%) and American study⁹ (15%). But it was higher in Sweden⁸ (50%) and in India¹⁰ (32.8%). Substance use disorder was the second most common psychiatric comorbidity (26.4%). The nicotine use was found in 88.8% and cannabis use in 12.2%. This is similar to finding of 80-90% smoker found by Kennedy, JA¹⁴ but more than the findings of Shakya DR¹² (69%). Alcohol use has been associated with high suicidal risk. There were two cases (5.8%) of deliberate self harm; one each of hanging and organo-phosphorus poisoning. In a meta-analysis, Stack S found the greater the per capita alcohol consumption, the greater the suicide rate.¹⁵ Robert J. Tait, found no association between gender and suicide, though the female deaths were 52% in the study.¹⁶ A study from Thailand showed majority (73.6%) who attempted suicide were female.¹⁷

In this study, physical comorbidity was present in 24 cases (47.1%). There were variable findings of prevalence of physical comorbidity in different countries like, 70% in Nepal¹¹, Ireland¹⁸ (14.1%) and 68.7% in India¹⁰. The disease of hepatobiliary system was most common (21.1%), which is similar to the findings from India¹⁰ (30.3%), and United States⁹ (26%), but lesser than previous studies in Nepal by Shakya DR¹⁹ et al (70%) and Sharma A et al¹¹ (92.48%). The second most common physical comorbidity was diseases of cardiovascular system (17.3%) of which hypertension was 11.5%, anaemia 3.8% and angina 1.9%. The second most common was anaemia (26.5%) In India¹⁰ and genitourinary problem (6%) in USA²⁰. But, in Ireland¹⁸, hypertension was the most common 5.9%. Among the individual

diseases in this study, the most common was cholelithiasis (13.4%) as the incidence of cholelithiasis is high in 'fat, fertile, flatulent and female of fifty'.

CONCLUSION:

Psychiatric as well as physical co-morbidities are common in women with alcohol dependence. The finding points to the importance of exploring comorbidities and their optimal treatment. Fear of stigmatization may lead women to deny their suffering. A prompt identification, intervention and treatment of underlying co-morbidities are essential in the management of ADS in women.

REFERENCES:

1. Shakya DR. An obstacle for alcohol abstinence. *Journal of Institute of Medicine*. 2009; 31(2):34-36.
2. Benjamin J. Sadock, Virginia A Sadock. (2009). *Comprehensive Textbook of Psychiatry*. 9th edition. 1268-1288.
3. Sadock, B.J. and Sadock, V.A. (2007). *Synopsis of Psychiatry*. 10th edition. 390-407.
4. Karol Brad R. Women and Alcohol use disorders: a review of important knowledge and its implications for social work practitioners. *Journal of social work*. 2002; 2 (3): 337-356.
5. Blume Laura N., Nielson Nancy H., Riggs Joseph A., et al. Alcoholism and alcohol abuse among women: report of the council on scientific affairs. *Journal of women's health*. 1998; 7 (7): 861-870.
6. Sokol RJ et al. The T-ACE questions: Practical prenatal detection of risk drinking. *American Journal of Obstetrics and Gynecology* 1989;160(4): 863-871. 6
7. Katharine AB, Jodie BW, Suzanne HP et al. Alcohol screening questionnaires in women; A critical review. *JAMA* 1998;180:166-171. 7
8. Brit Haver. Comorbid psychiatric disorders predict and influence treatment outcome in female alcoholic. *Eur Addict Res*. 2003;9(1):39-44.
9. Robin Ross, et al. Focus on Women : Age, Ethnicity, and Comorbidity in a National Sample of Hospitalized Alcohol-Dependent Women. *Psychiatr Serv*. 1998; 49:663-668.
10. P.J. Naga Venkatesha Murthy, Vivek Benegal, Pratima Murthy. *Alcohol Dependence in Indian Women: A Clinical Perspective*. NIMHANS, Bangalore, India.
11. Sharma A, Khandelwal SK. Women with alcohol-related problems in Nepal. *Addiction*. 2000; 95(7):1105-1108.
12. Shakya DR, 2005. MD thesis. *Alcohol Dependence Syndrome*.
13. Maeng Je Cho et al. Comorbid Mental Disorders among the Patients with Alcohol Abuse and Dependence in Korea. *J Korean Med Sci*. 2002; 17:236-41.
14. Kennedy, JA. *Psychiatric Secrets*. First Edition. 1996: 113.
15. Stack, S. *Suicide: a 15-year review of the sociological literature*. Part II: modernization and social integration perspectives. *Suicide and Life-Threatening Behaviour*. 2000; 30: 163-176.
16. Robert J. Tait And Gary K. Hulse. *Hospital Morbidity And Alcohol Consumption In Less Severe Psychiatric Disorder: 7-Year Outcomes*. *British Journal Of Psychiatry*. 2006; 188: 554-559.
17. Siriluck Suppakitporn. *Comorbidity of Alcohol Dependence in Suicidal Depressed Patients*. *J Med Assoc Thai*. 2005; 88(Suppl 4): S195-9.
18. Art O'Connor. *Female Alcoholism in Ireland: A follow-up study*. *Irish Journal of Psychiatry*. 1987; S:13-16.
19. Shakya DR, Shyangwa P M, Sen B. *Physical Diseases in cases admitted for Alcohol Dependence*. *Health Renaissance*. 2008; 5:27-31.
20. Brit Haver, Lena Dahlgren. *Early treatment of women with alcohol addiction (EWA): a comprehensive evaluation and outcome study. I. Patterns of psychiatric comorbidity at intake*. 1995; 90(1): 101-109.
21. *in the French elderly population*. *Br J Psychiatry* 2004; 184: 147-152
22. Ramchandran V, Sarda Menon M, Ramamurthy B. *Psychiatric disorders in subjects aged over fifty*. *Indian J Psychiatry* 1979; 22: 193-198.
23. Martha L, Bruce Gail J, Mc Avay, et al. *Major depression in elderly home health care patients*. *Am J Psychiatry* 2002; 159: 1367-74.
24. O'Connell H, Chin AV, Cunningham C, et al. *Alcohol use problems in elderly people - redefining an age-old problem in old age*. *BMJ* 2003; 327: 664-667.
25. Reifler B, Raskind M, Kethley A. *Psychiatric Diagnoses among geriatric patients seen in an outreach program*. *J Am Geriatr Soc* 1982; 530-533.
26. Zimberg S. *Alcohol abuse among the elderly*. In: Carstensen LL & Edelstein BA, ed. *Handbook of Clinical Gerontology*, New York: Pergamon Press, 1987; 57-65.
27. Aich TK, Lamichane N, Koirala NR, Ranjan S. *Geriatric psychiatry research in Nepal: an overview and current status*. In *Souvenir: 5th National Conference of the Psychiatrists' Association of Nepal*, 2013; 58-67.