

## *Original article*

# **Circumstances of the first drink among problem drinkers seeking help from a psychiatric service of a teaching institute in Eastern Nepal**

DR Shakya

Associate professor, B. P. Koirala Institute of Health Sciences, Dharan, Nepal

### **Abstract**

**Background:** Alcohol use and problem are common in Nepal. **Objective:** To investigate into the circumstances of alcohol use among problem drinkers, focusing mainly the first drink. **Methods:** It is a descriptive study among total of 200 consecutive consenting patients: 100 male and 100 female (gender balance emphasized), with alcohol use disorders seeking help from psychiatric service of a teaching institute in eastern Nepal in 2006-08. Alcohol use disorders were diagnosed with the 'International classification of diseases and infirmities' (ICD)-10th edition. Related information about socio-demography and circumstances of alcohol use were collected by using a 'semi-structured proforma' **Results:** Average (minimum, maximum) age of the subjects was 39.29 (17, 84) years. The age at the first drink was 17.31 (infancy, 59) years: 15.96 (infancy, 45) for males and 18.68 (infancy, 59) for females. As a whole, the most common circumstances of first use were custom of using alcoholic beverage as food, peer pressure/company, stressful situation and easily available at home. Custom of using alcohol as food, stressful situation, making in home and for health reason like during breast feeding were most common circumstances for first drink among females; and peer pressure and the custom were among males. A perceived stressor was associated more among females. **Conclusion:** Most problem-drinkers first drink in the pretext of the custom of alcoholic beverage as food, peer pressure, stressful situation and easy availability in eastern Nepal. Males start drinking at younger age and the first drink was more associated with stressors among females.

**Key words:** age/circumstance of first drink, alcohol, alcohol use disorder, eastern Nepal, problem drinkers.

### **Introduction**

Alcohol use and alcohol related disorders, both are common in community<sup>1-2</sup>, more so in eastern Nepal.<sup>3-4</sup> Even after suffering from the disorder, people are reported here to present to psychiatric service late<sup>5</sup> when they usually have physical<sup>6</sup> and or psychiatric comorbidities<sup>7</sup> and are likely to present as psychiatric emergencies.<sup>8</sup> Nepal, including eastern Nepal is multi-ethnic

#### **Address for correspondence**

Dr. Dhana Ratna Shakya, MD

Associate professor, Department of Psychiatry, BPKIHS,

Dharan, Nepal

Email: drdhanashakya@yahoo.com

and multi-cultural country with multitude of values, norms, traditions, religious practices and geography.<sup>4</sup> Nepalese cultural setting is ambivalent towards the alcohol use, reflected by its traditional barrier among ethnic groups called 'Tagadhari' which is reported to break in modern Nepal and the sanction among the group 'Matawali'.<sup>7,9</sup> Understanding the contribution of social, psychological and biological factors to the predisposition, precipitation and perpetuation of alcohol use problem is crucial not only for the individual case management

but also for the prevention at community level.<sup>1</sup> Despite of a great magnitude and burden of the problem, there is a scarcity of data about the circumstances of alcohol use from this part of Nepal.

Current study was carried out to investigate into the circumstances of the first time drink among the patients seeking psychiatric help for ‘mental and behavioral disorders due to use of alcohol’. Overarching objective would be to identify the strategies to prevent the use before turning it into a problematic pattern and to execute them through different programmes.

### Methods

It is a descriptive cross sectional study among the patients with ‘mental and behavioral disorders due to use of alcohol’, i.e. ‘alcohol use disorders’ (including all categories, e.g. alcohol intoxication, harmful use, alcohol dependence, alcohol withdrawal state, etc.) diagnosed according to the ICD-10 criteria.<sup>10</sup> It was carried out among 200 (100 male and 100 female) consecutive consenting subjects with the ICD-10 alcohol use disorders who came into the contact of the investigating psychiatrist in BPKIHS, Dharan, Nepal within the study period starting from July, 2006 till the planned number of subjects enrolled, i.e. December, 2008.

Informed consent was collected from the subjects and significant care-givers (when the patient was not co-operative). Strict confidentiality of information was maintained.

All the consenting consecutive patients seeking psychiatry service with the diagnosis of ‘alcohol use disorders’ (the ICD-10) with no clinically manifest medical complications (making them unable to be interviewed) were the subjects of this study.

Information about various facets of the first drink and pertinent demographic and clinical variables were collected using a pre-designed ‘semi structured proforma’. The proforma consisted of and in all subjects, an effort was made to probe into and record:

1. the possibly relevant factors (demographic-age, gender, education, marital status; geographical/social - residential setting, religion).
2. clinical variables (ICD-10 diagnosis, substance use in family members)
3. age of the first time drink.
4. circumstance of the first time drink,
5. stressors revealed during the enrolment.

Data were entered into a computer and analyzed using the ‘Statistical Package for Social Science’ (SPSS 17) - software.

### Results

A total of 200 cases were included; 100 male and 100 female patients with ‘alcohol use disorders’.

Their mean age was 39.24 years (minimum 17, maximum 84) as a whole: 37.63 (17, 84) for male and 40.87 (18, 72) for female patients. Age groups (30-39) and (40-49) constituted the largest proportion.

A great majority of subjects (83%); 86% males and (80%) females were married. (Table. 1)

**Table 1: Socio-demographic profiles I: gender, age and marital status [in No. (%)]**

Variable	Male	Female	Total
<b>Gender</b>	100 (50.0)	100 (50.0)	200 (100.0)
<b>Age (yr)</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
< 20	2 (1.0)	2 (1.0)	4 (2.0)
20- 29	17 (8.5)	13 (6.5)	30 (15.0)
30- 39	40 (20.0)	33 (16.5)	73 (36.5)
40- 49	26 (13.0)	33 (16.5)	59 (29.5)
50- 59	9 (4.5)	13 (6.5)	22 (11.0)
≥ 60	6 (3.0)	6 (3.0)	12 (6.0)
<b>Marital status</b>	<b>Male</b>	<b>Female</b>	<b>Total</b>
Married	86 (43.0)	80 (40.0)	166(83.0)
Single	9 (4.5)	5 (2.5)	14 (7.0)
Divorced	3 (1.5)	5 (2.5)	8 (4.0)
Widow	2 (1.0)	10 (5.0)	12 (6.0)

The most common ethnic group among the help seekers was ‘Disadvantaged Hill Janajati’, e.g. Rai 87 (58%), followed by: ‘Upper Hill’, e.g. Brahmin/Chhetri and ‘Relatively advantaged Janajati’, e.g. Newar/ Gurung. Female from ‘Upper hill’ and ‘Hill Dalit groups’; and male from ‘Relatively Advantaged’ and ‘Disadvantaged

Hill Janajati' groups were less; and nearly equal help seekers were from 'Disadvantaged non Dalit Terai' group.

Among them, Hindus were 68% and Buddhists 21%. More male problem drinkers were Hindu and female were Buddhist.

About 65% were educated to different levels. More male problem drinkers were educated than females.

Majority (78%) were employed in different professions and 12% currently unemployed. (Table. 2)

**Table 2: Socio-demographic profiles-II: caste-ethnicity, religion, education and occupation [No. (%)]**

Ethnic group*	Male	Female	Total
Upper hill	30 (15.0)	6 (3.0)	36 (18.0)
Upper Terai	1 (0.5)	0 (0.0)	1 (0.5)
Rel. ad. Janajati	7 (3.5)	14 (7.0)	21 (10.5)
Relig. Minor	0 (0.0)	0 (0.0)	0 (0.0)
Ds. Ndalit Trai	5 (2.5)	3 (1.5)	8 (4.0)
Ds. Hill Janajati	46 (23.0)	71 (35.5)	117(58.5)
Ds. Trai Janajati	2 (1.0)	0 (0.0)	2 (1.0)
Hill Dalit	9 (4.5)	6 (3.0)	15 (7.5)
Terai Dalit	0 (0.0)	0 (0.0)	0 (0.0)
Religion			
Hindu	77 (38.5)	58 (29.0)	135(67.5)
Buddhist	12 (6.0)	30 (15.0)	42 (21.0)
Muslim	0 (0.0)	0 (0.0)	0 (0.0)
Christian	1 (0.5)	2 (1.0)	3 (1.5)
Kiranti	10 (5.0)	10 (5.0)	20 (10.0)
Education			
Illiterate	13 (6.5)	56 (28.0)	69 (34.5)
Grade I-III	9 (4.5)	15 (7.5)	24 (12.0)
Gr IV-VII	23 (11.5)	8 (4.0)	31 (15.5)
Gr VIII- SLC	35 (17.5)	11 (5.5)	46 (23.0)
Intermediate	14 (7.0)	6 (3.0)	20 (10.0)
Graduate	2 (1.0)	2 (1.0)	4 (2.0)
Higher	4 (2.0)	2 (1.0)	6 (3.0)
Occupation			
Business	11 (5.5)	6 (3.0)	17 (8.5)
Agriculture	14 (7.0)	6 (3.0)	20 (10.0)
Labor	7 (3.5)	1 (0.5)	8 (4.0)
Service	17 (8.5)	5 (2.5)	22 (11.0)
House making	3 (1.5)	73 (36.5)	76 (38.0)
Teaching	7 (3.5)	3 (1.5)	10 (5.0)
Unemployed	21 (10.5)	2 (1.0)	23 (11.5)
Others	20 (10.0)	4 (2.0)	24 (12.0)

(Ethnic group\*- Rel. ad. Janajati = Relatively advantaged Janajati, Relig. Minor = Religiously minorities, Ds. Ndalit Trai = Disadvantaged nondalit Terai, Ds. Hill Janajati = Disadvantaged Hill Janajati, Dis. Trai Janajati = Disadvantaged Terai Janajati)

Majority of the subjects were from middle socio-economic status and from urban and semi-urban residential settings. More females were from villages. (Table. 3)

**Table 3: Socio-economic status and residential setting [No. (%)]**

Socio-economic status	Male	Female	Total
Low	21 (10.5)	20 (10.0)	41 (20.5)
Middle	74 (37.0)	77 (38.5)	151(75.5)
Upper	5 (2.5)	3 (1.5)	8 (4.0)
Residential setting			
Urban	45 (22.5)	39 (19.5)	84 (42.0)
Semi-urban	45 (22.5)	36 (18.0)	81 (40.5)
Rural	10 (5.0)	25 (12.5)	35 (17.5)

At the time of psychiatric consultation, the most number of the subjects had the diagnosis of 'alcohol withdrawal'. (Table. 4)

**Table 4: Distribution of 'mental & behavioral disorders due to alcohol use' (ICD-10)**

Diagnosis	Male	Female	Total
Alcohol intoxication	0 (0.0)	0 (0.0)	0 (0.0)
Harmful use of alcohol	7 (3.5)	21 (10.5)	27 (13.5)
Alcohol dependence (ADS)	14 (7.0)	31 (15.5)	35 (17.5)
ADS-Withdrawal (W)	37 (18.5)	18 (9.0)	68 (34.0)
ADS-W, complicated	28 (14.0)		46 (23.0)
Other/ induced	14 (7.0)	10 (5.0)	24 (12.0)

Average age of the first alcohol drink was 17.31 (infancy to 59) years; 15.96 (infancy to 45) for male and 18.68 (infancy to 59) for female. Average duration of use was 22.93 (minimum 0.1, maximum 69) years; (21.67; minimum 0.1, maximum 69 for male) (22.19; minimum 1, maximum 55 for female), and of problem drink 9.23 (minimum 0.1, maximum 40); (11.30; minimum 0.1, maximum 40 for male) (7.12; minimum 0.1, maximum 40 for female).

Most number of subjects started drinking in ages 15-19 and 20-24 years, present to the service after more than 20 years of use and 1-4 and 10-14 years of problem drinking. (Table. 5)

**Table 5: Age of the first drink, the duration of drinking and problem drinking (in years) [No. (%)]**

Age at 1 <sup>st</sup> drink	Male	Female	Total
< 1	2 (1.0)	1 (0.5)	3 (1.5)
1- 4	2 (1.0)	2 (1.0)	4 (2.0)
5- 9	14 (7.0)	14 (7.0)	28 (14.0)
10- 14	18 (9.0)	18 (9.0)	36 (18.0)
15- 19	34 (17.0)	23 (11.5)	57 (28.5)
20- 24	21 (10.5)	25 (12.5)	46 (23.0)
25- 29	5 (2.5)	6 (3.0)	11 (5.5)
≥ 30	4 (2.0)	11 (5.5)	15 (7.5)
<b>Duration of Use</b>			
< 1	2 (1.0)	2 (1.0)	4 (2.0)
1- 4	3 (1.5)	10 (5.0)	13 (6.5)
5- 9	6 (3.0)	7 (3.5)	13 (6.5)
10- 14	16 (8.0)	16 (8.0)	32 (16.0)
15- 19	18 (9.0)	11 (5.5)	29 (14.5)
≥ 20	55 (27.5)	54 (27.0)	109(54.5)
<b>Duration of problem drinking</b>			
< 1	5 (2.5)	10 (5.0)	15 (7.5)
1- 4	20 (10.0)	30 (15.0)	50 (25.0)
5- 9	19 (9.5)	26 (13.0)	45 (22.5)
10- 14	26 (13.0)	23 (11.5)	49 (24.5)
15- 19	6 (3.0)	6 (3.0)	12 (6.0)
≥ 20	24 (12.0)	5 (2.5)	29 (14.5)

Most of the problem drinkers drank the first time in the pretext of custom of alcohol using as food, peer pressure and stressful situation. Male subjects reported more due to the pressure by peer and female during stressful situation.

People experience in different ways with the first time drink. More males reported pleasure and more females not liking of the taste. (Table. 6)

**Table 6: Circumstance of and Experience with the first drink [No. (%)]**

Circumstance of 1 <sup>st</sup> drink#	Male	Female	Total
Peer pressure	50 (25.0)	1 (0.5)	51(25.5)
Ritual	6 (3.0)	6 (3.0)	12 (6.0)
Offered	10 (5.0)	2 (1.0)	12 (6.0)
Celebration	4 (2.0)	4 (2.0)	8 (4.0)
Made in home	4 (2.0)	19 (9.5)	23 (11.5)
Entertainment	2 (1.0)	2 (1.0)	4 (2.0)
Model/ imitate	4 (2.0)	1 (0.5)	5 (2.5)
Use as food	26 (13.0)	42(21.0)	68 (34.0)
Curiosity	2 (1.0)	2 (1.0)	4 (2.0)
When Stress	2 (1.0)	26(13.0)	28 (14.0)
For health	0 (0.0)	14 (7.0)	14 (7.0)
Not remember	4 (2.0)	1 (0.5)	5 (2.5)
During illness	2 (1.0)	2 (1.0)	4 (2.0)

Experience with 1 <sup>st</sup> drink	Male	Female	Total
Pleasure/ like	43 (21.5)	10 (5.0)	53 (26.5)
Dislike	28 (14.0)	38(19.0)	66 (33.0)
Not remember	26 (13.0)	46(23.0)	72 (36.0)
Not available	3 (1.5)	6 (3.0)	9 (4.5)

# Multiple response categories– One respondent may have one or more responses.

Two thirds (more female) reported various stressors predisposing, precipitating or perpetuating the disorder. Relatives of many had problem drinking. Nearly half of the subjects had some personality traits likely influencing the course of the disorder. (Table. 7)

**Table 7: Significant stressor, family history of alcohol problem & pre-morbid personality#**

Stressor	Male	Female	Total
Absent	45(22.5)	20(10.0)	65(32.5)
Present	55(27.5)	80(40.0)	135(67.5)
Relational	26(13.0)	31(15.5)	57 (28.5)
Recent/festival	5 (2.5)	6 (3.0)	11 (5.5)
Family ill	1 (0.5)	2 (1.0)	3 (1.5)
Good health	1 (0.5)	4 (2.0)	5 (2.5)
Other away	2 (1.0)	16 (8.0)	18 (9.0)
Affair	1 (0.5)	3 (1.5)	4 (2.0)
Life event	4 (2.0)	18 (9.0)	22 (11.0)
Own disease	12 (6.0)	12 (6.0)	24 (12.0)
Death near	5 (2.5)	16 (8.0)	21 (10.5)
Subs use of near	18 (9.0)	7 (3.5)	25 (12.5)
Other	4 (2.0)	2 (1.0)	6 (3.0)
<b>Family alcohol history</b>			
Alcohol use	81(40.5)	98(49.0)	179(89.5)
Alcohol use disorder	54(27.5)	59(29.5)	113(56.5)
<b>Pre-morbid personality</b>			
Well adjusted	47(23.5)	58(29.0)	105 (52.5)
Cluster A	8 (4.0)	2 (1.0)	10 (5.0)
Cluster B	9 (4.5)	10 (5.0)	19 (9.5)
Cluster C	19 (9.5)	13 (6.5)	32 (16.0)
Other	9 (4.5)	5 (2.5)	14 (7.0)
Not available	8 (4.0)	12 (6.0)	20 (10.0)

# Multiple response categories– One respondent may have one or more responses.

## Discussion

Substance use disorders are increasingly reported with multi-factorial causation like other mental disorders. The ‘*bio-psycho-social*’ model of psychiatric disorders proposed by George Angel largely holds true with these disorders as well. These disorders run in families. Personality traits,

e.g. anti-social and novelty seeking traits are associated with problem drinking and substance use. Much discussion has emphasized on the social, environmental and cultural contexts. Even in the present context of increasing evidence in favor of biological factors; these social, environmental and cultural factors are deemed important. Many of them are liable to modification for better results. Management of substance problems remains difficult because of their inherent nature of multi-factorial causation and many of them being difficult to modify. Hence, identifying the associated factors which are potentially modifiable is an important step.

The concept of '*agent, host and environment factors*' also does make use here. Basically attempt has been made in this study to look into '*agent, host and environment variables*' mainly host and environment factors. Major socio-demographic and clinical variables are host factors. Prevalent culture, customs, attitude, availability, home environment etc are environment related factors possibly interacting in the etio-genesis of alcohol use disorder. The effects of alcohol, e.g. euphoria, entertainment, transient stress relief, sense of wellbeing etc are some agent related variables. Intensive study of the modifiable factors may bring some remarkable outcomes for the prevention and management. Current study is hopeful of finding some similarly modifiable important factors and circumstances of alcohol use/ abuse in eastern Nepal.

In Nepalese community, alcohol problem is reported generally higher among males<sup>3,11</sup> and so in clinical settings.<sup>5,6,7</sup> However, considering the gender differences realized in Nepalese context regarding alcohol problem<sup>12</sup> and relatively high prevalence among females in certain areas and societies including Dharan,<sup>11</sup> gender representation was emphasized by including equal number of 100 male and female subjects each in this study. This revealed overall and different factors for genders for alcohol use and problem.

In this study, many of the problem drinkers drank the first time in the pretext of custom of alcohol using as food, peer pressure and stressful situation. In many Nepalese sub-cultures, alcohol is acceptable and rather an integral part of people's life, both as food and drink. Alcohol use is traditionally acceptable among Socio-cultural groups called 'Matawali' and traditional barrier among groups called 'Tagadhari' is also reported to be breaking in modern Nepal. Dharan, the study site of current study has high proportion of 'Matawali' ethnic groups and some of our hospital based study showed a remarkably high representation of Brahmins, a 'Tagadhari' among the in-patients of alcohol dependence.<sup>6,7</sup> Hence, this custom of using alcohol as food as a pretext for first time alcohol use seems realistic. Similar customs of using alcoholic beverages are reported from other countries, mainly in less industrialized and developing ones.<sup>13</sup> This pretext is even more pronounced among female subjects in this study. Nepalese females are engaged in preparing and serving food as well as alcoholic beverages by tradition in patriarchal subcultures. Again, this is consistent to the general observation and understanding. Since this is very important factor of starting drinking, some effective preventive measures should target it. For example, public awareness about the effects of alcohol use and about healthy foods might help reduce this trend of using drink as food. Because of such social sanction, many of these subjects drank for the first time also while offered by others, during some celebrations, customs and ritualistic procedures, or because it is made in home and had to drink to taste.

Social factors have always been an integral issue when one talks about substance use. The influence and role of peers is important in starting, maintaining and even abstaining from substance including alcohol.<sup>14</sup> This fact has been replicated by the finding that peer pressure is one of the most cited reasons for the first use of alcohol by Nepali problem drinkers

in this study, remarkably more so among males. In Nepali set up, males work out of house and spend more time with their friends, offering a drink is a socializing manner in many cultures and their role model is usually the one working out of home and this is probably the reason for peer pressure being so important reason for the first time alcohol use. This needs an intensive search but with this finding also, we are in a position to recommend that alcohol use should not be a socializing agent and some other healthy alternative culture may be adopted, for example offering a fresh fruit juice, assertiveness training and the culture of 'say no to a drink' like drug and not to force on part of the host of the party.

Literature and media content from this part of the world is abreast of the contexts and the depiction of stressful situation and alcohol use. In this study, more female and some male subjects reported to first time drink while they were extremely stressful due to various circumstances. During the course of alcohol use disorders, though for more females but also for males, stress was reported to be influential as predisposing, precipitating or maintaining in alcohol abuse. Strained relationship, mainly with family members like in-laws for female, the state of being someone away from home, mainly husband for work, some family member also drinking, illness and death of someone near and dear were among commonly perceived stressors among the problem drinkers. Similar stressors were reported also among mentally ill female spouses of Nepali abroad workers.<sup>15</sup> Awareness about the coping strategies and other psycho-social strategies need to be implemented for enhancing healthy coping among vulnerable people.

Some people, mainly female subjects also reported that they started drinking for some health reasons, for example to enhance appetite and gain weight, to increase the vitality or energy and to increase milk secretion during lactation. Some Nepalese subcultures have custom of offering alcoholic beverages during

this period to ladies. These people need to be educated about the ill effects of alcohol use and alternative methods of increasing milk secretion. Some people drank because of curiosity of the effect and others imitating others. Public awareness, responsible parenthood and inclusion of topics regarding harmful effects of alcohol in curriculum are some useful strategies on this regard.

In the first time experience, more male had pleasurable effect and more females unpleasant. Nearly one third of the total subjects were assessed as having some personality traits, mainly from cluster C and B which were deemed to affect the clinical course of alcohol use disorder. This finding is compatible with the studies from the same institute among inpatients of alcohol dependence<sup>7</sup> and from abroad.<sup>1</sup> Overwhelming majority revealed that one or other of their close blood relatives or family members also drink alcohol and more than half reported that they have alcohol use disorders. This is consistent with the high community prevalence of alcohol use<sup>16</sup> and alcohol use disorders in this part of the country.<sup>3</sup>

These study findings should be viewed with the consideration of some inherent limitations of this study, i.e. :

1. Sample was biased as it studied only the patients seeking help from psychiatry department of BPKIHS,
2. Recall bias was possible about the report of their past facts, e.g. circumstances of their first drink itself,
3. As pointed out earlier, despite of male preponderance of alcohol problem in community setting, we enrolled equal number of male and female samples to emphasize the gender representation which might not allow the result to be applicable to community setting.

Despite of these limitations, the objective of this study is clear and the findings appeared to be useful in:

1. Guiding clinical management to address those trigger situations,
2. Research- it might pave way to further in-depth and community based studies to better understand this problem, and
3. Policy making and planning for preventive programs. Here, the most important aspect is to emphasize on modifiable factors of alcohol use and to encourage the needful strategies. And most important but long term step for positive change seems to be public awareness regarding ADS in different levels such as: individual, family, school and community through various effective programs. As a popular saying goes- 'Prevention is better than cure', identification of the factors for the start of alcohol use and prevention at that point minimizes the further alcohol use problem.

### Conclusion

Most problem drinkers first drink in the pretext of the custom of alcoholic beverage as food, peer pressure, stressful situation and easy availability in eastern Nepal. Males start drinking more with peer pressure and the first drink was more associated with stressors among females. Hence, identification of modifiable factors for alcohol use and prevention at this point by various multidisciplinary and multidimensional measures will help decrease this common problem.

### References

1. Schuckit MA. Alcohol Related Disorders. In: Sadock BJ, Sadock VA and Ruiz P (eds.): Comprehensive Textbook of Psychiatry (9th ed). Philadelphia: Wolter Kluwer, Lippincott Williams and Wilkins, 2009. Pp 1269-88.
2. Royal College of Psychiatrists. A Historical Perspective. Alcohol: Our Favorite Drug. 1986. London, Tavistock. Pp. 11.
3. Jhingan HP, Sharma A, Koirala S, Shyangwa P, Upadhyay M, Prasad KMR and Khandelwal SK. Prevalence of alcohol dependence in a town in Nepal as assessed by CAGE questionnaire. *Addiction*, 1998; 339-43.
4. Shyangwa PM and Shakya DR. Substance Use in Eastern Nepal: Current Situation, Response and Future Strategy. In: Souvenir of the 2<sup>nd</sup> International Conference of SAARC Psychiatric Federation, November, 2006. Kathmandu. Pp. 38-9.
5. Shakya DR, Shyangwa PM, Sen B. Help seeking behavior in patients with alcohol dependence in a tertiary care hospital in eastern Nepal. *J Psychiatrists' Association of Nepal*. 2011; 1(1):15-19.
6. Shakya DR, Shyangwa PM, Sen B. Physical diseases in cases admitted for alcohol dependence. *Health Renaissance*. 2008; 5(1):27-31.
7. Shakya DR, Shyangwa PM, Sen B. Psychiatric co-morbidity in cases admitted for alcohol dependence. *Delhi Journal of Psychiatry*. 2009; 12(2):252-257.
8. Shakya DR, Shyangwa PM, Shakya R. Psychiatric emergencies in a Tertiary care Hospital. *J Nepal Med Assoc*. 2008; 47(169): 28-33.
9. Shrestha, NM. Prevention of Alcohol and Drug Problem in Nepal. *J Nepal Med Assoc*. 1993; 220-32.
10. World Health Organization. The ICD-10 Classification of Mental and Behavioral Disorders Diagnostic Criteria for Research. WHO. Geneva. 1993.
11. Niraula SR, Shyangwa PM, Jha N, Paudel RK, Pokharel MK. Alcohol use among women in a town of eastern Nepal. *J Nepal Med Assoc*. 2004; 43:244-249.
12. Shakya DR, Shyangwa PM, Sen B. Gender comparison of Clinical-course of Alcohol related disorders among Psychiatric help seekers from a tertiary-care-hospital in Eastern Nepal. Abstracts, ANCIPS 2012 Jan, Kochi. Pp.73.

13. Room R, Jernigan D, Marlatt BC Gureje O, Makela K, Marshall M, Monteiro M, et al. Alcohol in developing societies: A public health approach. Finnish Foundation for Alcohol Studies volume 46. 2002.
14. Johnson BD, Golub A. Sociocultural Issues. In: Lowinson JH, Ruiz P, Millman RB, Langrod JG eds. Substance Abuse, 4th Edition, 2005. Lippincott Williams and Wilkins. Pp. 107-120.
15. Shakya DR. Psychiatric Morbidity Profiles of female Spouses of Nepalese abroad workers. Program and Abstract Book of 10th World Congress of World Association for Psychosocial Rehabilitation. Bangalore, India 2010 November. Pp. 158.
16. Dhital R. Alcohol and Drug Use in Nepal. Report of CWIN Nepal, Kathmandu, 2001.