
Awareness and Practice Regarding Alcohol Consumption among Females in Rural Areas of Nepal

Aruna Gyawali*

*MPhil-PhD, Central Department of Home Science, Tribhuvan University, Kathmandu, Nepal.

Corresponding Email: [*msgyawali.aruna@gmail.com](mailto:msgyawali.aruna@gmail.com)

Received: 22 November 2023 Accepted: 06 February 2024 Published: 22 March 2024

Abstract: Consuming alcohol is defined as ingesting alcoholic beverages that include ethyl alcohol, such as wine, beer, whiskey, rum, and handmade alcoholic beverages called "Raksi." Excessive alcohol consumption can lead to serious health issues. Thus, this study aimed to assess the awareness regarding alcohol consumption among females in rural areas of Nepal.

A cross-sectional and analytical study was designed to assess the level of awareness and practice regarding alcohol consumption. Total 423 females of the 20-50 years age groups, engaged in "Raksi" preparation sites were selected. The data collection period was from 2021 July to 2022. A face-to-face interview was done with each individual. All questions related to awareness and practice regarding questionnaires were analyzed accordingly in univariate analysis and bi-variate analysis to find out the association between the variables. The result showed that the mean age of the females was 36.08 with a standard deviation of 7.951. and 51.7% were below the mean age of 36. Among 423 females 22.3 % knew AUD, 56.7% were aware of health consequences, and only 13.3% were aware of treatment protocol of health consequences. Females having inappropriate practices of alcohol consumption were 54.2%. There is an association between awareness regarding consumption and religion, marital status, educational status, and occupation with $p=0.043, 0.036, 0.046,$ and 0.033 respectively. Similarly, the inappropriate practice of alcohol consumption has a significant relation with religion, educational status, and occupation with p values of $0.049, 0.034,$ and 0.003 respectively. Even though there is a higher percentage of females were literate, there is a lack of awareness regarding alcohol consumption and inappropriate drinking habits. Further comparative study can be done in this aspect. Simultaneously, awareness and education-related programs can be implemented to address the problem.

Keywords: Alcohol, Beverages, Raksi, Ethanol.

1. INTRODUCTION

According to WHO, Alcohol is a psychoactive substance that has a dependence-producing property, which has been used widely in various cultures and customs worldwide [1]. The harmful use of alcohol has been reported as one of the common factors that resulted in more than 200 diseases and trauma [2]. In the context of Nepal, alcoholic beverages come under the name of beer, wine, whiskey, rum, and homemade alcoholic beverages known as *Raksi* and wine as *Jaad* [3] & [4]. Alcohol consumption is a term that refers to the intake of the intake of alcohol or beverages containing ethanol, normally orally [5]. As published in a WHO report, it revealed that harmful consumption of alcohol has serious health impacts causing more than 200 disease and injury impairments [1]. Alcohol Use Disorder (AUD) is a medical condition illustrated by an impaired ability to stop or control alcohol use even though there are adverse social, occupational, or health consequences [6]. Binge drinking is defined as consuming 5 or more standard drinks by men and 4 or more standard drinks by females in about 2 hours of period [7].

Alcohol consumption among women has been increasing these days. Nearly 13% of adult women have reported binge drinking [8]. Worldwide, 2.6% of deaths among women are attributed to alcohol only [1]. In Nepal heavy drinker women contributed 1.7%, and, the most common alcoholic beverage consumed is *Raksi* which was consumed by 50.9% of the alcoholic consumers [9].

2. RELATED WORK

Globally, it is found that alcohol misuse has been increasing day by day. According to WHO among total deaths in females, 2.6% is related to alcohol consumption [10]. PAHO has reported that most NCDs among women are with alcohol-related disease; the consequences are also seen in fetal as well [11]. AUD is seen among 1.7% of females worldwide [12]. As published in Our World in Data 2019, alcohol consumption by females was 0.48 liter in Nepal [13]. AUD is seen in 1.1% of the total 970 females attending primary health care services in Nepal [14]. There are studies done on the prevalence of consumption of alcoholic beverages but there is a lack of awareness-related studies, to explore the aspect of awareness and practice of alcohol consumption among females aged 20-50 was carried out. This aged group in rural areas was mostly engaged in the small-scale homemade alcohol production business. Thus, the present study aimed to assess the awareness and practice regarding alcohol consumption among females in rural areas of Nepal.

3. METHODOLOGY

The present study was a cross-sectional study, conducted in selected rural areas of Nepal, where most homemade alcoholic beverages were made. The females were selected from different rural areas of Nepal including all three geographical regions of Nepal Terai, Hills, and Mountain area. For the selection of the village lottery method was used and for the selection of respondents simple random sampling method was used. The selected females were of age group 20-50 who were directly or indirectly engaged in the small-scale homemade alcohol

production business. Those females who have been engaged in this business for at least 1 year were only included in the study and those who have less than one year of experience were automatically excluded, and those who were in the business in the past but have already left the industry from last one year were also excluded. If there was more than one person involved in the same business with the lottery method only one was chosen for the study purpose. The survey was carried out from 2021 July 25th to 2022 May 6th. The sample size was calculated with the assumption of a 50% prevalence of alcohol consumption among the ages of 20-50, and with a 10% nonresponse rate; a total of 423 were selected for the study. A face-to-face interview was done with each female and was given 10-15 minutes. For assessing the AUD, an Alcohol Use Disorder identification test screening tool was used which was developed by WHO, and a cutoff score of ≥ 9 was kept for alcohol dependence or alcohol abuse [14]. Collected data were first entered into an Excel sheet and then transported to SPSS for further analysis. The respondents were approached with awareness-related questions and all questions were summed up to calculate the level of awareness and the mean level of awareness was statistically calculated, similarly, questions related to practice were asked and also summed up. For practice, they were first assessed as ever drinkers or never drinkers and among only ever drinkers' further practice-related patterns were assessed as harmful drinking, binge drinking, and alcohol use disorder (AUD). And calculated as appropriate practice and inappropriate practice. Then analyzed in univariate analysis as mean, median, and percentage standard deviation, bi-variate analysis was done to find out the association between the variables. Where major variables were age, marital status, level of education, economic status, major occupation, family type, awareness, and alcohol consumption.

4. RESULTS

Among, 423 females, the mean age was 36.08 with S.D. ± 7.951 , whereas the majority i.e. 51.7% were below the mean age. Among them, approximately 8 out of 10 (79.2%) were married. Among all 65.8% had completed their school level education. Two-thirds of the females were from the middle wealth quintile. 54.2% belonged to a joint family and 51.7% had agriculture as their main occupation. Among total females 7 out of 10 brew alcohol in their home. When the respondents were asked about the condition known for AUD only 22.3% gave the right answer as given by NIAA 2020. On Binge drinking, only 30.8% gave the correct answer. On health consequences, 46.7% reported alcohol impacts heart health more than any other and hypertension is a more commonly seen health problem by 43.4%. 56.7% said AUD can be managed by rehabilitation. Thus, summing up all the awareness-related scores mean score was 17.33 with S.D. ± 4.225 . and 53.4% had an awareness level less than the mean value. On the practice of alcohol consumption, 14.7% had never consumed alcohol. Among the consumers, 73.3% had consumed within the last 12 months. And 56.7% had started consuming alcohol before the age of 18 years. The most common alcohol consumed is homemade *Raksi* by 65.9% of total alcohol consumers. This might be the result of tasting of self-brewed alcohol. The reason for the consumption of alcohol was they brew at home at 43.8% followed by relief from domestic violence stress by 27.3%. In one sitting 94.2% consumed more than one standard drink recommended by WHO i.e. more than 40 ml and the frequency of having alcohol at least once a week was 41.17%. The main reason for drinking

was because of home brewing 43.7%, where culture also became another reason for 27.4%. amazingly 15.2% drink because of domestic violence. Among the alcohol consumers, 64.8% haven't felt the need to change their habits. Among those who felt the need to change the habit only 15.2% had ever tried to cut down. And among the respondents, 57.6% are found to have binge drinking habits. Later, summing the practice regarding alcohol consumption mean value was 16.375 with S.D. \pm 4.768. The appropriate practice is shown by only 45.8% of the females scoring less than the mean value. AUD was found among 19.8%. Furthermore, there was a significant relationship between some variables and awareness of alcohol consumption such as religion 0.043, educational status 0.046, occupation 0.033, marital status 0.036. Similarly, there is also a significant relation between variables and alcohol consumption by females, such as religion 0.049, educational status 0.034, and occupation 0.003. The result showed that there is a significant relationship between awareness and alcohol consumption among females with a p-value of 0.001.

5. DISCUSSION

Awareness refers to the existing knowledge and perception of alcohol consumption and its consequences on women, as well as their feelings and preconceived notions about it. And practice meaning action taken in context of alcohol consumption

Studying alcohol consumption among females in rural areas is a very serious issue in the community as well as in a health perspective. Very few studies were found to have done a study on the awareness and practice of alcohol consumption among females.

The national prevalence of alcohol consumption in Nepal was 24.7 [15], while the present study showed the prevalence of alcohol consumption is 85.3%, this might be due to the study area. The result indicated that every 7 females out of 10 have a tradition of brewing alcohol in their home. While brewing alcohol they also have a habit of testing it. This is why the most common alcohol consumed was found to be homemade *Raksi* by 65.9% out of total alcohol consumers, this is similar to another study where 37% consumed *Raksi*. The reason for the consumption of alcohol was they brew at home at 43.8% followed by relief from domestic violence stress by 27.3% which are coping motives. This is a contrasting finding to the study done in 13 European countries in 2014, where the reasons for the use of alcohol were social motives for drinking [16] In one sitting 94.2% consumed more than one standard drink recommended by WHO i.e. more than 40 ml and the frequency of having alcohol at least once a week was 41.17%, but a similar study done in another area of Nepal showed that 15.7% [17] had at least once or twice a week this might be due certain customs and tradition followed in Nepal, and study population as well. Binge drinking habit was found among the females, with 57.6%, which is a little bit higher number than in a similar previous study [17]. Among the alcohol consumers, 35.2% felt the need to change their habits but only, among those who felt the need to change, 84.8% haven't even tried, the reason could be inadequate awareness of alcohol consumption shown by 53.4%, as there is a lack of curricula and programs regarding awareness on alcohol consumption program, which is also supported by a study done in Eastern Nepal where only 16.3% female respondents have adequate knowledge on alcohol consumption [18]. AUD in this study 19.8% which is higher than that of previous one where it was 1.1% only [14].



6. CONCLUSION

The finding showed that most females are engaged in home brewing of alcohol which might be one of the causes of alcoholism among this group. However, there is a lack of awareness of AUD, thus resulting in inappropriate alcohol consumption practices. There are still some groups who want to abstain from alcoholism but can't do so. Therefore, an interventional study for those can be recommended in the future to light upon the behavior change of alcohol consumption. A similar study can be done in an urban setting and a comparative study can be done to get a clearer view of various reasons for alcohol consumption in this studied group.

Acknowledgment

The author acknowledges all the respondents for their valuable time and others who have contributed their time and essential information to this study.

7. REFERENCES

1. WHO, "World Health Organization," 9 May 2022. [Online]. Available: <https://www.who.int/news-room/fact-sheets/detail/alcohol>. [Accessed Jan 2024].
2. WHO, "World Health Organization," 9 May 2022. [Online]. Available: https://www.who.int/news-room/fact-sheets/detail/alcohol/?gad_source=1&gclid=CjwKCAiAi6uvBhADEiwAWiyRdtZT_XrCFelD-4IbKeUHpldY4wupqqm2DZJXvWUAw6XOE5m9T1kRpRoChy8QAvD_BwE. [Accessed June 2023].
3. G. Correa, "https://www.alcoholhelp.com/," 19 June 2020. [Online]. Available: <https://www.alcoholhelp.com/alcohol/types-of-alcohol/>.
4. P. Lamichhane, "https://medium.com/," 17 September 2020. [Online]. Available: <https://medium.com/@plamichhane23/alcohol-in-nepal-raksi-589c82d87b36>.
5. S. E. Collins and M. Kirouac, "Alcohol Consumption," *Encyclopedia of Behavioural Medicine*, pp. 61-65, 2013.
6. NIAAA, "https://www.niaaa.nih.gov," 2020. [Online]. Available: <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/understanding-alcohol-use-disorder>. [Accessed January 2024].
7. NIAAA, "https://www.niaaa.nih.gov," 2024. [Online]. Available: <https://www.niaaa.nih.gov/publications/brochures-and-fact-sheets/binge-drinking>. [Accessed January 2024].
8. CDC, "https://www.cdc.gov/," 17 October 2022. [Online]. Available: <https://www.cdc.gov/alcohol/fact-sheets/womens-health.htm>. [Accessed January 2024].
9. M. Dhimal, B. Bista, S. Bhattarai, L. P. Dixit, M. K. A. Hyder, N. Agrawal, M. Rani and A. K. Jha, "Noncommunicable Disease Risk Factors: STEPS Survey Nepal 2019," *Nepal Health Research Council*, Kathmandu, 2019.
10. W. H. Organization, "World Health Organization," 9 May 2022. [Online]. Available: https://www.who.int/news-room/fact-sheets/detail/alcohol/?gad_source=1&gclid=CjwKCAjw7-SvBhB6EiwAwYdCAQmjv-



- tWfftwvi3CGMOKQub_fd8sNJvC4zDwGRHTu1OmlOXEqSYIdRoCFQUQAvD_BwE. [Accessed 23 January 2023].
11. PAHO, "Alcohol and Women's Health Infographic," 2013.
 12. J. Rehm and K. D. Shield, "Global Burden of Alcohol Use Disorders and Alcohol Liver Disease," *Biomedicines*, vol. 7, no. 4, pp. 99-109, 2019.
 13. W. H. Organization, "<https://ourworldindata.org>," Our World in Data, 2019. [Online]. Available: <https://ourworldindata.org/alcohol-consumption>. [Accessed 24 January 2023].
 14. N. P. Luitel, E. C. Baron, B. A. Kohrt and I. H. K. & M. J. D. Jordans, "Prevalence and correlates of depression and alcohol use disorder among adults attending primary health care services in Nepal: a cross sectional study," *BMC Health Services Research*, 2018.
 15. N. Thapa, K. K. Aryal, R. Puri, S. Shrestha, S. Shrestha, P. Thapa, S. Mehata, P. Thapa, M. R. Banjara and B. Stray-Pedersen, "Alcohol Consumption Practices among Married Women of Reproductive Age in Nepal: A Population Based Household Survey," *PloS One*, vol. 11, no. 4, 2016.
 16. E. Kuntsche, S. N. Gabhainn, C. Roberts, B. Windlin, A. Vieno, P. Bendtsen, A. Hublet, J. Tynjälä, R. Välimaa and Z. Dankulinová, "Drinking Motives and Links to Alcohol Use in 13 European Countries," *Journal of Studies on Alcohol and Drugs*, vol. 75, no. 3, pp. 428-437, 2014.
 17. T. B. Adhikari, A. Rijal, P. Kallestrup and D. Neupane, "Alcohol consumption pattern in western Nepal: findings from the COBIN baseline survey," *BMC Psychiatry*, 2019.
 18. G. R and K. P, "Knowledge and attitude of women towards alcohol use and related problems in the Eastern part of Nepal," *Journal of Psychiatrists' Association of Nepal*, vol. 4, no. 1, pp. 48-53, 2015.