Knowledge and Perception about Alcoholism among Adult Females Residing in the Rural Field Practice Area of Rajendra Institute of Medical Sciences, Ranchi, Jharkhand: A Cross-Sectional Study

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Abstract:

Introduction: The habit of alcohol consumption and alcoholism is known to adversely affect the health and well being of the people especially that of women but stillthe trends of its consumption is on rise even in India. Women in rural areas are exposed to limited source of knowledge regarding the ill effects of alcohol consumption.

Objectives: To assess the knowledge about adverse health effects of alcohol use and perception about alcohol consumption among study subjects.

Methodology: A cross sectional study was conducted in rural field practice area, Ormanjhi of Rajendra Institute of Medical Sciences, Ranchi for a duration of 27 months (September 2016 to November 2018) in which the sample size was 336. Interview regarding Knowledge and perception about effects of alcohol use and the source of such knowledge was conducted from entire sample. Data entry was done in MS Excel Sheet and analysis of data was done using SPSS software version 20.0.

Results: About 244 out of 336 (72.6%) of women were aware that alcohol has ill effects on health. The most common source of knowledge was sahhiya, reported by 186 out of 336 (55.4%) women followed by mass media, reported by 165 out of 336 (49.1%) of the women. The most common adverse health effect of alcoholism reported was cancers by 140 out of 336 (41.7%) of women followed by death as an adverse effect reported by 135 out of 336

(40.2%) of the women. About 66.4% of the study subjects agreed that alcohol consumption serves as a risk factor for most diseases.

Conclusion: Most of the women were aware about the adverse health effects of alcohol.

Keywords: Knowledge, Perception, Alcohol, Women

Introduction:

Alcohol is a psychoactive drug with addictive qualities that has been used for ages in many different cultures. Alcohol abuse has negative social and economic effects in addition to causing a large number of diseases. [1] In India, one of the most often used intoxicants is alcohol. Tribal societies have traditionally been the only ones to consume it, but other populations are beginning to adopt it more widely. It is widely utilised and freely accessible. Alcoholism affects every household and is a global issue. Alcoholic families are more dysfunctional than non-alcoholic families in all areas, including socially, emotionally, and physically.[2]

According to WHO estimates, alcohol abuse causes 3 million fatalities worldwide each year. This accounts for 5.3% of all fatalities. [1] Early in life, alcohol usage results in mortality and impairment. Approximately 13.5 percent of all deaths among adults between the ages of 20 and 39 are related to alcohol. Harmful alcohol use has been linked to a variety of mental and behavioural disorders, other noncommunicable diseases, and injuries. [1] Goa (4.2%), Andaman and Nicobar (2.5%), Madhya Pradesh (1.6%), Karnataka (1.0%), West Bengal (0.8%), Kerala (0.7%), Delhi (0.7%), Andhra Pradesh (0.4%), Gujarat (0.3%), Bihar (0.2%), and Uttar Pradesh (0.2%) have the highest percentage of women who drink in India (0.2%). [3] NFHS 3 statistics reveal the prevalence of alcohol usage among women in Jharkhandwas 9.9% and it has gone down to 4.1% according to NFHS 4 data.[4,5]

Since women have begun drinking alcohol alongside males, it is important to determine whether they are aware of the negative consequences alcohol has on their health. Alcohol harms women's health more severely than it harms men's, which is a well-known fact. Women often have greater blood alcohol levels than males after consuming the same amount of alcohol, and the initial effects of alcohol typically happen more quickly and continue longer in women than in men. Due to these distinctions, women are more vulnerable than males to the long-term harmful consequences of alcohol on their health.[6] Women attain higher blood alcohol concentrations after ingesting the same amount of alcohol as males do because they have less body water than men of comparable body weight [7, 8]. Additionally, women seem to flush alcohol from the blood more quickly than men. Given that the liver is where alcohol is processed almost exclusively, this finding may be explained by women's greater liver volume per unit lean body mass [9,10,11]

To safeguard the health of women and to advance family health, it is essential to identify the gaps in information regarding the harmful effects of alcohol use. Therefore, this study was done to evaluate the perception of alcohol intake and knowledge of the harmful health effects of alcohol use among adult females living inthe rural field practice area, Ormanjhi of RIMS, Ranchi.

Methodology:

A cross sectional study was conducted in the rural field practice area, ormanjhi of Rajendra Institute of Medical Sciences, Ranchi for a period of 27 months (from September 2016 to November 2018). All adult females above the age of 18 years both married as well as unmarried, residing in the study area of Ormanjhi block, Ranchi and willing to participate in our study were included in the study. The study was conducted among female patients attending the specialist Obstetrics/gynaecology clinic that is held once per week. We could collect data from 4-6 patients per week and could reach 336 patients at the end of our period of data collection of 15 months. Women who were unable to comprehend and who were

intoxicated at the time of data collection were excluded from the study. The sampling technique used was total consecutive sampling. After explaining the purpose of the study and taking written informed consent, data was collected using a pretested semi structured questionnaire containing sections such as Knowledge about health effects of alcohol consumption, Source of knowledge about effects alcohol use, Knowledge about adverse health effects of alcohol abuse and Perception about Alcohol consumption among study subjects. Except for the first section i.eKnowledge about health effects of alcohol consumption, answers to rest all the sections were of multiple response type. Templates were generated in MS Excel sheet and analysis of data as done using SPSS software version 20. Data are presented in the form of frequency tables. Ethical approval for the study was obtained from Institutional Ethics Committee of RIMS, Ranchi.

Results:

At the end of the study conducted among adult female residents of the rural field practice area of rajendra institute of Medical Sciences, about the knowledge and perception about alcohol consumption, it was observed that, most of the women 244 out of 336 (72.6%) were aware that alcohol consumption is bad for health, but 17 out of 336 (5.1%) of the women told that they believe alcohol is good for their health as seen in Table 1. The belief towards the positive effect on heath is mainly for the locally made country liquor (Hadiya) consumed most commonly by rural people in the present study setting. On assessment for the source of knowledge as depicted in Figure 1, it was observed that sahhiya 186 out of 336 (55.4%) was found to be the most common source of knowledge for the women about effects of alcohol use, followed by mass media 165 out of 336 (49.1%). Table 2 presents the various adverse effects about alcohol consumption among rural women. The most frequent response about adverse effect of alcohol abuse was occurrence of Cancers reported by 140 out of 336 (41.7%) women, followed by death 135 out of 336 (40.2%). About 66.4% of the study subjects agreed that alcohol consumption serves as a risk factor for most diseases. About 53.6% of the women disagreed on the fact that alcohol consumption leads to depressive feelings and 42.3% of the women were unsure about whether alcohol consumption gives good feelings as can be seen in Table 3.

Table 1:Knowledge about health effects of alcohol consumption (n = 336)

Health effect of alcohol	Frequency	Percentage (%)
Good	17	5.1
Bad	244	72.6
Not Sure	75	22.3
Total	336	100

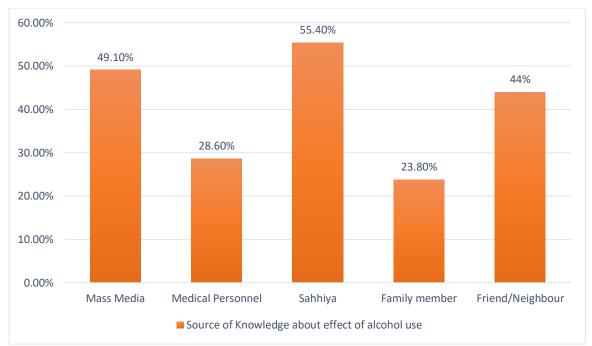


Figure 1:Source of knowledge about effects of alcohol use (n = 336)

Table 2: Knowledge about adverse health effects of alcohol abuse (n = 336)

Effects of alcohol use	Frequency	Percentage (%)	
Road Traffic Accident	105	31.3	
Adverse pregnancy outcome	46	13.7	
HIV and STI	14	4.2	
Liver disease	94	28	
Heart disease	106	31.5	
Respiratory disease	30	8.9	
Cancers	140	41.7	
Mental illness	90	26.8	
Kidney disease	104	31	
Death	135	40.2	

Table 3: Perception about Alcohol consumption among study subjects (n = 336)

Variables	Agree		Disagree		Undecided	
	Frequency	%	Frequency	%	Frequency	%
Good feeling	138	41.4	56	16.7	142	42.3
Risk factor for diseases	223	66.4	24	7.1	89	26.5
Completes gatherings	177	52.7	61	18.2	98	29.2
Strained relations	157	46.7	91	27.1	88	26.2
Depressive feelings	22	6.5	180	53.6	134	39.9

Work	194	57.7	77	22.9	65	19.3
Absenteeism						

Discussion:

In the present study conducted to study the knowledge and perception about alcohol consumption among adult females in rural field practice area of RIMS, Ranchi, it was found that approximately 3/4th of the study participants were aware that alcohol causes adverse effects on health. In another study done by Koirala P R et al [12] in Nepal, it was found that respondents had inadequate knowledge about adverse effects of alcohol consumption and only 16.3% of the study participants had adequate knowledge. This difference in the findings between both the studies can be attributed to lack of specificity in identifying the exact knowledge score in the present study as is done in the study by Koirala P R et al. Another reason for this difference could be the difference in the educational level of the study participants in both the study settings. Respondents to a qualitative study conducted by A. Toornstra et al. acknowledged that daily consumption, including that of children, binge drinking, and childhood ingestion pose health risks. These dangers were discussed in terms of peer pressure, low prices, and simple accessibility. The respondents acknowledged that households at risk for poor child development were those where one or both parents had alcohol dependence (AD). Current norms may be the goal of interventions, along with stigmatising ideas and aiding subjects in learning coping mechanisms. [13]. Alcoholic beverages are one of the most significant products of the global addiction demand, according to a different study conducted by Eashwar VM et al. Alcohol consumption tends to be a major issue in developing nations like India because of the country's diverse sociocultural practises, the states' various alcohol policies and practises, the community's lack of awareness of alcohol-related problems, false mass media propaganda about alcohol use, the consumers' various drinking patterns, and the emergence of social drinking as a habit due to the country's pervasive urbanisation. In order to minimise alcohol consumption, states need to enact strict alcohol laws. Additionally, consumers of alcohol need to be informed about the different negative effects of drinking alcohol. [14]

Approximately 50% of men and 30% of women were found to be current consumers of alcohol, according to a study on alcohol consumption by Demaio et al. The harms of everyday alcohol consumption were usually judged to be substantial, and nine out of ten respondents stated that heavy episodic alcohol consumption is frequent among Mongolians. In fact, 90% of respondents believed that drinking alcohol every day was either "hazardous" or "extremely harmful." It's interesting to note that rural men had higher rates of morning drinking, a sign of problematic drinking, and that it was linked to unemployment and lower levels of education. [15]. According to a study by Erik Loewen Friesen et al, alcohol use is a significant global risk factor for death and disease, and alcohol-related damages appear to be more common in rural and distant populations than in metropolitan ones. This review compiled findings from a variety of foreign studies on the risks associated with alcohol use in rural and remote regions, as well as the differences between rural and urban populations in these areas. The Scoping Review comprised 280 studies from 49 nations. The majority of research (60%) indicated that living in a rural area was more likely than living in an urban area to result in risky alcohol use or alcohol-related damage. The largest percentage was seen in Australia, among young adults, and for more severe alcohol-related outcomes. It changed by nation, age group, and outcome type between 1990 and 2019. [16].

Conclusion:

Majority of the women are aware of the fact that alcohol consumption has negative effect on overall health and well being. The most common source of knowledge about adverse health effects of alcohol is sahhiya and the most common perception that the study participants have about the ill effect of alcoholism is occurrence of cancer.

Conflict of interest: None

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References:

- 1. who.in/news-room/fact-sheets/detail/alcohol
- 2. Sasi. M. Knowledge on Ill Effects of Alcoholism and the Attitude Towards Alcoholic Husbands as Perceived by Wives. [Dissertation] Tamil Nadu Dr.M.G.R. Medical University, Chennai. March 2011
- 3. Gajmer P, Yamang H, Gurung S et al. Knowledge and attitude on the effects of alcohol consumption during pregnancy among the childbearing women residing in the urban and rural areas of Sikkim. International Journal of Advance Research in Nursing. Volume 3; Issue 1; Jan-Jun 2020; Page No. 94-101
- 4. http://rchiips.org/nfhs/pdf/NFHS4/India.pdf [assessed on 31/12/2020]
- 5. http://rchiips.org/nfhs/pdf/NFHS4/JH_FactSheet.pdf [assessed on 31/12/2020]
- 6. https://www.cdc.gov/alcohol/fact-sheets/womens-health.htm#:~:text=After%20drinking%20the%20same%20amount,of%20alcohol%20compared%20with%20men. [last assessed on 12/07/2022]
- 7. Frezza, M.; Di Padova, C.; Pozzato, G.; et al. High blood alcohol levels in women: The role of decreased gastric alcohol dehydrogenase activity and first-pass metabolism. *N Engl J Med* 322(2):95-99, 1990.
- 8. Taylor, J.L.; Dolhert, N.; Friedman, L.; et al. Alcohol elimination and simulator performance of male and female aviators: A preliminary report. *Aviat Space Environ Med* 67(5):407-413, 1996.
- 9. Li, T.K.; Beard, J.D.; Orr, W.E.; et al. Gender and ethnic differences in alcohol metabolism. *Alcohol Clin Exp Res* 22(3):771-772, 1998.
- 10. Kwo, P.Y.; Ramchandani, V.A.; O'Connor, S.; et al. Gender differences in alcohol metabolism: Relationship to liver volume and effect of adjusting for body mass. *Gastroenterology* 115(6):1552-1557, 1998.
- 11. Levitt, M.D.; Li, R.; DeMaster, E.G.; et al. Use of measurements of ethanol absorption from stomach and intestine to assess human ethanol metabolism. *Am J Physiol Gastrointest Liver Physiol* 3 (4):G951-G957, 1997.
- 12. Koirala P R, Joshi R G, Shakya D R et al. Knowledge and attitude of women towards alcohol use and related problems in the Eastern part of Nepal. <u>Journal of Psychiatrists Association of Nepal</u>. January 2015. 4(1):48-53DOI:10.3126/jpan.v4i1.16743
- 13. A. Toornstra, K. Massar, P. P. M. Hurks, M. M. S. Timmermans, G.Kok& L. M. G. Curfs (2020) Perceptions of Alcohol and Alcohol Use among CommunityMembers and Young Adults in Ukraine, Substance Use & Misuse, 55:8, 1269-1279
- 14. Eashwar VM, Umadevi R, Gopalakrishnan S.Alcohol consumption in India— An epidemiological review. J Family MedPrim Care 2020;9:49-55
- 15. Demaio et al.: Exploring knowledge, attitudes, and practices related to alcohol in Mongolia: a national population-based survey. BMC Public Health 2013 13:178.
- 16. Erik Loewen Friesen et. al. Hazardous alcohol use and alcohol-related harm in rural andremote communities: a scoping review, www.thelancet.com/public-health-Vol 7
 February 2022, e177-e187