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ORIGINAL ARTICLE

Socio-Economic and Demographic Factors Associated with Raw Alcohol Consumption

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ABSTRACT

Aim: To determine the socioeconomic and demographic characteristics that influence raw alcohol intake.
Methods: It was a cross sectional study, conducted at community level at Badin district for 3 months from 1st September 2019 to 30th November 2019. The study included all of the cases that met the inclusion criteria. All responders or their relatives provided written consent. A complete history of alcohol intake and associated factors was obtained. Performa was used to record all of the data. For data analysis, the SPSS v.22 was utilized.
Results: A total of 115 individuals participated in the study. Their mean age was 37.11 years, with a standard deviation of 8.096. The majority of the individuals (89.6%) were Sindhi; in terms of religion, 43(37.4%) were Muslin, 6(55.7%) were Hindu, and 8(7%) were Christians; roughly 53(46.1%) of the study participants were illiterate and had no education. About 44.3% started to drink as an adult, 26.1% drank more than five times per day, 61.7% drank more than two pegs/glasses of raw alcohol on a daily basis, % liked to drink at night, and around 45.2 % drank alcohol as a habit. The majority of drinkers (46%) were encouraged by their friends.
Practical implication From point of practical implication, it is important to know that drinking alcohol increases the chance of developing mental and behavioral disorders, including alcohol dependency, as well as severe non-communicable illnesses such as liver cirrhosis, several malignancies, and cardiovascular disease.
Conclusion: Raw alcohol intake (ethanol) can have major effects for people's current and future health and quality of life; our findings give critical new information regarding this public health issue.
Keywords: Alcoholism, Consumption, Demographic factors, Ethanol, Raw alcohol.

INTRODUCTION

Despite the Muslim majority's taboo on drinking, alcoholism is increasing in Pakistan. Alcohol abuse is widespread throughout the world, particularly in the Western world, where four out of every five people consume alcohol daily; according to the World Health Organization (WHO), 3.3 million people die each year as a result of alcohol abuse, accounting for more than 5 per cent of the worldwide disease burden[1].

Since the last decade, the number of alcohol users in Pakistan has increased, with the majority of them using illegal hazardous liquor. It has been observed that both children and adults consume alcohol and that the tendency is rapidly expanding, which is hugely concerning[2].

Alcoholism has several negative psychological, social, and biological repercussions, including a rise in psychosocial issues, psychiatric co-morbidities, and preventable illnesses and incapacities. These characteristics have various effects on how people drink, and they can be protective or risky[3].

Alcohol consumption was estimated to be responsible for 3.2% of fatalities globally in 2007 and approximately 4% of all deaths. Numerous researchers have found a link between socio-demographic characteristics and adolescent drinking behaviour. Teenagers who live with other family members, for example, are more likely to engage in a wide range of harmful behaviours than those who live with two biological parents[4].

Adolescents with a lower socioeconomic status were also more prone to drink alcohol. Consequently, growing divorce/separation rates and family income have become heated issues among the general public; it is vital to explore the relationship between certain socio-demographic factors and drinking habits[5].

According to a theoretical approach, men drink more than women do because men are more willing or motivated to take risks than women are. Because men may be enticed to drink by the belief that it will improve their sexual performance and pleasure (or make it easier for them to engage in sexual activity)[6]. These expectations may have a more substantial influence on alcohol intake. Excessive alcohol intake has immediate ramifications that elevate the risk of many health disorders. Unintended injuries, such as traffic accidents, falls, drowning, burns, and unintentional weapon injuries are the most prevalent side outcomes. In addition, alcohol is linked to two out of every three occurrences of intimate partner violence. Unprotected sex, physical intimacy with several partners, and a greater risk of sexual violence and sexually transmitted infections are all instances of dangerous sexual activities[7].

Alcohol poisoning is a medical emergency that arises when a person's blood-alcohol level exceeds a certain threshold. Exceeds a certain point. It results in Consciousness loss, hypotension, body temperature, coma, respiratory failure, and even death. Raising knowledge of the negative health consequences of alcohol use in homes, particularly among parents and siblings, is critical since they are influential variables in substance use. Setting up a peer education programme in which teenagers learn how peer pressure promotes alcohol intake via simulated experiences might potentially be an effective strategy to raise awareness of the negative consequences of alcohol use and urge adolescents to avoid and minimise their use of alcohol[8].

The objective of the study was to determine the socioeconomic and demographic characteristics that influence raw alcohol intake.

METHODOLOGY

It was a Descriptive Cross-sectional study conducted at the community level in Badin district of Sindh province for three months, from 1st September 2019 to 30th November 2019. Non-probability snowball sampling was used to select the samples. This study was performed after Ethical clearance and approval obtained

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from the Research Ethics Committee of LUMHS. Inclusion criteria were adult males and females age 18 years and above who are consumers of only raw alcohol, irrespective of religion and caste, respondents who are in a state of sense to respond and the participants who consent to participate in the study. The Exclusion criteria were respondents who did not permit participating in the study, children below 18 years of age taking raw alcohol, and those suffering from any severe disease.

Subjects were selected from the rural population of Badin, where raw alcohol is manufactured locally. All the cases that fulfilled the inclusion criteria were established in the study. Written consent was taken from all the respondents or their relatives. A detailed history was taken regarding alcohol consumption and associated factors. All the data was recorded on Performa (questionnaire). The data were analyzed in SPSS version 22. The quantitative variable, such as age, was shown as a histogram. Frequencies and percentages were calculated for qualitative variables such as socio-economic and demographic factors and were presented in pie and bar charts. The p-value ≤0.05 was considered statistically significant.

RESULTS

The study was conducted on 115 subjects. Their mean age was 37.11, with a standard deviation of 8.096. When asked about drinking, 35(30.4%) started during childhood, 26(22.6%) during adolescence, 51(44.3%) started when they were adults, and 3(2.6%) started at an older age. Around 20(17.4%) subjects drunk once a day, 36(31.3%) twice a day, 19(16.5%) three times a day, 10 (8.7%) drunk four times and 30(26.1%) had a habit of drinking more than five times a day. In terms of drinking frequency, 71(61.7%) used to drink more than two pegs/glasses of raw alcohol, 30(26.1%) two and 14(12.2%) had one peg/glasses of raw alcohol per day. More than 72(62%) of subjects preferred to drink at night, 5(4.3%) in the morning, 10(8.7%) in the evening and 28(24.3%) would drink any time of the day. Around 52(45.2%) drank alcohol as it was their habit, 17(14.8%) were used to drink due to unemployment, 16(13.9%) due to family problems, 18(15.7%) for enjoyment and 12(10.4%) to get relaxation. Most of the drinkers were encouraged by their friends 53(46%), 23(20%) drank themselves, 35(30.4%) were by family, and 4(3.5%) had other encouragement for drinking.

Table 1: Descriptive statistics regarding drinking period, frequency, daily pegs, preferred drinking time and drinking reason (n=115).

	Frequency	Percent (%)
Drinking period/Age		
Childhood	35	30.4
Adolescent	26	22.6
Adult	51	44.3
Older	3	2.6
Drinking frequency		
1	20	17.4
2	36	31.3
3	19	16.5
4	10	8.7
5 or more	30	26.1
Drinking daily pegs/glasses frequency		
One	14	12.2
Two	30	26.1
more than two	71	61.7
Preferred time of drinking		
Morning	5	4.3
Evening	10	8.7
Night	72	62.6
Anytime	28	24.3
The reasons for drinking		
Unemployment	17	14.8
Habit	52	45.2
Family problem	16	13.9
Enjoyment	18	15.7
Relaxation	12	10.4

Most of the alcoholics, 37(32.2%), preferred to drink at their home, 20(17.4%) at the hotel, 27(23.5%) at their workplace and 31(27%) would drink anywhere possible. Approximately 35(30.4%) spend 500/1500 Rupees per month on raw alcohol, 34 (29.6%) Rs. 1500/3000, 23 (20%) Rs. 3000/5000 and 23(20%) more than 5000 rupees per month. Most of the subjects, 64(55.7%), were aware of the harmful effects of consuming raw alcohol, while 51(44.3%) did not have basic knowledge about the harmful effects of raw alcohol. In terms of feelings after being drunk, 19 (16.5%) felt aggressive, 53 (46.1%) were relaxed, 5 (4.3%) were depressive, and 38(33%) had feelings of joy. Most subjects, 94 (81.7%), claimed to face problems after drinking, while 21(18.3%) did not face any problems. Most drinkers, 93(80.9%) lost their control after drinking raw alcohol, while 22(19.1%) did not. Forty (34.8%) of the subjects did not have any effect on them when raw alcohol was unavailable to drink, 43(37.4%) got aggressive, and 32 (27.8%) would use alternative drugs. In terms of the arrangement of money, 56(48.7%) had their jobs, 22(19.1%) would borrow, 14(12.2%) theft, and 23(20%) would use other ways of getting money for raw alcohol.

Table 2: Descriptive statistics regarding drinking influencer, place, expenditure, basic knowledge about harmful effects and feelings after being drunk (n=115).

	Frequency	Percent (%)
Drinking influencer		
Self	23	20
Friends	53	46.1
Family	35	30.4
Others	4	3.5
Preferred place of drinking		
Home	37	32.2
Hotel	20	17.4
Workplace	27	23.5
Any other	31	27
Monthly expenditure on drinking		
Rs. 500/1500	35	30.4
Rs. 1500/3000	34	29.6
Rs. 3000/5000	23	20
more than 5000	23	20
Basic knowledge about harmful effects of consuming raw alcohol		
Yes	64	55.7
No	51	44.3
Feelings after being drunk		
Aggressive	19	16.5
Relax	53	46.1
Depressive	5	4.3
Joy	38	33

Fig. 1: Distribution of the age of the study subjects.

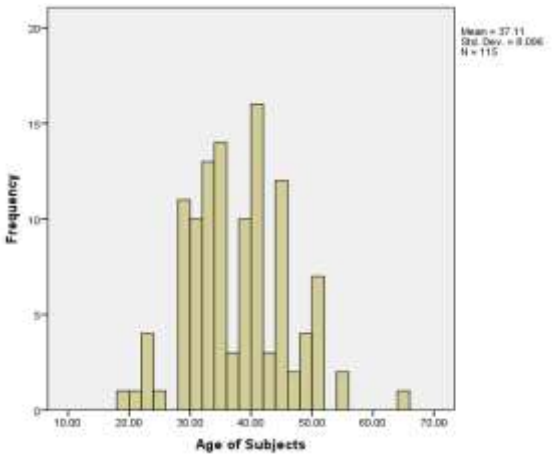

Table 3: Descriptive statistics regarding facing problems when drunk, losing control, effects of availability and arrangement of money (n=115).

	Frequency	Percent (%)
Facing problems when drunk		
Yes	94	81.7
No	21	18.3
Losing control after drinking raw alcohol		
Yes	93	80.9
No	22	19.1
Effects of unavailability of raw alcohol		
No effect on me	40	34.8
Become aggressive	43	37.4
Use alternative drugs	32	27.8
Arrangement of money for raw alcohol		
Job	56	48.7
Borrowing	22	19.1
Theft	14	12.2
Others	23	20

DISCUSSION

As it is one of the few legal psychoactive drugs in most parts of the world and is also used for social, cultural, and religious rituals, alcohol has long been the most popular psychoactive drug. However, there are significant differences in alcohol use between persons and countries[9].

Sarkar *et al*[10] in their study, reported that the majority (98.93%) of the 187 patients were male, in the productive age group of 20-49 years of age (85%), and married. Patients with no formal education (45.99%) and unskilled labourers (55.08%) made up most of the population. According to the Sarkar socioeconomic status scale, most patients (44.38%) were in socioeconomic class II.

In the current study, 44.3% of the participants began drinking as adolescents. Around 31% of people drank twice a day continuously. On a regular schedule, most alcoholics (61.7%) consume more than two pegs/glasses of alcohol. The majority of drinkers (62.6%) chose to consume alcohol at night. Around 45 per cent of the respondents said they drank alcohol because it was their habit. The majority of drinkers (46%) were encouraged by their friends. The majority of alcoholics (32%) preferred to drink at home. Around 30% of the population spends 500-1500 Rupees every month on raw alcohol. The majority of the participants (55.7%) were aware of the dangers of drinking raw alcohol. When it came to feelings after drinking, 46% said they were relaxed. The majority of the participants, 94(81.7%), claimed to have issues after drinking. When drinking raw alcohol, most drinkers (93.8%) lost control. Whenever raw alcohol was unavailable to drink, around 37.4% became aggressive. In terms of financial arrangements, 49% of people had jobs.

One research looked at how teenage drinking intentions evolved[10]. On the one hand, the proportion of teenagers who drink for coping motivations (e.g., dealing with negative emotions, alleviating stress, or avoiding social rejection) fell. In contrast, the percentage who drink for enhancing reasons (e.g., to feel good, become inebriated, or merely for fun) climbed[11]. Ethanol's impact on human health and nutrition is multifaceted. Ethanol is a macronutrient energy source that may provide calories for all of the human organism's fundamental biological operations, including cell reproduction, function, maintenance, physical labour energy, and thermogenesis. In two crucial characteristics, ethanol differs from the three primary food macronutrient energy sources, glucose, fatty acids, and amino acids[12].

Lebourgeois *et al*[12] undertook research. "On how many days (if any) have you drank alcohol in the previous 30 days (at least a glass of beer, wine, cocktail, aperitif)?" was the inquiry about alcohol consumption. The alternatives for the seven-question survey varied from "never" to "30 days." The parenthesis was introduced to discourage the respondent's merely accounting for sipping. It has already been proven that the youngest do not consume whole glasses of alcoholic beverages, but only a modest amount. Adolescents who had drunk alcohol at least once in the previous 30 days were separated into two groups: those who had drunk alcohol at least once in the last 30 days and those who had not consumed alcohol in the last 30 days[12].

In another research, Zimet *et al*[13] and Canty-Mitchell *et al*[14] assessed family and peer support using a four-item scale from the « Multidimensional Scale of Perceived Social Support » (MPSS), which has been demonstrated to have internal coherence and factorial validity, especially among teenagers. The influence of family structure on adolescent drug misuse has been widely explored. Living in a two-parent home has been identified as a protective factor against teenage drug misuse. Many cross-sectional and longitudinal studies have validated this viewpoint[15.16].

However, barely a few studies have looked examined potential gender differences. In a survey of 11-15-year-old Flemish teens, it was observed that men from mixed households and females from one-parent families were more likely than adolescents from two-parent families to drink alcohol at least once a week[17]. Previous studies[18,19]have looked at the influence of parenting variables (parents' drinking behaviour, parenting style, parental restrictions concerning alcohol, and so on) on adolescent alcohol usage. Furthermore, a recent systematic review and meta-analysis[20]of longitudinal studies in adolescents aged 12–18 that focused on modifiable parenting factors indicated that parental support was a protective factor connected to both alcohol beginning and levels of subsequent use.

We found no link between peer support and early alcohol consumption in Yap et al.'s study[20], which looked at both genders. Several research[20]have looked into the impact of peer influence on early drinking, and various determinants, such as peer acceptability, have been identified as predictors of starting to drink.

CONCLUSION

We looked into the elements that influence raw alcohol intake, such as socioeconomic and demographic parameters. This subject has received scant attention thus far. Because raw alcohol intake (ethanol) can significantly affect people's current and future health and quality of life, our findings give critical new information regarding this public health issue. This research will aid policymakers and action takers in better targeting and adapt messaging to the most vulnerable people.

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Authors' contributions: ZUA, MIS & GU: designed the study, performed the statistical analysis, wrote the protocol, and wrote the first draft of the manuscript **SMM,** managed the analyses of the study, **AH, MKL:** managed the literature searches. All authors read and approved the final manuscript."

REFERENCES

1. World Health Organisation. Global status report on alcohol and health 2014. 2014;1–392.
2. Lovato C, Linn G, Stead LF, Best A. Impact of tobacco advertising and promotion on increasing adolescent smoking behaviours. Cochrane Database Syst Rev. 2003 Jul 21;
3. Yang P, Tao R, He C, Liu S, Wang Y, Zhang X. The Risk Factors of the Alcohol Use Disorders—Through Review of Its Comorbidities. Front Neurosci. 2018 May 11;12.
4. Gitatui M, Kimani S, Muniu S, Okube O. Determinants of harmful use of alcohol among urban slum dwelling adults in Kenya. Afr Health Sci. 1970 Jan 1;19(4):2906–25.
5. Scott SB, Rhoades GK, Stanley SM, Allen ES, Markman HJ. Reasons for divorce and recollections of premarital intervention: Implications for improving relationship education. Couple Fam Psychol Res Pract. 2013;2(2):131–45.
6. CDC. Excessive Alcohol Use and Risks to Women's Health [Internet]. Centre for Disease Control Fact Sheets. 2014 [cited 2021 Sep 6]. Available from: http://www.cdc.gov/alcohol/fact-sheets/womens-health.htm
7. Petticrew M, Maani Hessari N, Knai C, Weiderpass E. How alcohol industry organisations mislead the public about alcohol and cancer. Drug Alcohol Rev. 2018;37(3):293–303.

8. Doyno CR, White CM. Sedative-Hypnotic Agents That Impact Gamma-Aminobutyric Acid Receptors: Focus on Flunitrazepam, Gamma-Hydroxybutyric Acid, Phenibut, and Selank. J Clin Pharmacol. 2021;61(S2):S114–28.
9. Tedor MF. Alcohol consumption and cultural systems: Global similarities and differences. In: The Handbook of Alcohol Use. Elsevier; 2021. p. 355–78.
10. Sarkar AP, Sen S, Mondal S, Singh OP, Chakraborty A, Swaika B. A study on socio-demographic characteristics of alcoholics attending the de-addiction center at Burdwan medical college and hospital in West Bengal. Indian J Public Health. 2013;57(1):33–5.
11. Villarosa MC, Messer MA, Madson MB, Zeigler-Hill V. Depressive Symptoms and Drinking Outcomes: The Mediating Role of Drinking Motives and Protective Behavioral Strategies Among College Students. Subst Use Misuse. 2018;53(1):143–53.
12. Lebourgeois S, González-Marín MC, Jeanblanc J, Naassila M, Vilpoux C. Effect of N-acetylcysteine on motivation, seeking and relapse to ethanol self-administration. Addict Biol. 2018;23(2):643–52.
13. Zimet GD, Powell SS, Farley GK, Werkman S, Berkoff KA. The multidimensional scale of perceived social support. J Pers Assess. 1990;52(1):30–41.
14. Canty-Mitchell J, Zimet GD. Psychometric properties of the multidimensional scale of perceived social support in urban adolescents. Am J Community Psychol. 2000;28(3):391–400.
15. Hoffmann JP. Family Structure and Adolescent Substance Use: An International Perspective. Subst Use Misuse. 2017;52(13):1667–83.
16. Harakeh Z, De Looze ME, Schrijvers CTM, van Dorsselaer SAFM, Vollebergh WAM. Individual and environmental predictors of health risk behaviours among Dutch adolescents: The HBSC study. Public Health. 2012;126(7):566–73.
17. Vanassche S, Sodermans AK, Matthijs K, Swicegood G. The Effects of Family Type, Family Relationships and Parental Role Models on Delinquency and Alcohol Use Among Flemish Adolescents. J Child Fam Stud. 2014;23(1):128–43.
18. Johnson B, McBride D, Hopkins G, Pepper S. An Examination of Parent-Child Relationships and Teen Substance Use: A Brief Report. J Child Adolesc Subst Abus. 2014;23(4):210–6.
19. Balázs M, Piko BF, Fitzpatrick KM. Youth Problem Drinking: The Role of Parental and Familial Relationships. Subst Use Misuse. 2017;52(12):1538–45.
20. Yap MBH, Cheong TWK, Zaravinos-Tsakos F, Lubman DI, Jorm AF. Modifiable parenting factors associated with adolescent alcohol misuse: a systematic review and meta-analysis of longitudinal studies. Addiction. 2017;112(7):1142–62.