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Mode of alcohol consumption and its corresponding health issues among alcohol consumers in Bogawanthalawa, Sri Lanka

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ABSTRACT

Alcohol consumption and related abuse are causes of mortality and morbidity worldwide (WHO). Consumption of alcohol in the upcountry region usually increased in amount rather than in any other part of Sri Lanka. It is essential to know the mode of alcohol consumption among various types of consumers. That helps to conduct a well-planned program for the prevention and control of this catastrophic social pathology. The main scope of this study is to identify the mode of alcohol consumption and related health issues, at the same time to expose the associating factors that lead to alcohol consumption. Selected 50 adult males have been interviewed from the study area using a semi-structured questionnaire. The study participants were selected through the purposive sampling method. Gathered data have been analyzed using Excel and discussed. According to the research outcomes, we have found that most of the participants agreed that they are consuming locally made alcohol and beer. 70% of the consumers have different health issues, 58% have family problems and financial struggles due to alcohol consumption. About 40% alcohol dependent had clinical signs of chronic illness. 70% of the consumers drank alcohol outside and during their work time. Alcohol consumers stated their associating factors of consumption as the climate, society, family problems, poverty, and physical soreness. According to the questionnaire survey, 74% of the participants were identified for daily consumption of alcohol. The most considered matter is their starting age of alcohol consumption is so young, and this study emphasizes the need for public education regarding the effects and illness of alcohol consumption at a young age. Proper awareness and guidance could help the youngsters to overcome the addiction. Public places and workplaces are the main areas to conduct awareness and intervention programs.

Keywords: Alcoholic, Health, Issues, Morbidity, Society

1. INTRODUCTION

The prevalence of alcohol usage is in massive amounts worldwide. Alcohol abuse and its related morbidity also showing an ascending number. Consumption of alcohol and its related illness are prevailing nationwide in Sri Lanka. Public health survey in 2014 conducted in Sri Lanka shows that the prevalence of alcohol use ranged between 37.7 – 52.5% in men and 1.6% in women. The victims of alcoholic abuse can develop health problems like hypertension, increases the risk for oral/esophageal cancers, gastritis, anemia, male erectile dysfunction, alcoholic myopathy, dementia, depressive symptoms like lack of interest, sadness, and feeling low during intoxication and withdrawal from alcohol (Eashwar et al., 2019).

Since Sri Lanka is rich in culture and social connectivity, people celebrate special occasions with food and beverages. But consumption of alcohol is limited to some adult alcohol consumers. Maybe this type of behavior is considered normal and acceptable in many communities in the country. But people are not aware that even occasional use also can lead to alcohol intoxication leading to road and domestic accidents. At the same time, the new consumer can be addicted and become an alcoholic person.

1. 2. Objectives

There is the main objective and a specific objective that lead this study to an extent. The main objective is,

- To identify the mode of alcohol consumption and related health issues
- And the specific objective of the research is,
- To expose the associating factors which lead to the alcohol consumption

2. LITERATURE REVIEW

Few studies have been conducted in the recent past regarding alcoholism worldwide. Mostly affected countries by the alcohol usage are focusing on the effects and morbidity rather than finding the root cause which leads the addicts to be chained with that.

Ganesh Kumar et al. (2013) have discussed alcohol consumption and its pattern. In their study, they aimed to assess the prevalence and pattern of alcohol consumption in a rural area in Tamil Nadu, India. By using a community-based cross-divisional study they found that the prevalence of alcohol was 9.4% and more males at their middle age started using alcohol. They concluded their research with a suggestion for Health educational interventions to control alcohol usage in the area.

Gosh and Mukherjee (2012) researched Kolkata, India. They undertook the study to identify the patterns of alcohol intake among different types of alcohol consumers and to assess the clinical signs of chronic harmful alcohol use. With the aid of a questionnaire survey among adult males, they found that Indian-made foreign liquor and locally made alcohol beverages are consumed by the participants. And forty-one percent of consumers drank at public places and

workplaces. They have concluded as about 62% of the dependents had clinical signs of chronic alcohol consumption.

Eashwar et al. (2019) carried out a study in an urban area of Kanchipuram district, Tamil Nadu aiming to find out the prevalence of alcohol consumption and its epidemiological determinants. With the descriptive cross-sectional study among adult males, they found the major determinants as the social stigma, unawareness of the harmful effects of alcohol consumption, and health problems. They conclude that the public needs education on the effects of alcohol consumption at a younger age group, in addition to encouraging refusal skills to overcome peer pressure. This prevailing issue is most common in south Asian countries since several studies have been carried out regarding the same. By identifying the mode of alcohol and its corresponding health issues, hopefully, could provide solutions in the Bogawanthalawa study area. Multiple alcohol-related studies have been done previously all around the world since globally, alcohol abuse is a major cause of mortality and morbidity (Gosh, 2012). But only a few studies have been conducted in Sri Lanka even though the center part of the island has a high amount of alcohol consumers. Hence this study will make a wide-open for future researches in the same field.

3. MATERIALS AND METHODS

3. 1. Study area

This study was carried out in a small estate settlement in Bogawanthalawa south Grama Niladhari division situated in Nuwara Eliya District. Native people of the area engaged in estate works and mere works for daily wages. And they are economically unstable and educationally backward. Most of the families have at least one alcoholic person at their house. Most of them seek medical help due to various physical problems. Therefore, the plot is highly significant for the research. The spatial location of the research area is indicated in Figure 1.

This research mainly relies on primary data collection since it is so human sensible. 50 adult male participants were selected using the purposive sampling method from the non-probability sampling technique, as we could simply identify the persons related to the research in the study area. Selected adult males above 18 years old have been provided required qualitative data to fulfill the objectives of the research. The pre-structured questionnaire was used as a study tool to collect relevant data. Field observation was also done to explore the economic and social status of alcohol consumers.

Collected primary data have been analyzed through an Excel spreadsheet. And summarized the quantitative data using descriptive and analytical statistical methods. Qualitative data was analyzed to identify central tendency analysis such as mean, median, and mode. Secondary data collection was also done from the indicated sources in Figure 2. A univariate analysis was carried out to test the association between socio-demographic and other factors and alcohol use (Ganesh Kumar et al, 2013).

The questionnaire contained details of the socio-demographic characteristics of the study participants, the current drinking pattern of the participants who identified to have an alcohol-consuming behavior, their health issues and awareness of health problems caused because of alcohol consumption, and their economic characteristics.

Collected nonspatial data were tabulated and analyzed through an Excel spreadsheet. The spatial data have been analyzed through QGIS 3.20.0 software.

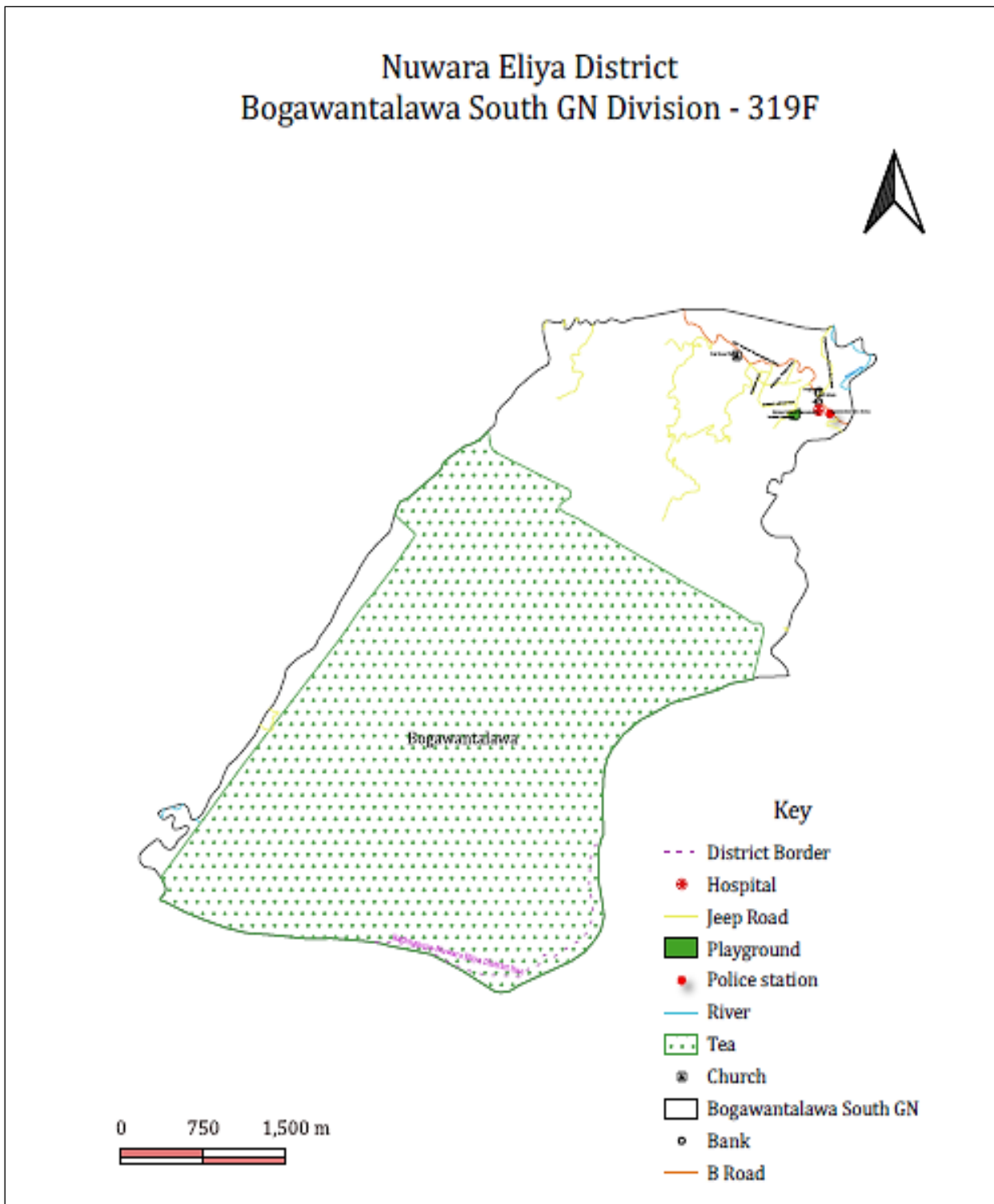


Figure 1. Study Area; Source: Compiled by the author from QGIS 3.20

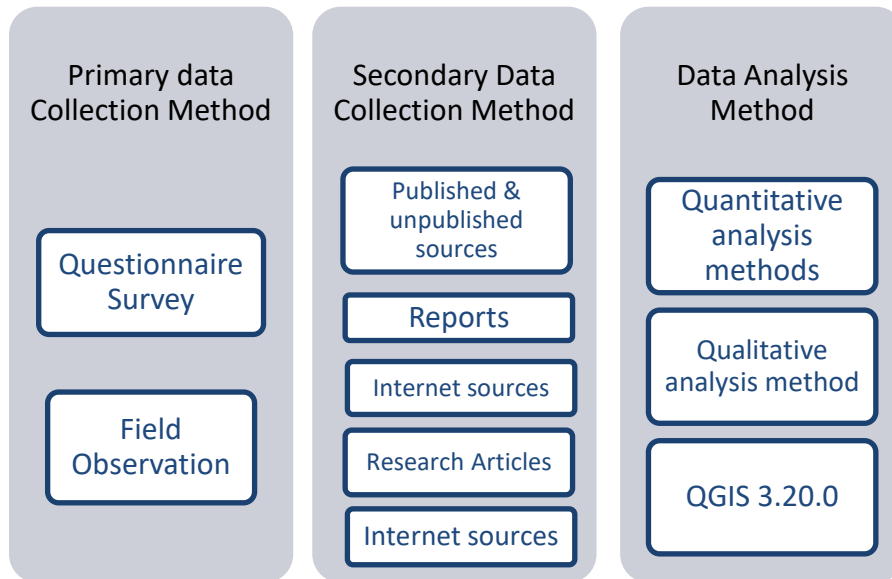


Figure 2. Methods and Materials: Compiled by the author

4. RESULTS AND DISCUSSION

4. 1. Socio-demographic characteristics of the study participants

This study demonstrated the prevailing alcohol consumption of the study participants. More than 75% of the individuals are consuming alcohol in different modes in the study area. By using the purposive sampling method we only selected 50 participants to answer the questionnaire survey.

Table 1 is showing the demographic information about the study participants. Most of the people who have been selected for the study are 40 to 60 Age range. And most of the participants have a primary education level. 50% of them are estate laborers. 76% of them are married and have more than one child.

Table 1. Demographic details of the participants.

Characteristics	Frequency (n = 50)	Percentage (100%)
Age group (Years)		
<20	02	04%
21 – 40	20	40%
40 – 60	23	46%
>60	05	10%
Education		
Illiterate	15	30%
Primary	21	42%
Ordinary Level	10	20%
Advanced Level	02	04%
Higher Education	01	02%

Occupation		
Student	03	06%
Estate worker	25	50%
Private firm worker	17	34%
Government firm worker	03	06%
Business	02	04%
Marital Status		
Single	10	20%
Married	38	76%
Divorced	00	00%
Widower	02	04%
Number of Children		
No children	15	30%
1	08	16%
2	16	32%
3	08	16%
>4	03	06%

Source: Information derived from the participants through questionnaire survey

According to the above table, the people who are highly engaged in alcohol consumption have less literacy. 50% of them are estate workers. Mostly the working people consume highly and, have a family with responsibilities.



Figure 3. The site of the study participant's accommodation; Source: From the observation

In the above Figure 3, you can recognize the standard of living of the study participants who consume alcohol. These line houses have one or two rooms and generally, five to seven people live in such houses. Economically they are so unstable and barely have enough food to eat. Most of the study participant's occupation is depending on the estate. They work in a daily wage basis. Below Figure 4 shows the occupation types of the selected participants.

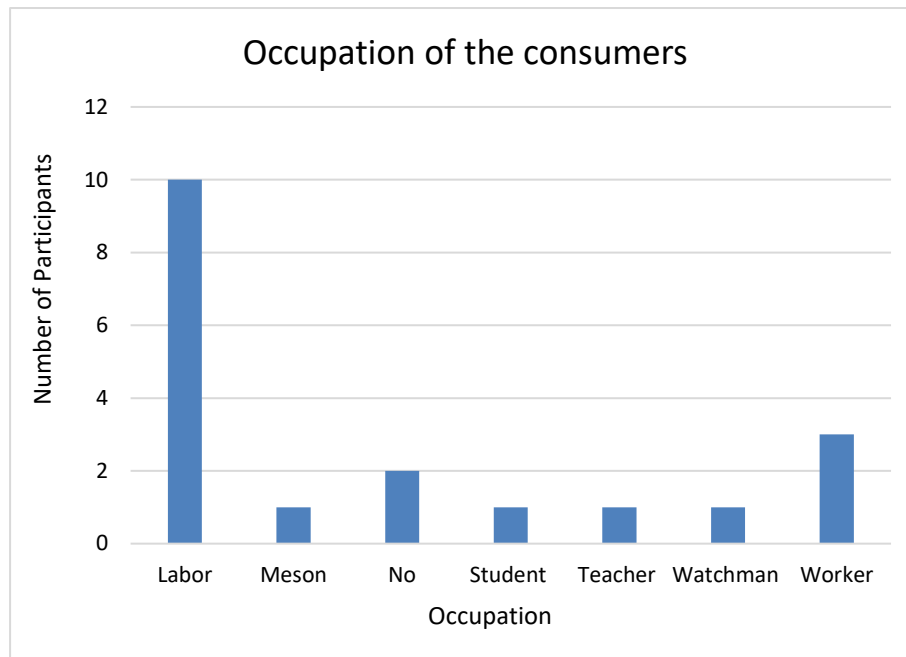


Figure 4. Occupation of the alcohol consumer
 Source: Compiled by the author from a Questionnaire survey

Most of the people engaged in estate labor works and only a few of them are working outside of their estate. Since their education level is low, they could not afford a fair-paying job opportunity out of the estate nor in a city. Through the survey we could identified some of them are students and teachers but they are occasional drinkers and their drinking pattern is very low compared to the estate workers.

When the estate workers had been questioned about the reason for their alcohol consumption, they said that they consume alcohol due to their tiresome estate work. They tend to take alcohol to have a good night's sleep. Most alcohol consumers claim the same reason for their addiction. Estate labor's duty in the field is to pluck tea, shape gullies, lifting heavily loaded tea packs, and operating machines. 90% of their monthly earning is below 20,000 Rupees. Therefore, they couldn't fulfill their needs and requirements. Despite their economic struggles, they consume alcohol to forget their tragedy (From direct discussion with the native).

4. 2. Characteristics of Alcohol Usages and Related morbidity

People's preference towards alcohol consumption is based on the accessibility and availability in their area. The study area is situated in rural. Therefore, most of the participants consuming locally made alcohol, beer, and arrack. The prevalence of alcohol consumption was high among males compared to the female population.

Even though various types of alcohol are accessible in the area, almost 31% of the study population consume locally-made alcoholic beverages due to affordability. Most of the consumers engaged in estate works, cannot afford expensive beverages. Hence, most of them consume locally made alcohol which is normally addressed as Kasippu. And that is severely harmful to the digestive system (Sarkar, 2015).

Table 2. Types of alcoholic beverage consumed by the study participants.

Type of alcoholic Beverage	Consumption of Participants (Frequency)	Percentage
Beer	13	20.97%
Foreign Made	02	3.23%
Locally Made	19	30.65%
Toddy	13	10.37%
Arrack	09	14.52%
All types	06	9.68%
Total	59	100%

Source: Compiled by the author from a Questionnaire survey

The frequency of alcohol consumption was recorded through the survey. 11% of the participant consuming alcohol daily and 26% of the participants consuming alcohol occasionally. Since the study participant’s economy is not in a stable state, they struggle to fulfill their basic needs. Even if some of them desired to consume alcohol daily, they couldn’t afford to.

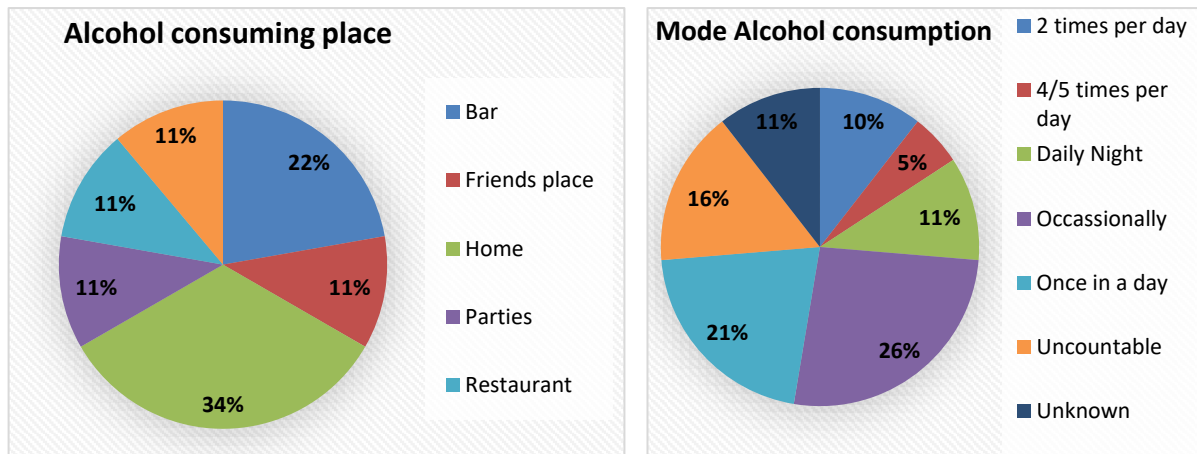


Figure 5. Participant’s alcohol consumption in a day and consuming place;
Source: Compiled by the author from a Questionnaire survey

According to the survey, most people consume alcohol at home. 34% of the study participants disclosed it. The cold climate might be the reason for the people to consume liquor at home but not outside. Except for the liquor consumption, the participants have other

addictions such: tobacco chewing, Mava powder usage, and battle leaf chewing. According to some survey and study findings, the starting age of alcohol consumption play a vital role in the morbidity and health issues. At the same time, the experience of the drinker lead to social problems as well. Drinkers also experience a range of social harms because of their own drinking, including family disruption, problems at the workplace (including unemployment), criminal convictions, and financial problems (Casswell and Thamarangsi, 2009; Klingemann and Gmel, 2001; Rehm J, 2011).

In accordance to the questionnaire survey, a few heavy drinkers started their alcohol consuming habit at their early twenties. Hence, they have decades of experience in alcohol consumption and suffer from chronic illnesses. The below Figure. 6 is showing the period of alcohol addiction of the study participants. While some of them have started the alcoholic behavior a long time ago, a few occasional drinkers started the behavior very recently. Therefore the circumstances of such behavior seem different from one person to another. Following the graph, most of them have started their behavior in their twenties and have come so far.

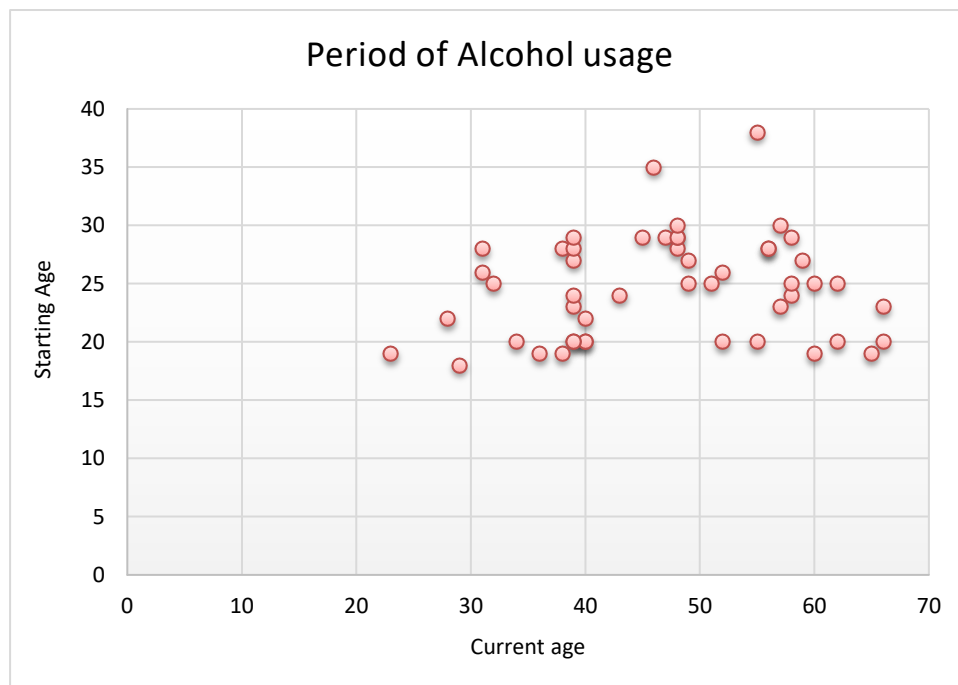


Figure 6. The period of alcohol usage by the study participants;
Source: Compiled by the author from Questionnaire survey

There were different types of reasons given by the alcohol consumers. The reasons were varied due to the different age categories. Most youngsters agreed that they consume alcohol for their enjoyment. While married and elder participants were exposed to different reasons.

Approximately 79% of them said that they consume alcohol due to their physical soreness. Table 3 provides the details. The next common reasons told by the participants were cold climate and family problems. When asking about the benefits of alcohol consumption, different benefits were conveyed.

Table 3. Benefits from alcohol consumption according to the study participants.

Benefits of alcohol consumption	Frequency (Number of Participants)	Percentage (100%)
Relief body pain	25	38%
Remove Stress	15	23%
Helps to forget the sadness	09	14%
Bring Joy	05	08%
Helps to associate with others	11	17%

Source: Compiled by the author from the Questionnaire survey

The study participants were inquired whether alcohol consumption provide them any benefits, and ultimately we could notice that 38% of them believe that alcohol could cure their body pain. 23% of them have mental stress and believe that alcohol could help them to be happy without any stress.

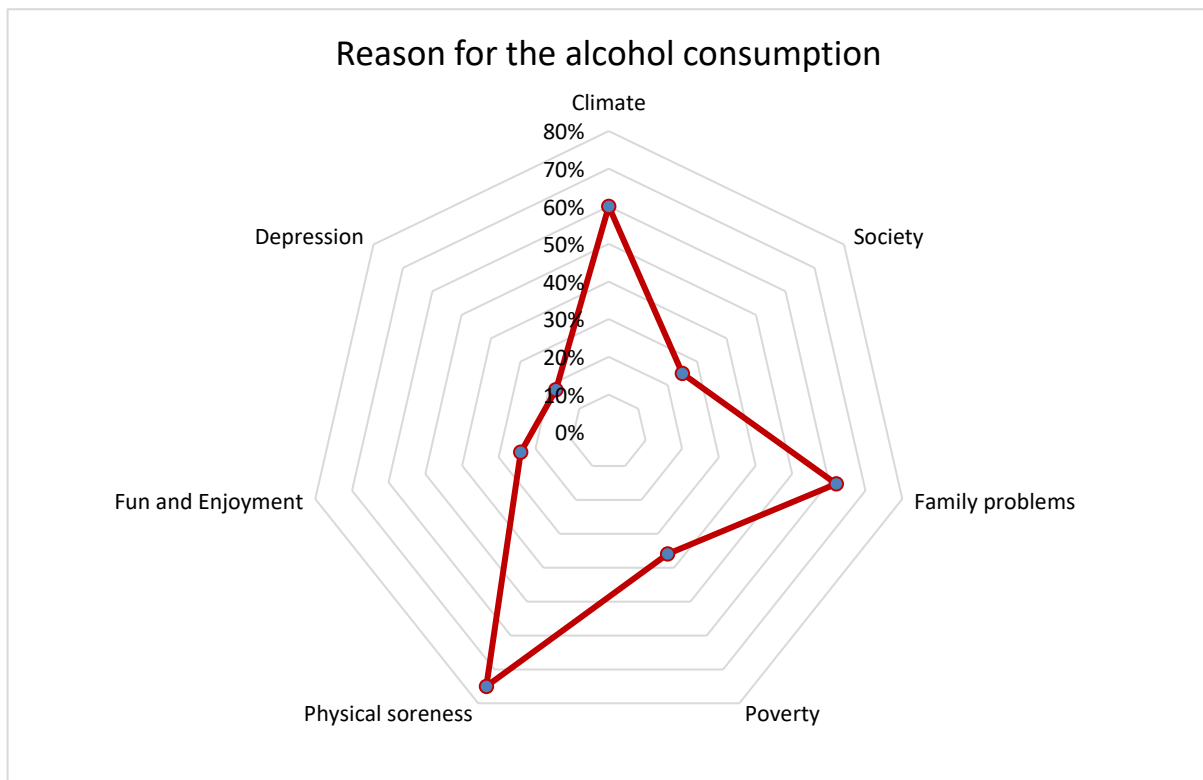


Figure 7. Reasons told by the study participants for their alcohol consumption;
Source: Compiled by the author from a Questionnaire survey

Current drinkers were asked to answer the question of whether they face any problems at home due to their alcoholic behavior. The responses have been illustrated in Figure 8.

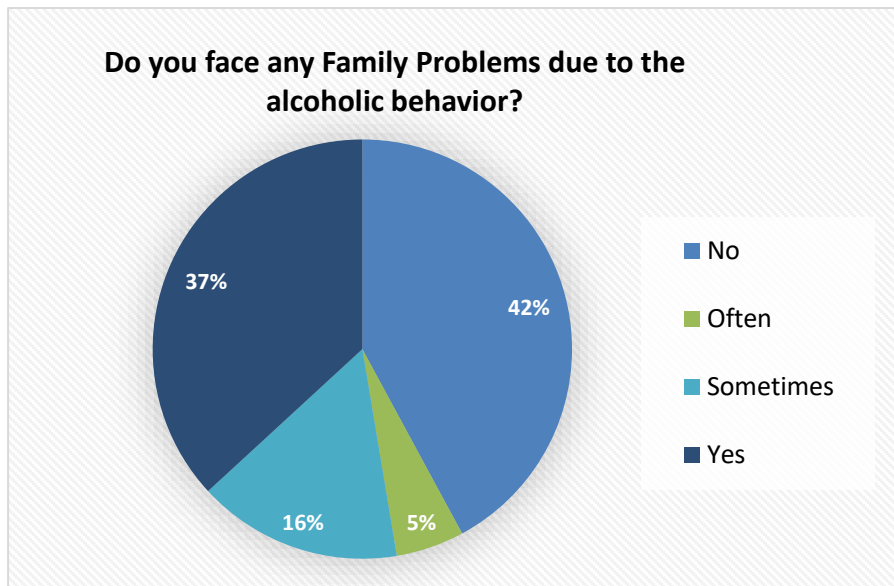


Figure 8. Effect of alcoholic behavior in the well-being of family life;
Source: Compiled by the author from the Questionnaire survey

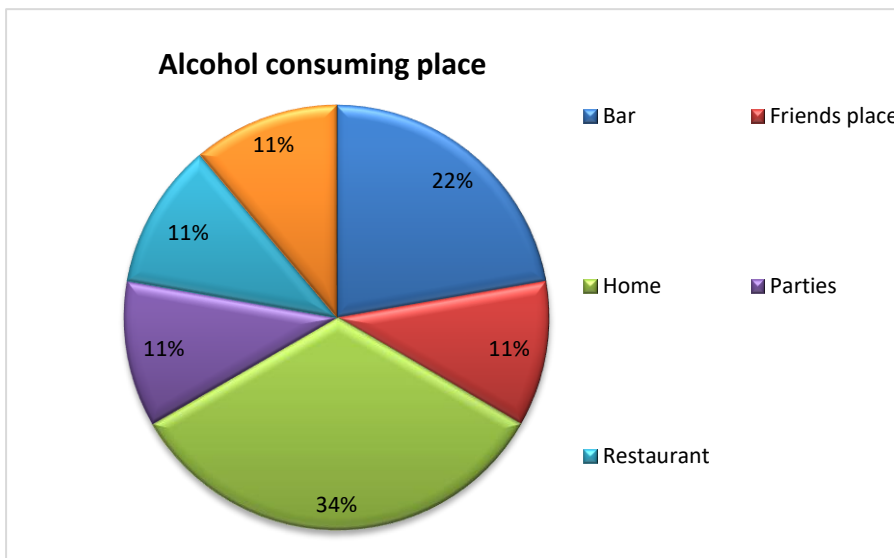


Figure 9. Place where the participants consuming alcohol;
Source: Compiled by the author from the Questionnaire survey

Surprisingly 42% of the study participants said that they do not have any family problems after the consumption of alcohol. And those male drinkers said that since they are the head of

the family no one will inquire about their behavior. Though 37% of participants agreed they have family problems.

People who consume alcohol at home or friend’s places have a safe drinking pattern and the people who consume alcohol from bars, parties, and Restaurants have a high chance to be problem drinkers. Figure 9 presents the alcohol-consuming places of the drinkers.

Below Table 4 shows the initial age of the alcohol consumption of the study participants. The starting age of liquor practice has a major influence on the drinking pattern.

Table 4. Age of initiation for the alcohol consumption

Initiation of the drinking habit	Frequencies	Percentage
<20	05	10%
20-25	15	30%
25-30	25	50%
30-35	05	10%

Source: Compiled by the author from the Questionnaire survey

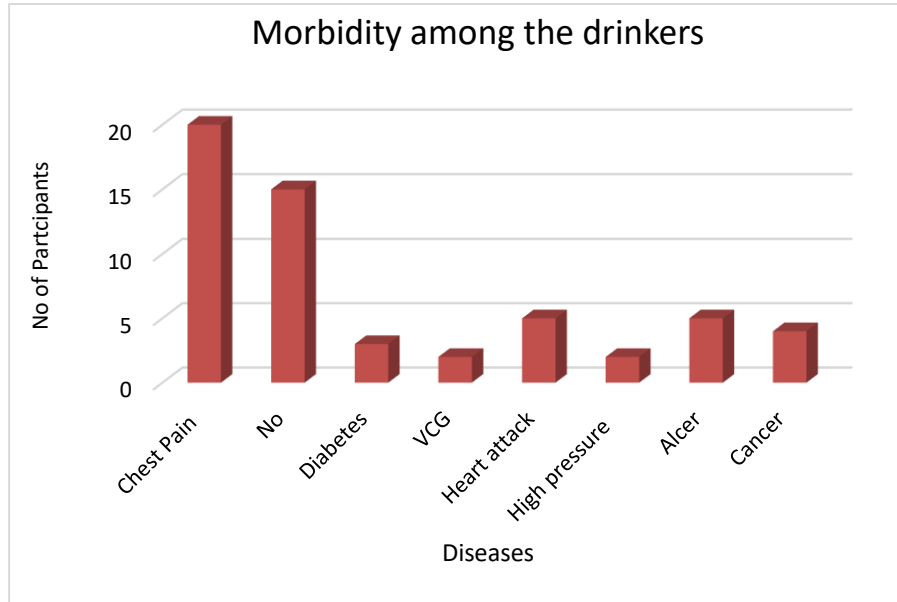


Figure 10. Prevailing morbidity of the selected drinkers;
Source: Compiled by the author from the Questionnaire survey

50% of the study participants started their drinking habit around the age of 25 to 30. At the same time, 30% of the participants initiated drinking at their younger age as 20 to 25. Some

of them have initiated the habit by themselves, watching other elders and some participants said that their relatives, friends, and family encouraged them to drink.

The study participants were asked whether they are suffering from any illness. Approximately 40% of them said that they have chest pain. At the same time surprisingly 28% of them said they don't have any health problems. The morbidity among the drinkers has been illustrated in Figure 10.

According to the survey a high number of the alcohol consumers are suffering from asthma and respiratory problems. Few of them are receiving treatments from the government hospitals and most of them do not take any medication. They vocalize that they don't have enough money to pay for the medicines. Four people have cardiovascular disease and they still consuming alcohol. According to their responses, it could be identified that they have lack of knowledge about the alcohol related morbidity and they are not aware about the risk yet.

The pattern of alcohol is more contributing to morbidity among the alcohol consumers. Some of the current drinkers who had sad life circumstances were found to be problematic. It was found that the mean age of the initiation of alcohol consumption identifies to be around 26 years old. This early stage of the habit might have indulged due to the lack of awareness and illiteracy since 76% of the current drinkers have started drinking due to a third person's force.

5. CONCLUSION AND RECOMMENDATION

The study mainly focusing the alcohol consumption and the relationship between alcohol consumption and prevailing morbidity among selected current drinkers in the study area. 70% of the consumers have various types of health issues such as Chest pain, Cancer, Ulcer, Diabetes, Heart attack, and High blood pressure. Most of the people in the study area don't visit the doctor and haven't done any health checkups recently to verify their health condition. About 40% alcohol dependent had clinical signs of chronic illness. When most of them said that they do not have any identified health issues, they confess that they never visited a doctor and only approached home remedies. Therefore, they might not know the disease they have in their body yet. But most of them feel heartburn and stomach pain so often. Males who consume alcohol at home have a safe drinking habit and the man who drinks outside has a problematic drinking pattern. They often face issues and family quarrels.

From this study, it was found that the most common benefit gained from alcohol consumption as told by the participants was the relief of body pain. And some of them said that it was helping them to forget the stress and past bitter incidents. At the same time as told by the study participants, the main reason for the alcohol consumption was physical soreness, climate, and family problem. It can be concluded that most of the people engaged in drinking are estate workers and they have a load of physical work on the field. Therefore, they were consuming alcohol to forget the physical soreness. Even though they indicated their family struggles as a reason for their alcohol consumption, due to their behavior only they might have family problems.

58% have family problems and financial struggles due to alcohol consumption. 70% of the consumers drank alcohol outside and during their work time. 74% of the participants being recognized for daily consumption of alcohol. The most considered matter is their starting age of alcohol consumption is so young, and this study emphasizes the need for public education regarding the effects and illness of alcohol consumption at a young age.

The most considered fact is the study participant's starting age of alcohol consumption is young and they were in their twenties, so this study emphasizes the need for education regarding the effects and illness of alcohol consumption at a young age. Appropriate awareness and guidance could help young people to overcome addiction. Educational centers, Public gathering places, media, and workplaces are the main areas to conduct awareness and intervention programs. Adolescents are at greater risk of alcohol morbidity. Innovative and comprehensive approaches to prevention could stop the morbidity issues before they develop. The present study is only limited to the small number of people in a specific rural area. Further studies can be developed through different sociodemographic variables.

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