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Impact of Alcoholism – Kerala

The Report

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&

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Dr. Celine Sunny
Project Director

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Executive Summary

Alcohol plays too significant a role in society today and should be an afterthought as opposed to the most essential addition to any social event. Alcohol creates numerous social, economic, and health problems that could very easily be stopped if it plays a less influential role in everyday events. The pattern of alcohol consumption by the different categories of population and its manifold impact on the general society are of great importance today. The present study has made a situational analysis of the phenomenon of alcoholism and suggested suitable measures for reducing / minimising its impact on the populace in the state of Kerala.

The specific objectives of the study are;

1. To find out the socio-economic profile of the respondents viz: Drinkers (Alcohol Users), Spouses of Drinkers and Non-Drinkers (Non-Alcohol Users).
2. To trace out the history of consumption and circumstances stimulating the drinking behaviour.
3. To highlight the extent of alcohol consumption across the cross section of the society (among the various segments of the people).
4. To know the trends and patterns of alcohol consumption in the state and to differentiate between Hazardous and Potentially Hazardous Drinkers.
5. To find out the impact of alcohol consumption on physical /mental health, psychological well being, family life, social relationships and productivity of the Drinkers (Alcohol Users).
6. To compare the status of physical /mental health, psychological well being, family life, social relationships and productivity of the Drinkers (Experimental Group) with that of the Non-Drinkers (Control Group).

The study area covered 9 districts of Kerala and the data were collected from the 1031 primary respondents; 941 experimental group respondents - 622 adult drinkers, 229 adolescent drinkers and 90 spouses of drinkers and 90 control group respondents of adult non-drinkers, 18 case study respondents, 18 anecdotes and 41 key informants. Thus, a total sample size of 1108 respondents came under the purview of the study. Further, for a comparative analysis, 622 adult drinkers from the experimental group and 90 non-drinkers from the control group were cross examined on selected variables. The tools used for eliciting information included; *Pre-tested interview schedule, Interview guide, Case Study format* and *Anecdote format*.

The major findings of the study include the following;

Socio- Economic Profile of the Respondents

- Of the respondents - the drinkers (adults and adolescents), spouses of drinkers and non drinkers: Most of the adult drinkers were: males belonging to Hindu religion followed by Christian and Muslim, in the age group of 30 - 44years, married and from the rural areas. Majority of them and their parents were less educated. Economically, most were employed but in the lower income categories.
- Socio-economic status of the adolescent drinkers was slightly better than the adults and the spouses of drinkers.
- Non-drinkers were also from almost similar socio-economic background of the adult drinkers.

- Most of the drinkers were involved in substance abuse especially, Smoking tobacco.

Harmful and Less Harmful Drinkers

- About 30% adults were harmful drinkers while 95.2% of the adolescents were less harmful drinkers. Harmful drinking was found to be more among: older age groups, men and the less educated.

Alcohol Use History

- Majority (adults and adolescents) initiated drinking with their peers, at the age group of 15-21 years, for just 'Experimentation', or 'Peer Modelling'.
- 10.1% adults and 33.6% adolescents started drinking even before 14years.
- Most adults started regular drinking at the age of 22-29years, while adolescents at 15-21 years.
- Solitary drinking was more among harmful drinkers compared to less-harmful drinkers.

Extent, Trend and Patterns of Alcohol Consumption

- About 40% adults were frequent or highly frequent drinkers while 93.9% adolescents were infrequent or highly infrequent.
- Most were starting their first drink at evening, while husbands of 17.8% spouses, 16.4% adults and 2.9% adolescents at early morning. Majority of the harmful drinkers had their first drink at early morning or forenoon while most less-harmful drinkers had it in the evening.
- The usual place of drinking for adults was 'Bar' or 'Home', while for adolescents, it was 'Friends' house' or 'Home'.
- Most adults and husbands of spouses and a good number of adolescents too were consuming 180ml or more quantity of alcohol.
- A good number of adults were spending an amount of Rs.100/- to Rs.250/- followed by Rs.50/- to Rs.100/- for drinking.
- Almost all highly frequent drinkers spent generously for drinking per day. I.e. an amount of Rs.250/ - Rs.500/- (48.4%) or Rs.100/ - Rs.250/ (45.2%).
- Even among infrequent drinkers, most (60%) had to set aside an amount of Rs. 50/- to Rs.100/- or Rs.100/- to Rs.250/- for their drinking.
- Majority of the adults and adolescents were consuming more than one brand of alcohol drinks.
- For adults, 'Brandy' and 'Rum' were the favourite brands while for adolescents, it is Brandy and Beer (17%).
- Most adults and adolescents usually mix water with alcohol.
- For majority of the drinkers 'Beverage shop' was the main source of alcohol followed by 'Bar'

Impact of Alcohol Consumption

- Physical and potential mental health problems were reported by most of the adult drinkers and spouses of drinkers. More than half of the adolescents too reported on the same.
- Personal and family functioning activities were affected for majority of the drinkers.
- Externalising and internalising emotions were reported higher (moderate/high) among the adult drinkers compared to the adolescent drinkers.

- The general family functioning was low among almost one fourth of the adults and husbands of spouses.
- Problems with family members were reported by most of the adults and the spouses.
- Relationship with spouse and relationship with children were found to be low for a good percentage of the adults and husbands of spouses.
- Acceptance in the family was moderate or high among most of the adults or the husbands of spouses while less among the adolescents.
- Acceptance in society was higher among the adolescents compared to the husbands of spouses and the adult drinkers.
- Problems in the social life were reported more by the spouses of drinkers compared to the adult and the adolescent drinkers.
- Participation in social activities was lesser for the adults and husbands of spouses compared to the adolescents.
- Regarding missed days of work and loss of job due to alcohol consumption out of every 10 adults, more than 1 had it. For the adolescents, out of every 10, more than 1 had dismissal from the school.
- More than one sixth of the adolescents were suspended from the school due to the intake of alcohol.
- Accidents at work due to alcohol consumption were reported by few of the adults and spouses of the drinkers.
- Decreased efficiency was reported more by the spouses of drinkers compared to the adult and the adolescent drinkers.
- More than half of the adults and the adolescents had physical fights under the influence of alcohol.
- A good number of drinkers had drunken driving at some times or most of the time. Of these, more than 25% of the adults and nearly 20% of the adolescents had got arrested and held at the police station. Among them, nearly half of the adolescents and husbands of spouses and one third of the adults had accidents at least once in the course of action. It is also noted that the accident rate was more among the adolescents than the adults.

The impact of alcoholism was reported more by the spouses of drinkers than the adult drinkers. As most of the adolescents were not regular drinkers, the impact was comparatively less among them.

- The impact of alcoholism on the physical and mental health, psychological well being, family, society and productivity, the experimental group (drinkers) had shown variations with high impact on the harmful drinkers compared to the less harmful drinkers. However, with regard to the control group (non-drinkers), the status of physical / mental health, psychological well being, family and societal relationship and productivity were comparatively higher than the experimental group.

Withdrawal, Treatment and Allied Aspects

- Majority of the adults and husbands of the spouses had attempted to stop/cut down alcohol drinking for a month and more than 90% of them succeeded in this. The period of their abstinence was 1-6 months. About half of the adolescents also had tried to stop drinking and most could stop it for a month. Withdrawal problems like; unable to sleep, feel anxious, fidgety/relentless etc.

were faced by majority of all the above groups. A few had FITS/Convulsion or Delirium tremens.

- About 10% of the adults and 20% of the spouses of the drinkers reported of the treatment at De-addiction centre while only 5 adolescents had the same.
- The reasons cited for restart of drinking by most of the adults, adolescents and spouses were: 'wanted to use' and peer pressure.

The study proposes the following recommendations to reduce the impact of alcoholism.

- Identification of alcohol-prone areas to introduce alcohol consumption policy effectively.
- Introduction of alcohol-consumption policy taking into consideration the factors viz. i. Purchase of alcohol- permit card system, ii. Retail sale – restricting the number of Bevco outlets and Bars, iii. Monitoring visits by the enforcement authorities.
- Annual earmarking of funds by LSGs, Govt. depts, and Corporates for implementing the suitable measures to mitigate the problem of alcoholism.
- Revision of curriculum in schools/colleges incorporating the topics related to alcoholism and its impact.
- Setting up of adequate number of treatment centres for de-addiction and initiate tobacco cessation programmes attached to it.
- Start a cell at hospitals/clinics/PHCs for providing consideration services to patients with alcohol use disorders.
- Strictly enforce the law related to the age of buying liquor (21years) and strengthen enforcement of law to address conflicts and violation of laws due to harmful use of alcohol as physical fights and drunken driving were reported more among harmful drinkers.
- Media interventions utilizing the services of celebrities and role models to advertise the harmful effects of alcohol consumption.

INTRODUCTION

Alcoholism which is also known as Alcohol dependence syndrome, is a disease that is characterized by the following elements viz. ‘Craving’- a strong compulsion to drink, ‘loss of control’ – the frequent inability to stop drinking once a person has begun, ‘physical dependence’ – occurrence of withdrawal symptoms such as nausea, sweating, shakiness, and anxiety when alcohol use is stopped after a period of heavy drinking, and ‘tolerance’- need for increasing amounts of alcohol in order to get ‘high’(National Institute of Alcohol Abuse and Alcoholism). This description of alcoholism helps us to understand why most alcoholics can’t just ‘use a little will power’ to stop drinking. The majority of alcoholic individuals need outside assistance to recover from their disease. Different from alcoholism, alcohol abuse is the misuse or overuse of alcohol to the detriment of relationships, family life, work, and finances. While alcoholism is a disease, alcohol abuse is a precursor to that disease. There is no cure for alcohol abuse because it is not a disease, it is a habit, and habits can be treated. Alcoholism too, though, is a disease can be treated, but there is always a chance of relapse.

Alcohol not only affects the individual drinker but also people around them and society as a whole. It has a big impact in workplace with absenteeism, work accidents, and lower performance, which can lead to unemployment. Alcohol costs the employee, employer and social security system largely. It also affects the productivity of a person. The regular Drinkers have a lower productivity rate than those of the unaffected workers. Alcoholism may also lead to loss of job. This could have a cascading effect because if they are idle, it may lead to increased drinking.

Alcohol is found to be the drug of choice among many youth. As a result, underage drinking is emerging as a prominent public health problem. Consumption of alcohol, in the teens, affects their attention span, memory, etc. and they tend to drop out from school/college. Moreover, teens tend to abuse alcohol with other substances (drugs). In addition, there is more incidence of alcoholic teenagers being involved in road accidents, violence, suicide attempts, sexual activities, unprotected sex and also as victims or perpetrators of sexual assault.

According to WHO estimates, there are about 2 billion people worldwide who consume alcoholic beverages and 76.3 million with diagnosable alcohol use disorders. Many regions of the world have reached a stable and saturated consumption status while a few traditional markets, for example, Europe, are showing declining trends of alcohol consumption. As a result, new potential markets such as Asia have become the focus for industry, which are increasingly targeting these markets. Operating through different media channels, the widest variety of promotional strategies are expected to result in a rise in the production, distribution, and consumption of alcohol in the South-East Asian Region. (WHO Global Status Report on Alcohol, 2004)

India is showing a phenomenal increase in alcohol consumption, with the initiation age on an alarming decrease. The illicit market (spurious, seconds and thirds) consumption is far more than the legal sales. Though India is regarded as a traditional dry or abstaining culture, yet it has one of the largest alcohol beverage industries in the world, Bennet et al. (cited in Gururaj G, NIMHANS, 2011). The UB group, for example is the third largest producer in the world. India is the dominant producer of alcohol in the South East Asia Region (65%) and contributes to about 7% of the total alcohol beverage imports into the region. In addition, more than two thirds of the total beverage alcohol consumption within the region is in India. As per the statistics of the Planning Commission of India, 2003, there has been a steady increase in the production of alcohol in the country with the production doubling from 887.2

million litres in 1992-93 to 1,654 million liters in 1999 – 2000 and was expected to treble to 2300 million litres (estimated) by 2006-2007. In the subsequent years too, similar trend is estimated. (Gururaj G, NIMHANS, 2011)

Though the overall prevalence of drinking is low and the fact that there is a strong gender difference in the habit of drinking amongst men and women, frequent and heavy consumption is the dominant pattern. Repeated observations have documented that more than 50% of all Drinkers in India, satisfy the criteria for hazardous drinking. The signature pattern is one of heavy, solitary drinking, predominantly spirits, typically more than five standard drinks per occasion. (Loyi, 2009).

Marginalized communities (geographically isolated, minorities, tribes, economically or socially deprived communities) are often victims of the harmful effects of alcohol. In these areas, alcohol is sometimes introduced for quick profits, exploiting the ignorance of the community regarding harm from alcohol use. Sometimes employees pay wages in alcohol rather than in cash (WHO, 2004). Some marginalized communities, especially tribal communities brew alcohol at home leading to the diversion of food grains to alcohol production further aggravating hunger and poverty.(Loyi, 2009)

The age of initiation to Alcohol is going down. Different states have different legal minimum age limits for alcohol consumption with the lowest being 18 years in Karnataka, 21years in Kerala and the highest at 25 years in Delhi. However, the legal age in India, for serving alcohol is seldom checked. There is increasing lobbying in the alcohol industry for the reduction in the permissible age (Loyi, 2009).

Patterns of alcohol consumption vary widely through the country. Punjab, Andhra Pradesh, Goa, and the North-eastern states have a much higher proportion of male alcohol consumers than the rest of the country. Women tend to drink more in the states of Arunachal Pradesh, Assam and Sikkim in Northeast, Madhya Pradesh, Chattisgarh, Orissa, Andhra Pradesh in Central

and East India and Goa in the West compared to other states (Economicsmate, 2012).

However, there has been a shift within a span of 5 years. Kerala has higher per capita consumption of alcohol in the nation- more than 1.76 gallons per person a year- overtaking traditional hard drinking states like Punjab and Haryana. Shockingly, more than 40% of revenues for Kerala's annual budget come from alcohol. A State run monopoly sells alcohol-Kerala State Beverages Corporation (KSBC) runs, 337 liquor shops, all open seven days a week (except on the 1st day of the month). Each shop caters for an average to an astonishing 80,000 clients. This fiscal year the KSBC is expected to sell \$1 billion dollar of alcohol in a state of 30 million people, up from \$ 12 m when it took over the retail business in 1984. Similarly, revenues from alcohol to the State's exchequer have registered a 100% rise over the past four years. The monopoly is so professionally run that consumers can even send text messages from their phones to a helpline number to record their grievances. There are some 600 privately run bars in the state and more than 5000 shops selling toddy, the local brew. There is also a thriving black market liquor trade (Alaiwah, 2010).

Drinking is killing a lot of people and exacting a heavy social cost. Rising numbers of divorces in Kerala are linked to alcohol abuse. In addition, the majority of road deaths in the state nearly 4000 during 2008 – 2009 are due to drunken driving. Hospitals and rehabilitation centres are packed with patients suffering from alcohol related diseases (Alaiwah, 2010).

The need of the hour is to have a systematic and comprehensive understanding of the present scenario of alcoholism in Kerala, so that necessary steps can be chalked out.

It is in this context that the Research Institute, Rajagiri College of Social Sciences has undertaken the present study on alcoholism to unearth the intensity of the problem and to present the findings before the concerned

authorities and policy makers for evolving appropriate strategies and action programmes for effectively handling the situation.

1.1 Review of Literature

Alcohol is a depressant drug that slows down the activity of the brain, contains absolutely no nutrients, and does not help relieve tension, induce sleep, or solve problems. All alcoholic beverages contain the same mood changing agent ethyl alcohol, though in varying percentage, i.e. 45-55% in distilled spirits (whisky, brandy, rum) 35 – 75% in arrack, 10-12% in wine and 6 – 8% in beer/toddy. About 10 to 15% of Alcohol Users develop alcohol dependence and become alcoholics. Anybody can become an alcoholic barring age, education, intelligence, or socio-economic status. Such a person increases the quantity or frequency and continues drinking even though alcohol causes problems to his health, work life, family, or social relationships. Alcohol is a toxic substance that can affect each and every organ in the body like the stomach, liver, heart, brain, nerves, and so on. With treatment, it is possible to give up drinking totally and live without alcohol. However, as with other diseases, the earlier the help is sought, the lesser the damage and the better the recovery. (T.T. Ranganathan Clinical Research Foundation)

Changing social norms, urbanization, increased availability, high intensity mass marketing and relaxation of overseas trade rules along with a poor level of awareness related to alcohol has contributed to increased alcohol use. Profile of clients in addiction treatment centres in 23 states (including states with prohibition) showed that alcohol was the first or second major drug of abuse in all except one state. (T.T. Ranganathan Clinical Research Foundation)

A large amount of revenue is generated from the sale of alcohol. Yet, the hidden cumulative costs of health care, absenteeism, and reduced income levels related to heavy alcohol use are higher. These costs are estimated to be 60% more than the revenue generated shows a study from Karnataka. Hazardous drinking was significantly associated with severe health problems such as head injuries and hospitalizations. 15 to 20% of traumatic brain injuries were related

to alcohol use, 37% of injuries in a public hospital were due to alcohol. 17.6% of psychiatric emergencies were caused by alcohol. 34% of those who attempted suicide were abusing alcohol. 20% of absenteeism and 40% of accidents at the workplace are related to alcohol. In a public enterprise, a number of workplace accidents reduced to lesser than one fourth of the previous levels after alcoholism treatment. 85% of men who were violent towards their wives were frequent or daily users of alcohol. More than half of the abusive incidents were under the influence of alcohol. (T.T. Ranganathan Clinical Research Foundation).A study of 284 under trials in one sub jail (Thiruvananthapuram) showed that 57% were under the influence of alcohol at the time of committing the crime, including hooliganism, rape and murder, Abuja (cited in Sinha, 2012). Alcoholism is an unpredictable, progressive disease, which not only affects the person who is an alcoholic, but the whole family, Charles et al. (cited in Sinha, 2012). In a family, children are generally ignored if one of the parents is an alcoholic. In these cases, often all the attention of the family members is directed towards the alcoholic or his alcoholism. Most of these children experience some form of neglect or abuse, Black (cited in Sinha, 2012). Hence, it is called a family disease. An assessment showed that domestic violence reduced to one tenth of previous levels after alcoholism treatment. 3 to 45% of household expenditure is spent on alcohol. Use of alcohol increases indebtedness and reduces the ability to pay for food and education, studies show. Alcohol abuse leads to separation and divorce and causes emotional hardship to the family. The emotional trauma cannot be translated in terms of money, but the impact on the quality of lives is significant (T.T. Ranganathan Clinical Research Foundation).

A study conducted by the National Institute of Mental Health and Neurosciences, (NIMHANS) Bangalore, and sponsored by the WHO shows that 20% of women reported domestic violence and 94.5% of women identified their husbands' alcohol consumption as a risk factor in incidents of domestic violence (The Hindu, May 03, 2008).

Alcohol abuse and its related problems cost society, many billions of dollars each year, Rice et al. (cited in National Institute on Alcohol Abuse and Alcoholism, 2006). Each year, approximately 5000 young people under the age of 21 die as a result of underage drinking, this includes about 1900 deaths from motor vehicle crashes, 1600 as a result of homicides, 300 from suicides, as well as hundreds from other injuries such as falls, burns and drowning as shown by studies and surveys. According to data from the 2005 Monitoring the Future (MTF) Study-an annual survey of U S youth, three fourths of 12th graders, more than two thirds of 10th graders and about two in every five 8th graders have consumed alcohol. In addition, when youth drink, they tend to drink intensively, often consuming 4 to 5 drinks at one time. The following studies also show the dangerous effects of alcohol in teens (National Institute on Alcohol Abuse and Alcoholism, 2006). Elevated liver enzymes, including some degree of liver damage were found in Adolescents who drink alcohol, Clark et al. (cited in National Institute on Alcohol Abuse and Alcoholism, 2006). Young Drinkers who are overweight or obese, showed elevated liver enzymes even with moderate levels of drinking, Mauris et al. (cited in National Institute on Alcohol Abuse and Alcoholism, 2006).,Drinking alcohol during the period of rapid growth and development (i.e. prior to or during puberty) may upset critical hormonal balance necessary for social development of organs, muscles, and bones, Dees W.L, Sreevastava, and Hiney J.K (cited in (National Institute on Alcohol Abuse and Alcoholism, 2006).

The percentage of the drinking population aged below 21 years has increased from 2% to more than 14% in the past 15 years, according to studies in Kerala by Alcohol and Drugs Information Centre India, a non-governmental organization (NGO). Alarminglly, the study found that the ‘average age of initiation’ had dropped from 19years to 13 years in the past two decades. (Chennai Youth Times, 2013)

There is incidence even to suggest that the poor are beginning to drink more than they earn- a deadly spiral of alcohol and debt. One recent study by

NIMHANS in the households of rural, urban, town and slum population of 28,500 people in and around the city of Bangalore, Karnataka, found that the average monthly expenditure on alcohol of patients with alcohol addiction is more than the average monthly salary. Using their findings in the Bangalore study, researchers from NIMHANS have calculated that the direct and indirect costs attributable to alcohol addiction is more than triple the profits of alcohol taxation and several times more than the annual health budget of Karnataka. Extrapolating their findings to the whole of India, they estimate the total alcohol revenue for 2003- 04 of 216 billion rupees falls 28 billion rupees short of the total cost of managing the effects of alcohol addiction. These included the tangible costs of health care, occupational, financial, social, and legal factors. (Islamic Information Centre, 2013)

1.2 Scope of the Study

The data related to alcoholism is mind blowing and it is a serious problem in today's society. If we want to reduce the figures involving fatalities, injuries, diseases caused from the use and abuse alcohol, it is important to create awareness among the public, including the large group of users and abusers of alcohol about the impact of alcoholism. Educating and realising the impacts of alcoholism have on the different aspects of a person's life are the best ways of lowering the number of alcohol addicts. Alcoholism affects the lives of individuals and families at the micro level. However, its macro level impact on the economy of a nation are equally if not more severe. Hence, a policy, which regulates sales and the price of drink, is also important.

Over the years, studies have been undertaken in the area of alcoholism. However, not many in-depth studies have been conducted in Kerala in this regard. The present study will bring to focus the various dimensions of this problem. The findings of the study will also serve as a data bank for the planners and policy makers categorically devising appropriate policies and action programs. These include identification of alcohol-prone areas, formulation of an alcohol-consumption policy, preparation of a plan document,

annual year, marking of funds by the LSGs, Government departments, and Corporates for undertaking relevant programmes, and revision of curriculum in the schools/colleges, for mitigating this problem.

1.3 Objectives of the Study

1. To find out the socio-economic profile of the respondents viz: Drinkers (Alcohol Users), Spouses of Drinkers and Non-Drinkers (Non-Alcohol Users).
2. To trace out the history of consumption and circumstances stimulating the drinking behaviour.
3. To highlight the extent of alcohol consumption across the cross section of the society (among the various segments of the people).
4. To know the trends and patterns of alcohol consumption in the state and to differentiate between Hazardous and Potentially Hazardous Drinkers.
5. To find out the impact of alcohol consumption on physical /mental health, psychological well being, family life, social relationships and productivity of the Drinkers (Alcohol Users).
6. To compare the status of physical /mental health, psychological well being, family life, social relationships and productivity of the Drinkers – Alcohol Users (Experimental Group) with that of the Non-Drinkers – Non-Alcohol Users (Control Group).

1.4 Design of the Study

Geographical Area

All the 14 districts of Kerala formed the geographical area of the study.

Universe

The population of Kerala who were Alcohol Users (potentially hazardous and Hazardous Drinkers) in the age group of 12 years and above and Non Alcohol Users in the age group of 18years and above constituted the universe of the study.

Sampling

A multistage stratified random sampling procedure was adopted in selecting the different categories of respondents.

Selection of districts

The 14 districts of Kerala were distributed over the Northern, Central and Southern regions. The Northern Districts comprised Kasargode, Wayanad, Kannur, Kozhikode, and Malappuram. The Central Districts included Palakkad, Thrissur, Ernakulam, and Idukki. The Southern Districts consisted of Thiruvananthapuram, Kollam Pathanamthitta, Alappuzha, and Kottayam.

From the Northern Districts, Wayanad, Kozhikode, and Kannur were taken. Wayanad has been selected for its tribal population; Kozhikode and Kannur were taken because they have a mix of urban, rural, and coastal population.

Thrissur, Ernakulam, and Idukki were taken from the Central region, Idukki being a hilly region and Thrissur and Ernakulam have been reported to have high levels of alcohol consumption. Thiruvananthapuram, Kollam, and Alappuzha were taken from Southern Districts; all three have a mix of rural, urban, and coastal populations. Thus, a total of 9 districts, reported to be having high rates of alcohol consumption were included in the study.

Selection of Respondents

Primary Respondents

There are two groups of respondents viz. Experimental and Control Groups with Drinkers (Alcohol Users) and Non-Drinkers (non-Alcohol Users) respectively.

A drinker in the present study is one who consumes alcohol. The Experimental Group respondent category included; not only Adult men but also women and Adolescent boys and girls, as alcohol consumption has been increased a lot among Adolescent boys and girls and women. Further, the Spouses of the Alcohol Users were also included to understand the extent of alcoholic impact on the family.

With regard to the selection of the respondents of the Experimental Group, from each of the selected nine districts, 110 respondents each with a distribution of 30 Adolescents (20 boys & 10 girls), 70 Adults (60 males & 10 females), and 10 Spouses were proposed to be taken for the study, totalling to 990 respondents. However, due to various technical constraints, viz sensitivity of the topic and reluctance of women and Adolescent girls to reveal the situation, responses of only 941 (622 Adults + 229 Adolescents + 90 Spouses) were considered for the analysis.

With regard to the Control Group, 90 Adult Non-Drinkers with a distribution of 10 each from each of the 9 selected districts were taken. The Control Group was specifically included in the study for a comparative analysis with the 622 Adult Drinkers of the Experimental Group on selected variables.

Thus, total sample size of 1031 primary respondents came under the purview of the study.

Regarding the selection of the above categories of respondents;

The *Adolescents* for the sample were taken from schools and colleges, arts and sports clubs, or from De-addiction centres/Family counselling centres.

The *Adults (Drinkers & Non-Drinkers)* were drawn from different socio-economic and employment backgrounds including professionals, businessmen, agricultural labourers, contract workers, fishermen, single women, etc. and they were approached by going to the particular sites of various employment sectors. Social clubs or De-addiction/Psychiatric Clinics/Family Counselling Centers, Anganwadi Centres, Asha workers etc. were also the sources. Further, the respondents were selected through accidental sampling and snowball technique. The Non-Drinkers with almost similar socio-economic backgrounds of the Drinkers were also selected through the same procedure.

The *Spouses* were the wives of Hazardous/Potentially Hazardous Drinkers and were from different socio-economic and employment backgrounds. They were contacted through household surveys.

Case Study Respondents

For conducting case studies, 18 cases were identified with a distribution of 2 cases each (1 Adolescent + 1 Adult) from the selected 9 districts. Care was taken to include potentially hazardous and Hazardous Drinkers from each of the district.

Anecdote Respondents

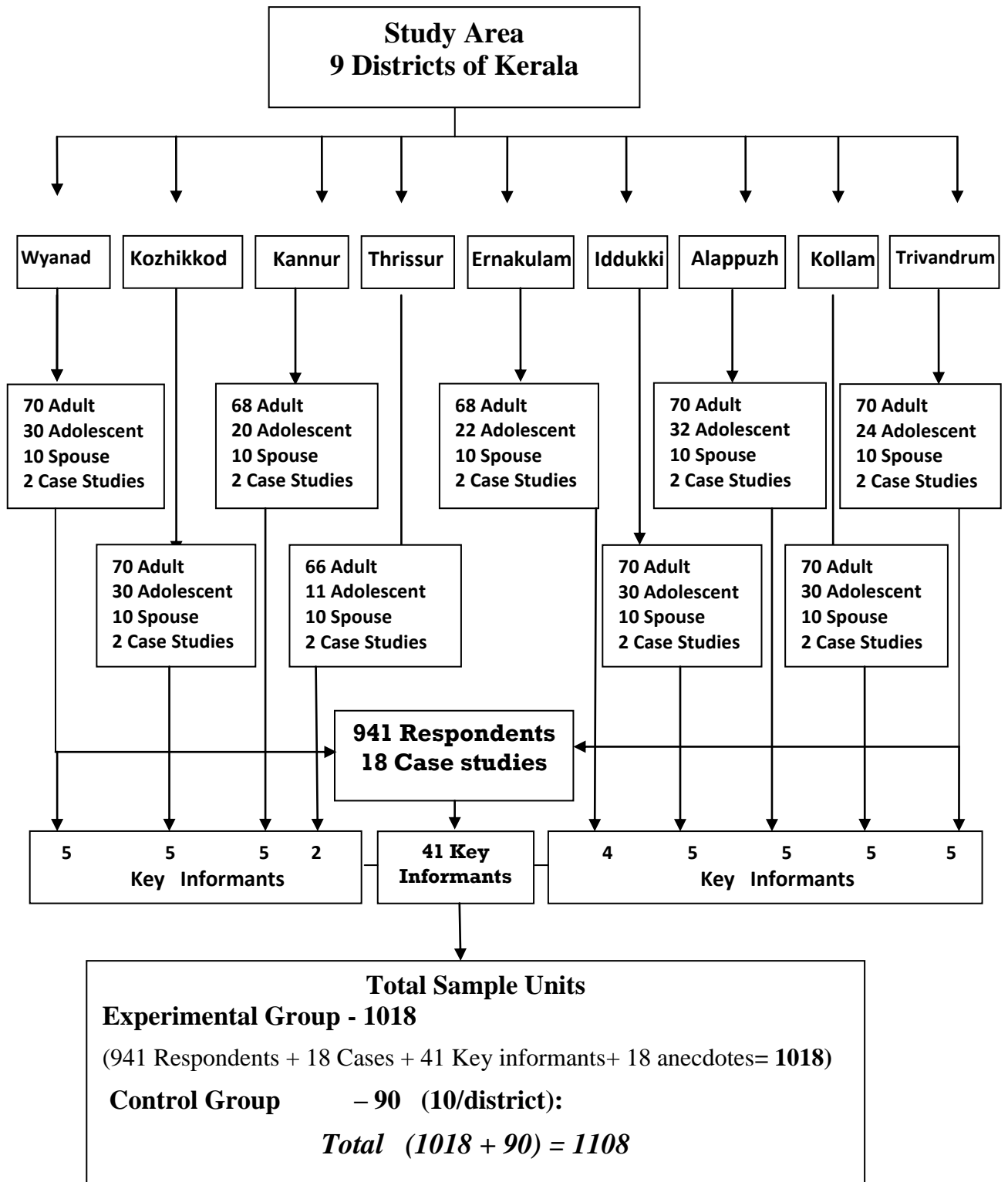
18 anecdotes (from 2 Panchayats per district, i.e. one with a high level of alcohol consumption and the other with the least consumption) were prepared by interaction with the following respondents, viz: Panchayat President, Counsellor, Social Activist, Health workers and Religious Persons, of the respective Grama Panchayats.

Key Informants

41 Key informants viz: a Social Worker/Psychologist of De-addiction Centre/ Psychiatric clinic a Counsellor/Principal of School/College a Police Official/Excise Official, a corporate head and an official of Anti- Alcohol Movements, ranging 2-5 from the 9 selected districts were also included in the study.

In total 1108, respondents (1031 primary respondents + 18 case study respondents + 18 anecdote respondents + 41 key informants) came under the purview of the study.

Sample Distribution



Methods

The study was both descriptive and analytical. Interviews, formal and informal discussions, observations and case studies were the methods used for the collection of data.

Tools

The tools were prepared in consultation with the Chief, Social services division and Chief, Evaluation division of the State Planning Board.

The following tools were administered for drawing information from the respondents:-

- a. *Pre-tested interview schedule*-for the selected respondents (Drinkers, Non-Drinkers and Spouses of Drinkers)
- b. *Interview guide* - for the Key Informants
- c. *Case Study format* - for selected Alcoholics
- d. *Anecdote format* - for respondents from Panchayats
(with high and least alcohol consumption)

1.5 Sources of Data

The sources of primary data were; Alcohol Users among the Adults (male and female), and Adolescents (male and female) and Spouses of Alcohol Users, of the selected 9 districts. Other respondents included key personnel and anecdote respondents.

The sources of secondary data were; documents, official records, and literature pertaining to the subject of the study.

1.6 Orientation to Research Team

A one-day orientation-training programme was imparted to the Research Team comprising Research Investigators from Rajagiri College of Social Sciences and Research Assistants from the State Planning Board at the Rajagiri College of Social Sciences. The orientation was co-ordinated by the Chief, Evaluation Division, the District Planning Officer and the Regional Officer, Ernakulam and the Executive Director and Consultants of the Research Institute.

The forenoon session was devoted to explaining the study outline with special reference to the objectives and the modus operandi of the survey. The post-

lunch session was allotted for familiarization with the tools of data collection viz. Interview Schedule for alcoholics, non-alcoholics, and Spouses of alcoholics. Interview Guide for Key Personnel and format for Case study respondents. Mock interviews were also carried out.

1.7 Actual Data Collection

The Research team of 10 investigators was divided into; 1 field supervisor and 9 investigators of 3 teams. Each team of 3 members was entrusted with the task of collecting data from each of the 3 regions viz: North, South and Central, of the selected 9 districts. The teams were facilitated by Personnel from the Planning Board viz: Research Assistants (RAs) and District Planning Officers. The team of RAs of State Planning Board collected the data of the Control Group.

1.8 Data Processing and Analysis

Data analysis was done using both manual and computerized operations - Statistical Package for Social Science (SPSS). Appropriate statistical tools like chi-square tests were also used wherever relevant. The study report was of both qualitative and quantitative in nature. The analysis was jointly carried out by the Rajagiri team and Chief, Evaluation Division of the State Planning Board.

1.9 Limitations

Though the proposed sample size for the primary respondents was 1080, due to the sensitivity of the topic, and reluctance of the Adolescent girls and Adult females reveal the situation, data could be collected from only 1031 respondents with a distribution of: 712 Adults (622 Drinkers and 90 Non-Drinkers), 229 Adolescents and 90 Spouses. Further, of the 45 key personnel, only 41 co-operated with the study. With regard to Adolescents, as almost all the respondents were students (school was the main source of sample) with a short history of alcohol use, there were not many Harmful Drinkers found in this category.

ANALYSIS AND INTERPRETATIONS

The state of affairs in Kerala in relation to alcoholism is shocking and the state is deteriorating fast. Kerala has the highest per capita consumption - over eight litres (1.76 gallons) per person a year - in the nation, overtaking traditionally hard-drinking states like Punjab and Haryana. (Biswas, 2010). Shockingly, more than 40% of revenues for Kerala's annual budget come from alcohol (Corporation, 2012). Drinking is killing many people and exacting a heavy social cost. Rising numbers of divorces in Kerala are linked to alcohol abuse. In addition, the majority of road deaths in the state nearly 4000 during 2008 – 2009 are due to drunken driving (Alaiwah, 2010). The present scenario in the state wants the need of having a systematic and comprehensive understanding of alcoholism in Kerala so that the necessary steps could be chalked out. It is in this context that the Kerala State Planning Board has decided to conduct the present study of alcoholism, in association with the Research Institute, Rajagiri College of Social Sciences to unearth the intensity of the problem.

The data were collected from the 9 districts (3 districts from each of the region) reported to be having high rates of alcohol consumption. A total of 622 Adult and 229 Adolescent Alcohol Users and 90 Spouses of Alcohol Users from different socio-economic and employment backgrounds were contacted and interviewed to elicit information regarding the subject of the study.

In addition, for making a comparative analysis, a Control Group of 90 Adult Non-Drinkers were interviewed and the analysis was done mainly between the Drinkers and Non-Drinkers of the Adult sample on selected variables. Chi-square tests were also performed wherever necessary to ensure the statistical significance.

The analysis of the data has been divided into 10 sections viz; 1.Socio-Economic Profile of the Respondents, 2.Classification of Respondents into Hazardous and Less Hazardous Drinkers3.Alcohol Use History, 4.Extend, Trends and Patterns of Alcohol Consumption, 5.Impact of Alcohol Consumption on Drinkers in comparison with Non-Drinkers, 6. Withdrawal, Treatment and Allied Aspects 7. Suggestions by the Respondents, 8. Views of Key Personnel, 9.Anecdotes and 10. Case Studies.

2.1 Socio-Economic Profile of the Respondents

Alcohol consumption bears many stereotypes related to economic and social status. The society has a different picture about the drinking habits of people with different socio-economic backgrounds.The present study has made an attempt to profile the socio-economic conditions of the different categories of respondents viz; Adults - Drinkers (Experimental Group) and Non-Drinkers (Control Group), Adolescents (Drinkers) and Spouses (of Drinkers) in order to identify the role of different categories of people related to the occurrence and prevalence of alcoholism in Kerala. The variables analysed in this section were; locality, age, education of respondents and their parents, religion, marital status, type of family, use of other substances, employment status and family income.

Locality

The set target of the study was the rural population. Nevertheless, it does not keep aloof the urban population.

Of the Adults, the majority of the Drinkers (74.8%) and Non-Drinkers (66.7%) were from the rural regions.

83.8% of the Adolescent Drinkers and 86.7% of the Spouses of Drinkers too hailed from the rural regions. (*Refer to table 2.1.1*)

**Table No.2.1.1
Locality of the Respondents**

Locality	Adult		Adolescents	Spouses of Drinkers
	Drinkers	Non-Drinkers		
Rural	465	60	192	78
	74.8%	66.7%	83.8%	86.7%
Urban	157	30	37	12
	23.2%	33.3%	16.2%	13.3%
Total	622	90	229	90
	100.0%	100.0%	100.0%	100.0%

Gender

Though majority of the Alcohol Users in the state are males, females are also included in the present study.

Among the Adults, 89.5% of the Drinkers and 86.5% of the Non-Drinkers were males.

Similarly, a majority (82.5%) of the Adolescent Drinkers were also males. (Refer to table 2.1.2)

**Table No.2.1.2
Gender of the Respondents**

Gender	Adult		Adolescents
	Drinkers	Non-Drinkers	
Male	557	78	189
	89.5%	86.7%	82.5%
Female	65	12	40
	10.5%	13.3%	17.5%
Total	622	90	229
	100.0%	100.0%	100.0%

Age

Individual reactions to alcohol vary and are influenced by many factors such as age, gender, race or ethnicity, physical condition (weight, fitness level, etc), family history of alcohol problems etc. Among which, age is one of the most

important variable examined. The present study has made an effort to include respondents in the different age categories.

Of the Adults, the majority (40%) of the Drinkers belonged to the age group of 30 – 44 years, followed by middle aged (45-59 years) and youth (21-29 years) with 28.8% and 21.9% respectively. The mean age was found to be 40.6 years. With regard to Non-Drinkers too, almost similar distribution of age was noticed.

Regarding the Spouses (of Alcohol Users), most (47.8%) were also in the thirty plus (30-44 years) age category. Middle aged and youth constituted the next majority with 27.8% and 16.7% respectively. (Refer to figure 2.1.1)

Almost all the Adolescents belonged to the age group of either 17-19 years (56.3%) or 15-17years (41%). (Refer to table 2.1.3)

Gender-wise distribution of the Adults showed that most (41.5%) of the females belonged to middle aged (45-59years) category followed by 29.2% with 30-44 years. However, the majority (41.3%) of the males were about 30-44 years, followed by middle aged (27.3%) and youth (22.8%). (Refer to figure 2.1.2)

Figure No.2.1.1
Age of the Respondents – Non-Drinkers/Adults/Spouse

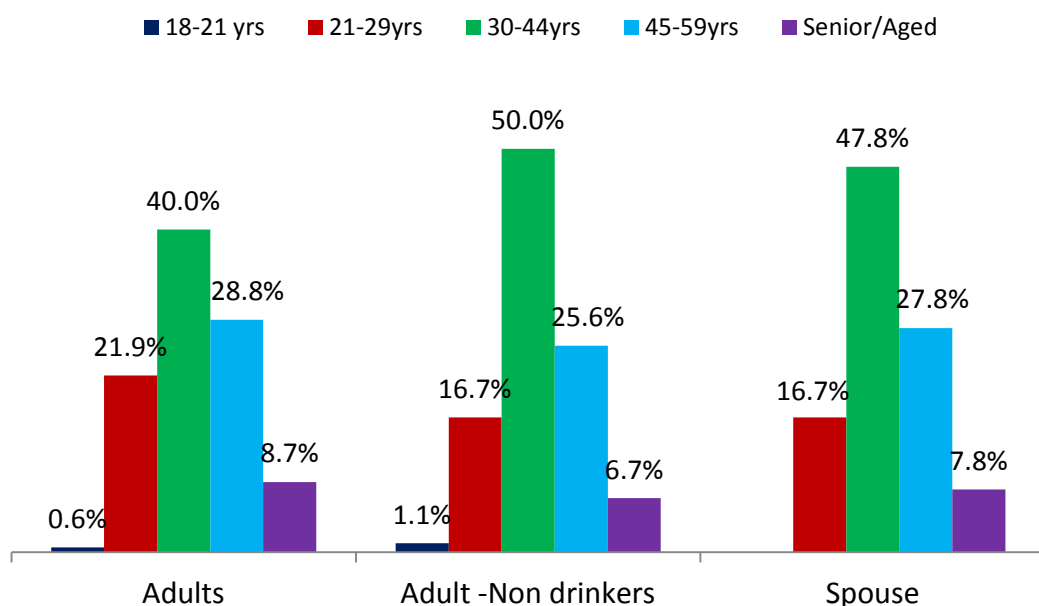
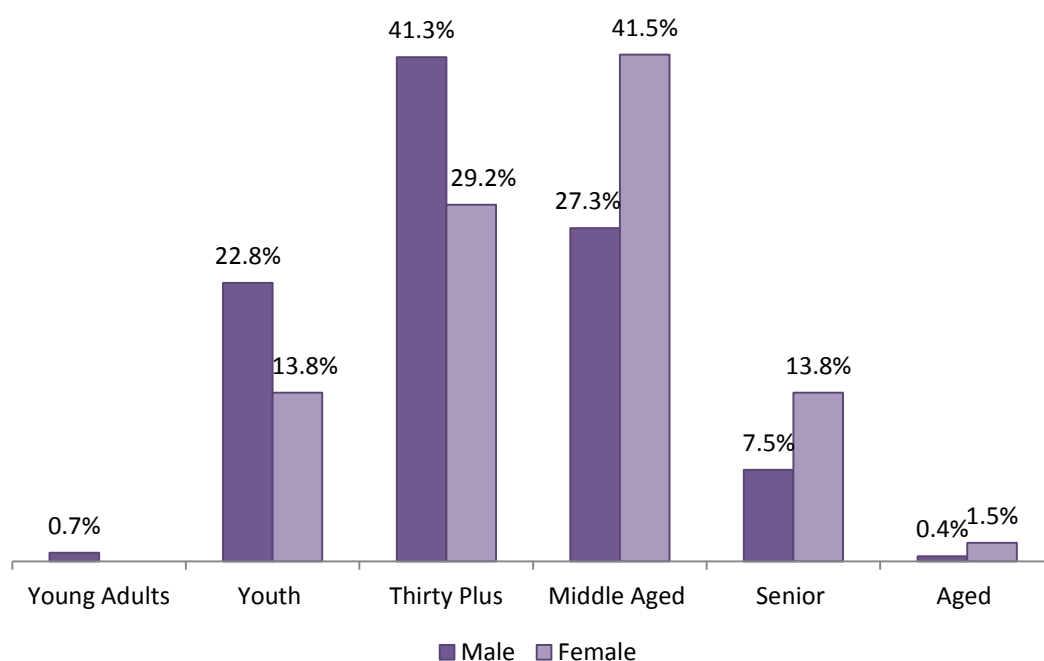


Table No.2.1.3
Age of Adolescent Alcohol Users

Age	Frequency	Percent
13-14 years	6	2.6
15-17 years	94	41.0
Above 17 years	129	56.3
Total	229	100.0

Figure No.2.1.2
Age Vs Gender of the Adult Alcohol Users



Educational Qualification of the Respondents

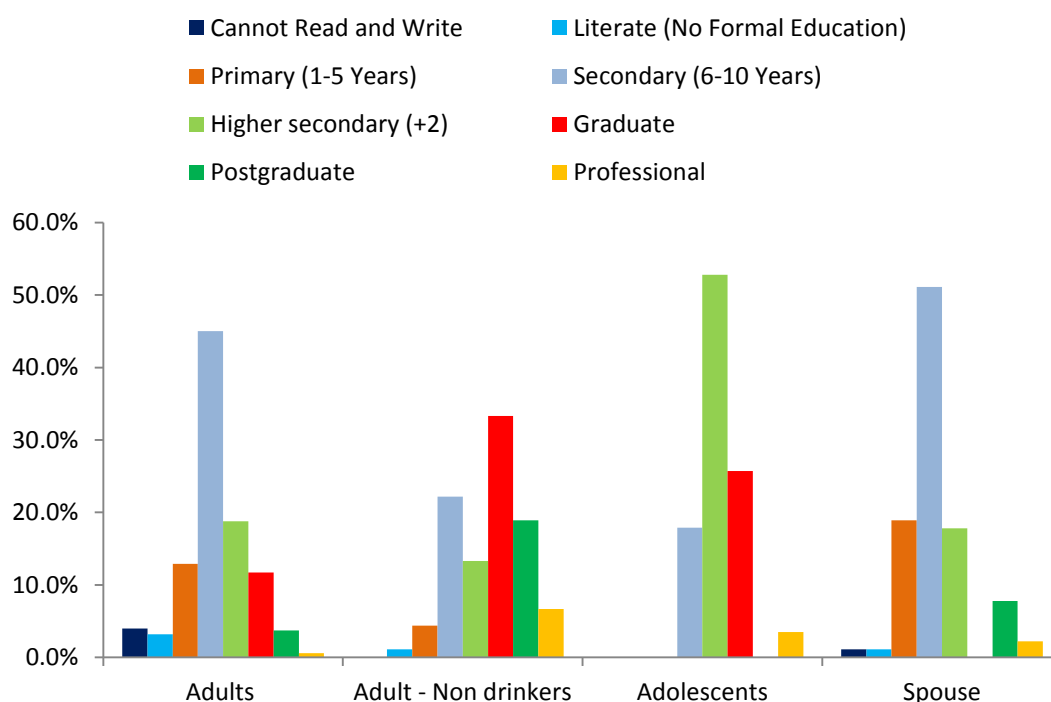
Among the Adults, nearly half (45%) of the Drinkers were having secondary education. 18.8% and 15.4% were with a higher secondary education and graduation or post graduation respectively.

It is to be noted that the educated were found to be more among the Non-Drinkers than the Drinkers with 33.3% graduates, 18.9% postgraduates, and 6.7% professionals. Further, no Non-Drinkers in the sample were reported to be illiterate i.e. cannot read and write.

More than half (52.8%) of the Adolescents were higher secondary students while the next majority (25.7%) were under graduate students.

The Majority (70%) of the Spouses in the sample were either secondary (51.1%) or primary (18.9%) educated followed by 17.8% and 7.8% with higher secondary education and post graduation respectively. (Refer to figure 2.1.3)

Figure No. 2.1.3
Educational Qualification of the Respondents



Educational Qualification of Parents

Parents are considered as the first role model of any child. Education of parents plays an extremely vital role in the healthy functioning of a family and the future of their children. It is a well-known fact that family atmosphere and parents' approach to child have an interrelation with the initiation of drinking of a child. Hence, the present study has a look into the educational qualification of the parents of Drinkers - Adults and Adolescents.

A probe in this regard showed that only just above 10% of the Adult Alcohol Users had their parents with higher secondary or more educational qualification. The majority of them were having secondary (Father -31.7%, Mother- 29.6%) or primary (Father-29.1%, Mother-28.8%) education.

Unfortunately, a good number (Father-28.3%, Mother-32.5%) were illiterates or literates with no formal education.

With regard to the Adolescents, nearly one third of them (Father -34.1%, Mother-31.8%) had their parents with higher secondary or more education. While the majority (46.7% each) of them reported of having secondary education for their parents. (Refer to table 2.1.4)

**Table No. 2.1.4
Educational Qualification of Parents**

Educational Qualification	Adults		Adolescents	
	Father	Mother	Father	Mother
Cannot Read and Write	69	92	11	11
	11.1%	14.8%	4.8%	4.8%
Literate (No Formal Education)	107	110	7	6
	17.2%	17.7%	3.1%	2.6%
Primary (1-5 Years)	181	179	26	32
	29.1%	28.8%	11.4%	14.0%
Secondary (6-10 Years)	197	184	107	107
	31.7%	29.6%	46.7%	46.7%
Higher secondary (+2)	43	34	52	44
	6.9%	5.5%	22.7%	19.2%
Graduate	17	18	24	25
	2.7%	2.9%	10.5%	10.9%
Postgraduate	7	4	2	4
	1.1%	0.6%	0.9%	1.7%
Professional	1	1	-	-
	0.2%	0.2%	-	-
Total	622	622	229	229
	100.0%	100.0%	100.0%	100.0%

Religion

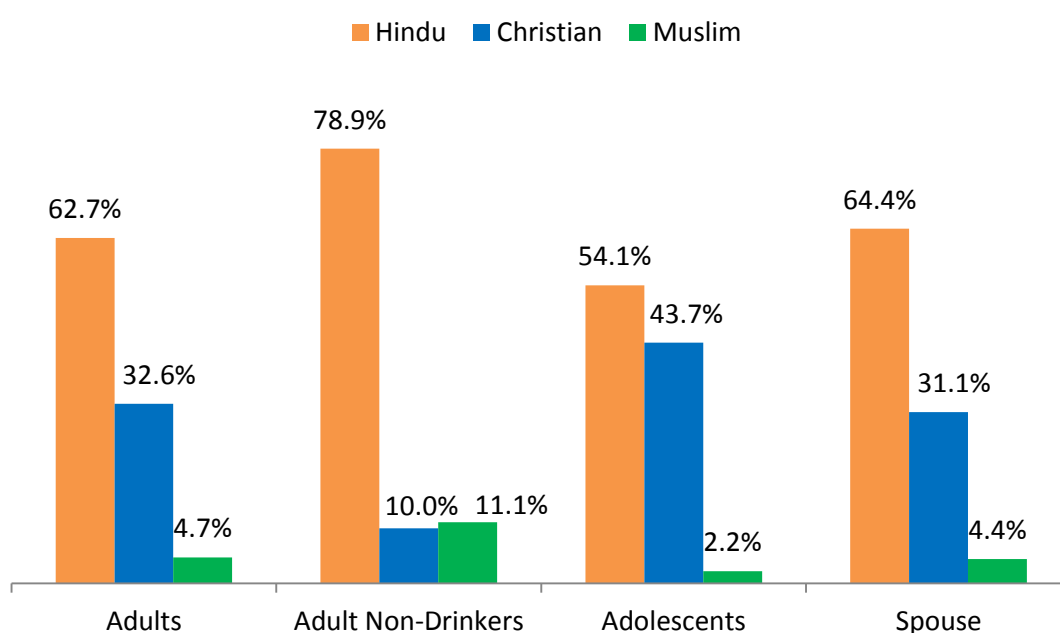
The majority (62.7%) of the Drinkers among the Adults were Hindus, followed by Christians (32.6%) and Muslims (4.7%). With regard to Non-Drinkers,

78.9% of them were Hindus while 10% and 11.1% were Christians and Muslims respectively.

Most (54.1%) of the Adolescents were Hindus followed by Christians (43.7%) and Muslims (2.2%).

Regarding the religion of the Spouses, 64.4% of them were Hindus and the rest constituted Christians (31.1%) and Muslims (4.4%). (*Refer to figure 2.1.4*)

Figure No.2.1.4
Religion of the Respondents



Type of Family

Among the Adults, the majority (79.9%) of the Drinkers were from Nuclear families while the rest belonged to Joint (12.9%) and Extended (7.2%) families.

Most (71.1%) of the Non-Drinkers were also from Nuclear families. However, those from the Joint (18.9%) and Extended (10%) families were slightly higher among the Non-Drinkers than the Drinkers.

Majority of the Adolescents (88.6%) and the Spouses (80%) too belonged to the Nuclear families. (*Refer to table 2.1.5*)

**Table No.2.1.5
Type of Family of the Respondents**

Type	Adult		Adolescent	Spouse
	Drinkers	Non-Drinkers		
Nuclear	497	64	203	72
	79.9%	71.1%	88.6%	80.0%
Extended	45	9	14	18
	7.2%	10.0%	6.1%	20.0%
Joint	80	17	12	-
	12.9%	18.9%	5.2%	-
Total	622	90	229	90
	100.0%	100.0%	100.0%	100.0%

Marital Status of the Adults

Of the Adults, most (71.2%) of the Drinkers were married while 24.4% were single. A few belonged to the categories viz; separated, divorced, widowed, or cohabiting.

Among the Non-Drinkers, 83.3% of them were married and the rest were single. None were found to be separated, divorced or widowed. (*Refer to table 2.1.6*)

**Table No.2.1.6
Marital Status of the Adults – Drinkers & Non-Drinkers**

Marital Status	Drinkers	Non-Drinkers
Single	152	15
	24.4%	16.7%
Married	443	75
	71.2%	83.3%
Separated	12	-
	1.9%	-
Divorced	8	-
	1.3%	-
Widowed	5	-
	0.8%	-
Cohabiting	2	-
	0.3%	-
Total	622	90
	100.0%	100.0%

Use of Other Substances

Use of other substances along with alcohol shows the extent of the danger involved and health concerns in the alcoholics. The long-term effects of drug and alcohol abuse can be very severe and adverse. Substance and alcohol abuse can cause irreversible damage to various organs of the body including the brain. Substance abuse affects the central nervous system of the brain. Memory loss, ability to judge properly, blackouts are some of the most common problems who are heavily into substance abuse. It happens because if the concentration of drugs and alcohol increases to a very high level in the blood, the oxygen carrying capacity of the blood is reduced and thereby a very low amount of blood reaches the brain. This results in the death of brain cells. As a result of which the person can suffer from loss of memory even after the intoxication effect is over (*Substance and alcohol abuse, 2012*). Here, an attempt has been made to find out the type and extent of substance abuse among the Alcoholics and Non-alcoholics.

Of the Adults, except for 26%, all the other Drinkers in the sample had a habit of using substances other than alcohol. A good number (48.6%) had a habit of smoking tobacco while a few (11.6%) had a habit of oral tobacco and 11.1% had the habit of using more than one substance.

With regard to the Non-Drinkers, the majority (92.2%) had not the habit of substance abuse except a few (7.8%) who reported of smoking tobacco.

Among the Spouses, most (92.2%) reported of the substance abuse of their husbands. Of the various items of substance abuse, smoking tobacco was the major one as pointed out by majority (73.3%) of the Spouses.

With regard to the Adolescents, a good number (46.3%) were not involved any of the substance abuse. However, 'Smoking tobacco' was found to be a common habit for most among the rest. (*Refer to table 2.1.7*).

It is to be noted that the Alcohol Users were not only affected by the alcohol but also by the substance abuse as most of them had a habit of using other harmful substances. Smoking tobacco was found to be the most common among

them. Alcohol consumption itself is reported to be a cause of cancer and smoking tobacco increases the vulnerability.

Table No. 2.1.7
Use of other Substances

Use of other Substances	Adult		Adolescents	Spouses
	Drinkers	Non-Drinkers		
No substance abuse	162	83	106	7
	26.0%	92.2%	46.3%	7.8%
Smoking Tobacco	302	7	86	66
	48.6%	7.8%	37.6%	73.3%
Oral Tobacco	72	0	15	7
	11.6%	.0%	6.6%	7.8%
Panparag	-	-	1	3
	-	-	0.4%	3.3%
Ganja/Charas	3	0	2	2
	.5%	.0%	0.9%	2.2%
Sniffing (Correction Fluid/Whitener/ Kerosene)	11	0	9	-
	1.8%	.0%	3.9%	-
Others	3	0	3	-
	.5%	.0%	1.3%	-
More than one item	69	0	7	5
	11.1%	.0%	3.1%	5.6%
Total	622	90	229	90
	100.0%	100.0%	100.0%	100.0%

Employment Status

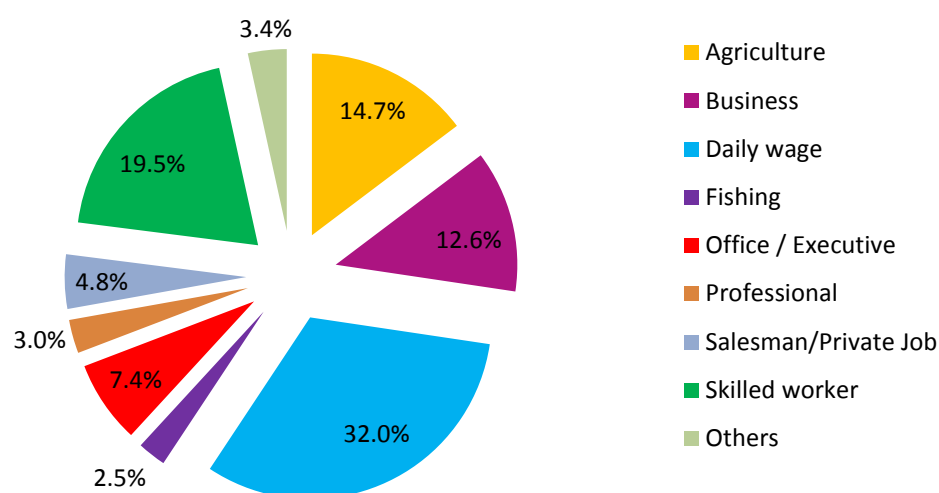
Among the Adults, though the majority (80.8%) of the Drinkers were employed, a good number (19.2%) were unemployed. Most of the employed were daily wage workers or skilled workers viz; drivers, carpenters, mechanics, etc. The study also included; business men, agricultural workers, office staff/executives, fishermen, private employees and professionals in the sample. Of the Non-Drinkers, the majority (80%) of them were also employed.

Of the Spouses, more than half of them were unemployed. However, a good number (46.7%) were employed as daily wage earners, self employed, NREG workers, employees of private firms etc. (Refer to table 2.1.8)

**Table No.2.1.8
Employment Status of the Respondents**

Employment Status	Adult		Spouse
	Drinkers	Non-Drinkers	
Unemployed	120	18	48
	19.2%	20.0%	53.3%
Employed	502	72	42
	80.8%	80.0%	46.7%
Total	622	90	90
	100%	100%	100%

**Figure No.2.1.5
Type of Occupation of Adult-Drinkers**



Monthly Income of the Family

Among the Adults, the majority (42.3%) of the Drinkers belonged to a lower income category of Rs.5000/-Rs.10000/- followed by Rs.10000/-25000/- (33.8%) while Non-Drinkers in the sample were from a slightly higher economic background with more than half of them belonging to either Rs.10000/ - Rs.25000/- (32.2%) or Rs.25000/ – Rs. 50000/- (20%) income category, followed by Rs.5000/ – 10,000/- (27.8%) category.

More than one third (35.8%) of the Adolescents reported that their family had an income of Rs.10000/-25000/-. 25.4% and 24.5% each belonged to the category of below Rs.5000/- and Rs.5000/- to Rs.10000/- respectively.

More than 60% of the Spouses were from the families of having a lesser monthly income of either Rs. 5000/- to Rs.10000/-(44.4%) or below Rs.5000/- (18.2%). However, 34.4% of them had a monthly income of Rs.10000 – Rs.25000/-. (Refer to table 2.1.9)

**Table No.2.1.9
Monthly Income of the Family**

Monthly Income	Adults		Adolescents	Spouses
	Drinkers	Non-Drinkers		
Below Rs.5000/-	113	8	58	22
	18.2%	8.9%	25.4%	24.4%
Rs.5000 – 10000/-	263	25	56	34
	42.3%	27.8%	24.5%	37.8%
Rs.10,000-25,000/-	210	29	82	31
	33.8%	32.2%	35.8%	34.4%
Rs.25,000-50,000/-	30	18	14	3
	4.8%	20.0%	6.1%	3.3%
Rs.50,000- 100,000/-	4	6	-	-
	0.6%	6.7%	-	-
Rs.1 Lakh & above	2	4	-	-
	0.3%	4.4%	-	-
Total	622	90	229	90
	100.0%	100.0%	100.0%	100.0%

An overview of the socio-economic profile portrayed that most of the respondents viz: Adults, Adolescents and Spouses were from rural areas. Among the Adults, there were two categories of respondents viz. Drinkers and Non- Drinkers. A good number among both of them belonged to the age group of 30-44years followed by the middle aged and youth. Of the Drinkers, females were more in the age group of 45-59years whereas males were more in 30-44years category. Drinkers were found to be less educated compared to Non-Drinkers as most of them were secondary educated while majority among the Non-Drinkers were graduates, post graduates or professionals. The parents (both father and mother) of Drinkers were also less educated as only less than 10% had above secondary education. Irrespective of their drinking habit, most were from Hindu community followed by Christians and Muslims. However,

representation of the Christian community was less among Non-Drinkers compared to Drinkers. Further, a good majority of the Adults were from nuclear families. Though, none among the Non-Drinkers were separated, divorced or widowed, most among the Drinkers & Non-Drinkers were married.

Most of the Drinkers had a habit of substance abuse. Smoking tobacco was found to be the most common among them followed by oral tobacco and Ganja. Though substance abuse was less among the Non-Drinkers, a few resorted to smoking tobacco. Regarding employment, most of the Drinkers and Non-Drinkers were reported to be employed in one or other occupation. Further, family income was found to be comparatively less among the Drinkers.

The Adolescents were mainly males belonging to the age group of 17-19years or 15-17years. The majority were higher secondary students and parents of a good number were having secondary education or above. Though Hindus were prominent, Christians followed it in a slight margin. Nuclear families dominated the Adolescent sample too. Family income of the majority was in between Rs.10000/- to Rs.25000/- per month.

The majority of the Spouses were in 30-44years age category. Middle aged and Youth constituted the next majority. Most of them were secondary or primary educated. Hindu community was prominent among the Spouses followed by Christians and Muslims. More than half of them were unemployed and a good number having only an income of Rs.5000-10000 or below.

2.2 Classification of Respondents: Harmful and Less Harmful Drinkers

Alcoholism, a chronic illness is characterized by repeated drinking of alcoholic community, interferes with the drinker's health and social or economic functioning, and leads to continuing problems. An alcoholic is unable to recognise these problems or if he/she takes note, is not able to stop drinking completely. Alcoholism is a state in which an individual loses control over his alcohol intake wherein he is constantly unable to refrain from drinking, once he begins (Johnson, 1973). According to Keller and Efron (1955), alcoholism is characterized by the repeated drinking of alcoholic beverages to an extent that

exceeds customary use or compliance with the social customs of the community and that adversely affects the drinker's health or interferes with his social or economic functioning.

Understanding the frequency of drinking helps us to differentiate an alcoholic from an 'occasional drinker'. Any person who takes alcohol is a 'drinker', while a 'compulsive drinker' who cannot live without taking alcohol is called, 'alcoholic'. *Clinebell (1956)* has defined 'alcoholic' as one, whose drinking interferes frequently or continuously with any of his important life adjustments and interpersonal relationships. When alcohol enters the bloodstream, it circulates all over the body. Its effects depend on the quantity taken. They vary depending on the speed at which a person drinks. His/her weight and the presence of food in the stomach also make a difference. The percentage of alcohol in the drink and to some extent, some psychological factors like; which one and with whom is drinking are also important.

Based on the various factors involved in alcohol consumption, the Drinkers can be divided into different categories. Here, an attempt has been made to classify the Alcohol Users in the sample into harmful and less Harmful Drinkers by taking into consideration a few significant variables viz: frequency of drinking, quantity of drinking and time of drinking. A score matrix was prepared in this regard and based on this the relationship between harmful drinking and socio-demographic variables was analysed. Accordingly, this section is divided into two viz. 1. Score matrix 2. Harmful drinking Vs. Adults and Adolescents and 3.Harmful drinking and Socio-demographic variables.

2.2.1 The Score Matrix

Of the three categories of respondents, Adults and Adolescents were classified into Harmful and Less-Harmful Drinkers based on the three variables viz: Frequency of drinking, Quantity of consumption and Time of the first drink in a day. However, the Spouse category was not taken for classification since they are not Alcohol Users and the data on frequency of drink, quantity of

consumption and time of first drink of their husbands was drawn based on their perceptions.

With regard to the score matrix, the total Score given was 10. Those who scored **above 6**, were classified into *Harmful Drinkers* and **6 and below** into *Less Harmful Drinkers*. (Refer to table 2.2.1.)

**Table No. 2.2.1.1
Score Matrix**

Variables	Classification	Score	Max Score
Quantity of Drink	Low Quantity (<180 ml/day)	1	2
	High quantity (\geq 180 ml)- Score 2	2	
Frequency of Drink	Highly Infrequent (Less Than once a month - 2-3 days a Month)	1	4
	Infrequent (1-2 Days/week to 3-4 Days/week)	2	
	Frequent (Nearly Every Day – Every Day)	3	
	Highly Frequent (More than once a day, more than twice a day)	4	
Time of First Drink in a Day	Evening	1	4
	Afternoon	2	
	Forenoon	3	
	Early Morning	4	
	Total Score		10

2.2.2. Harmful Drinking Vs Adults and Adolescents

Based on the above score matrix, the Adult and the Adolescent respondents were given scores and were categorized into Harmful and Less-Harmful Drinkers.

Harmful Drinking Vs Adults

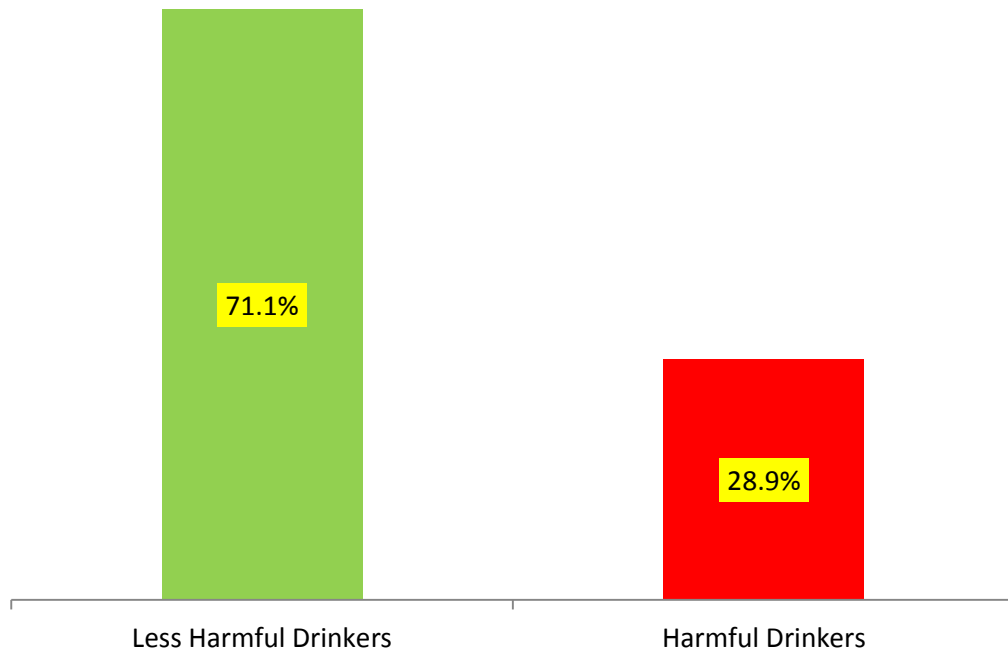
It was evident from the data that the majority (71.1%) of the Adults belonged to the Less-harmful category i.e. they got only 6 marks or below. However, nearly 3 out of every 10 Adult (28.9%) Alcohol Users in the sample were found to be Harmful users. The mean score among Adults was found to be 5.7, which is almost near to the cut of score 6 and it shows the vulnerability of the Less-Harmful Drinkers to become Harmful. (Refer to Table 2.2.2 & Figure 2.2.1).

It is to be noted here that there is every possibility of the Less- harmful category being prone to Harmful drinking, as alcoholism is a progressive disease and can be a terminal illness if untreated.

**Table No. 2.2.1.2
Harmful Drinking Vs Adults**

Scoring			Cumu. Percent	Category
Score	Frequency	Percent		
3.00	42	6.8	71.1%	Less Harmful Drinkers (442)
4.00	156	25.1		
5.00	148	23.8		
6.00	96	15.4		
7.00	60	9.6	28.9%	Harmful Drinkers (180)
8.00	42	6.8		
9.00	55	8.8		
10.00	23	3.7		
Total	622	100.0	100%	
<i>Mean</i>			5.7026	
<i>Median</i>			5.0000	
<i>Mode</i>			4.00	
<i>Std. Deviation</i>			1.87619	

Figure No.2.2.1
Harmful Drinking Vs Adults



Harmful Drinking Vs Adolescents

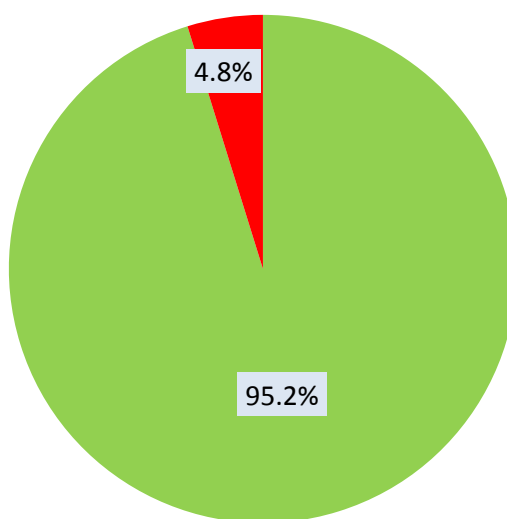
In tune with the score matrix, the Adolescent respondents were also categorised into two viz. Harmful and Less Harmful Drinkers. As per the data, majority (95.2%) of the Adolescent Drinkers was reported to be Less-harmful and only a negligible percent fell into the category of Harmful Drinkers. The mean score among Adolescents was just above 4; which means they are a little far from the cut off score or Harmful drinking. As almost all of them are school / college going students, the probability of early morning drinking and more frequent drinking are rare among this category which in turn might have reduced the score. (Refer to table 2.2.3 & Figure 2.2.2)

**Table No.2.2.1.3
Harmful Drinking Vs Adolescents**

Scoring				
Score	Frequency	Percent	Cumulative Percent	Category
3.00	64	27.9	95.2%	Less Harmful Drinkers (218)
4.00	98	42.8		
5.00	44	19.2		
6.00	12	5.2		
7.00	3	1.3	4.8%	Harmful Drinkers (11)
8.00	5	2.2		
9.00	3	1.3		
Total	229	100.0	100%	229
Mean				4.2096
Median				4.0000
Mode				4.00
Std. Deviation				1.19930

**Figure No. 2.2.2
Harmful Drinking Vs Adolescents**

■ Less Harmful Drinkers ■ Harmful Drinkers



2.2.3 Harmful Drinking of Adults and Socio-demographic Variables

Socio-demographic variables play an important role with regard to the consumption of alcohol by the Adults. An attempt has been made here to analyse the association between the harmful drinking of Adults and prominent socio-demographic variables viz: age, sex, education, and religion.

Harmful Drinking of Adults and Age

Age-wise analysis showed that Harmful drinking was found to be more among the older age groups compared to younger age groups. i.e., senior / aged people (48.2%), followed by middle aged groups (33%) and thirty plus category (31.3%). (Refer to table 2.2.2.1)

It is to be noted that as the age increases, the Harmful drinking also increases. Naturally, there is a tendency for Less-Harmful Drinkers in the younger age groups to become addicted to alcohol in due course. Hence, it is essential to take adequate measures to curtail the drinking among the younger generation.

**Table No. 2.2.2.1
Harmful Drinking of Adults Vs Age**

Age	Harmful drinking		Total
	Less Harmful	Harmful	
Young Adults (18-21years)	4	0	4
	100.0%	.0%	100.0%
Youth (21-29years)	119	17	136
	87.5%	12.5%	100.0%
Thirty Plus (30-44years)	171	78	249
	68.7%	31.3%	100.0%
Middle Aged (45-59years)	120	59	179
	67.0%	33.0%	100.0%
Senior /Aged (60 years& Above)	28	26	54
	51.8%	48.2%	100.0%
Total	442	180	622
	71.1%	28.9%	100.0%

Harmful Drinking of Adults and Gender

Gender-wise, Harmful drinking is found to be much higher among Men (31.8%) compared to Women (4.6%). (Refer to table 2.2.2.2)

**Table No. 2.2.2.2
Harmful Drinking of Adults Vs Gender**

Sex	Harmful drinking		Total
	Less Harmful	Harmful	
Male	380	177	557
	68.2%	31.8%	100.0%
Female	62	3	65
	95.4%	4.6%	100.0%
Total	442	180	622
	71.1%	28.9%	100.0%

Harmful Drinking of Adults and Education

Education-wise, Harmful drinking was found to be less among the Adults with higher education as compared to those with lower education; i.e. Harmful Drinkers among professionals, postgraduates and graduates in the sample were only 0.0%, 4.3% and 9.6%, respectively whereas Harmful Drinkers among primary educated, secondary educated and uneducated were; 38.8%, 37.1%, and 28% respectively. (Refer to table 2.2.2.3).

**Table No. 2.2.2.3
Harmful Drinking of Adults Vs Education**

Education	Harmful drinking		Total
	Less-Harmful	Harmful	
Cannot Read and Write	18	7	25
	72.0%	28.0%	100.0%
Literate (No formal education)	17	3	20
	85.0%	15.0%	100.0%
Primary (1-5 Years)	49	31	80
	61.3%	38.8%	100.0%
Secondary (6-10 Years)	176	104	280
	62.9%	37.1%	100.0%

Higher secondary (+2)	90	27	117
	76.9%	23.1%	100.0%
Graduate	66	7	73
	90.4%	9.6%	100.0%
Postgraduate	22	1	23
	95.7%	4.3%	100.0%
Professional	4	0	4
	100.0%	.0%	100.0%
Total	442	180	622
	71.1%	28.9%	100.0%

In short, the present study has classified Adult and Adolescent respondents into 'Harmful Drinkers' and 'Less-Harmful Drinkers' (Spouses were not classified, as they are not Alcohol Users) in relation to the variables viz: early morning drinking, frequency of drinking and quantity of drinking. Around 3 Adults and 0.5 Adolescents among every 10 Adults/Adolescents in the sample were found to be Harmful Drinkers. A cross analysis of the Harmful Drinkers with the socio-economic variables revealed the probability of increase in Harmful Drinking among Adults in tune with the increase in age. Further, it was found that men and those with less education are more vulnerable to Harmful Drinking.

2.3 Alcohol Use History

Although, people consume alcohol mainly for their psychological effects, they are often consumed within specific social contexts and may even be a part of religious practice. The initiation of alcohol consumption varies from person to person depending on various factors of which the prominent ones are examined here. The variables dealt in this regard were; With whom they Initiated Drinking, Age at First Drink, Reason for First Drink, Age at onset of Regular Drinking, Reason for Regular Drinking, and With whom they Regularly Drink.

With whom Initiated Drinking

The analysis of the data of Adults reaffirmed the fact that the majority (71.7%) initiated drinking with their peers, 13.1% by self, 11.7% along with their relatives, and 3.5% with others (Strangers, Acquaintances, Neighbours etc.).

Most (55.5%) of the Adolescents too, initiated drinking with their peers. While 22.7% began it with their relatives, 18.8% by self and 3.5% with others (Strangers, Acquaintances, Neighbours etc.) (*Refer to table 2.3.1*)

Table No. 2.3.1
With whom Initiated Drinking

Initiation with Whom	Adult	Adolescent
Self	81	43
	13.1%	18.8%
With Peers	446	127
	71.7%	55.5%
Relatives	73	52
	11.7%	22.7%
Others(<i>Strangers, Acquaintances, Neighbours etc.</i>)	22	7
	3.5%	3.1%
Total	622	229
	100%	100%

Age at First Drink

A potentially powerful predictor of progression to alcohol-related harm is age at first use. Evidence suggests that earlier the age at which young people take their first drink of alcohol, the greater the risk of abusive consumption and the development of serious problems, including alcohol disorders. Although, early onset of alcohol use has been closely associated with numerous adverse short-term and long-term consequences, very little is known about the relationship between early onset and the subsequent development of alcohol abuse and dependence. Early onset of alcohol use is a major public health concern in terms of its impact on adolescent morbidity and mortality. In the United States, Grant, and Dawson's analysis of the National Longitudinal Alcohol Epidemiological Survey found that over 40% of all individuals who reported drinking alcohol before the age of 14 became alcohol dependent, four times the rate observed for those who first reported drinking at ages 20 and older.

The analysis of empirical data in the present study showed that the average age of initiation of drinking for Adult respondents was found to be 20.3years. In other words, more than half (61.7%) of them had their first drink at the age group of 15-21 years. However, 20.4% had it at the age group of 22-29 years, 10.1% at less than 14 years, and 7% in the age group of 30-44 years while only 0.8% at above 45 years. (*Refer to table 2.3.2*)

With regard to the Adolescents, a significant number (33.6%) had their first drink at below 14years while the remaining 66.4% had at the age group of 15-21 years. Though, the govt. of Kerala recently has risen the drinking age from 18 to 21years, the mean age at first drink for Adolescents in the sample was found to be about15.2 years. (*Refer to table 2.3.2*)

It is to be noted that the earlier the age at which youth take their first alcoholic drink, the greater will be the risk of developing alcohol related problems.

Table No. 2.3.2
Age at First Drink

Age Group (In years)	Adult <i>Mean -20.3</i>	Adolescent <i>Mean – 15.2</i>
Below 14	53	77
	10.1%	33.6%
15 – 21	324	152
	61.7%	66.4%
22 – 29	107	-
	20.4%	-
30 – 44	37	-
	7.0%	-
More than 45	4	-
	0.8%	-
Total	525	229
	100%	100%

Reasons for First Drink

The reason for the first use of alcohol is an important variable to be considered while looking into the alcohol use history. A multitude of reasons have been

cited by the two categories of respondents viz: Adults and Adolescents in this regard.

Most (47.4%) of the Adults initiated alcohol consumption just for ‘experimentation’, while 40.5% for ‘modelling the peer’. The other reasons cited were; modelling of significant Adults (4%), for maintaining social status (1.8%), for relieving from negative mood (1.4%), for enhancing their positive mood (2.3%), for relieving physical problems (1.9%) and only 0.6% for coping with stress.

With regard to Adolescents, ‘Experimentation’ (46.7%) and ‘Peer modelling’ (43.7%) were the main reasons cited. The other major reasons were; modelling of significant Adults (6.1%), to maintain social status (0.9%), to enhance positive mood states (2.2%) and to relieve negative mood (0.4%). (*Refer to table 2.3.3*)

Table No. 2.3.3
Reasons for First Drink

Reasons	Adult	Adolescent
Experimentation	295	107
	47.4%	46.7%
Peer Modeling	252	100
	40.5%	43.7%
Modeling of Significant Adults	25	14
	4.0%	6.1%
To Maintain Social Status	11	2
	1.8%	0.9%
To Relieve Negative Mood States	9	1
	1.4%	0.4%
To Enhance Positive Mood States	14	5
	2.3%	2.2%
To Relieve Physical Problems	12	-
	1.9%	-
To Cope With Stress	4	-
	0.6%	-
Total	622	229
	100%	100%

Age at Onset of Regular Drinking

It is commonly known that early alcohol use increases the risk of alcohol addiction in the later years. The regular use of alcohol in early adolescence

increases the vulnerability to a number of alcohol related problems as it occurs at a time when physiological and social conditions (e.g., onset of puberty and concerns regarding the opinions of one’s peers) strongly support continued and more regular use.

The data in this regard portrayed that most of the Adults (41.3%) in the sample started regular drinking at the age of 22-29 years, followed by 20% at 15-21 years, 19.8% at 30-44 years, and 2.5% at above 45 years while only 0.8% began it at their 14 years or even before that. *(Refer to table 2.3.4)*

Of the Adolescents, 60.7% started regular drinking at the age of 15-21 years. However, 10.9% started it at the age of 14 years or before. *(Refer to table 2.3.4)*

A good number (27.8%) of Spouses opined that their husbands started regular drinking at the age of 22-29 years, followed by 22.2% perceived that their husband started it at 30-44 years, 14.5% at 15-21 years and 3.1% at 14 years or before. A few (1.1%) reported that their husbands became regular Drinkers only after the age of 45 years. A good number (31.1%) were unaware of the age at which their husbands started regular drinking. *(Refer to table 2.3.4)*

**Table No. 2.3.4
Age at Onset of Regular Drinking**

Age Group (in years)	Adult	Adolescent <i>Avg-16.09</i>	Spouse
14 & below	5	25	3
	0.8%	10.9%	3.3%
15-21	124	114	13
	20.0%	60.7%	14.5%
22-29	257	-	25
	41.3%	-	27.8%
30-44	123	-	20
	19.8%	-	22.2%
45& above	16	-	1
	2.5%	-	1.1%
Not a Regular Drinker / Don't know	97	90	28
	15.6%	39.3%	31.1%
Total	622	229	90
	100%	100%	100%

Reasons for Regular Drinking

‘Peer pressure’ was reported as one of the main reasons for drinking regularly by majority (47%) of the Adults. The next majority (35%) had a feeling of ‘wanted to use’, while 13.3% had ‘craving’. Another 13.3% stated that they drink regularly to ‘enhance their positive mood’.

For majority (61.1%) of the Adolescents too, ‘Peer pressure’ was a main reason to use alcohol regularly while for 23.1% it was the feeling of ‘wanted to use’.

Majority (63.3%) of the Spouses blamed ‘peer pressure’ for their husbands’ drinking habit. However, 18.9% and 13.3% stated it as ‘craving for alcohol’ and ‘wanted to use’ respectively. (Refer to table 2.3.5)

Table No. 2.3.5
Reasons for Regular Drinking

Reasons	Adult N-622	Adolescent N-229	Spouse N-90
No Response	33	23	0
	5.3%	8.7%	0.0%
Craving	83	9	17
	13.3%	3.9%	18.9%
Peer Pressure	292	140	57
	47.0%	61.1%	63.3%
Wanted To Use	218	53	12
	35.0%	23.1%	13.3%
Withdrawal	12	0	4
	1.9%	0.0%	4.4%
Negative Mood	30	2	4
	4.8%	0.9%	4.4%
Coping With Stress	54	2	1
	8.7%	0.9%	1.1%
Retaliation	3	3	0
	0.5%	1.3%	0.0%
Pain	18	0	0
	2.9%	0.0%	0.0%
Boredom	25	3	6
	4.0%	1.3%	6.7%
Positive Mood	83	7	0
	13.3%	3.1%	0.0%

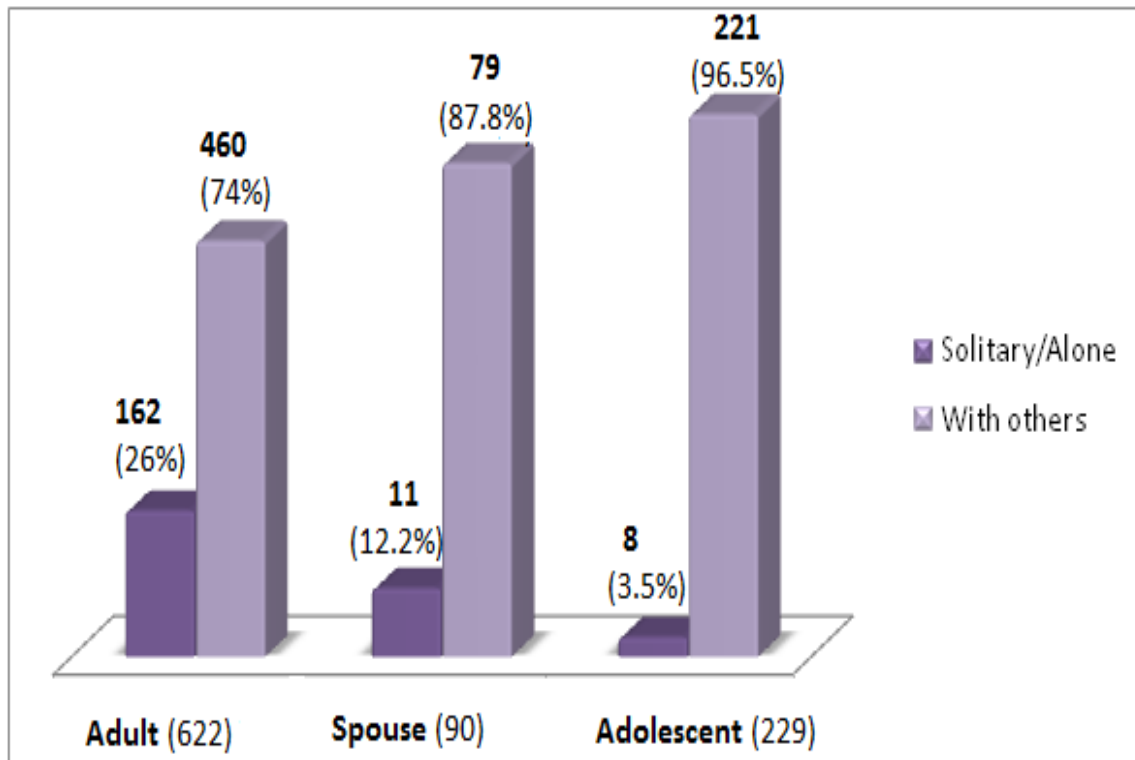
Company of Others while Drinking

Drinking alone, is a much more pure and forthright form of imbibing, because it focuses entirely on the simple act of putting alcohol into the bloodstream. It tosses aside all the half-hearted pretensions about merely using alcohol as a social tool as in the case of drinking in the company of others.

About three fourth of the Adults, 96.5% of the Adolescents and husbands of 87.8% of the Spouses had a company of others while drinking; mostly it was their friends, besides co-workers and relatives. (Refer to figure 2.3.1 & table 2.3.6)

A cross analysis of the data with Harmful drinking showed that solitary drinking was found to be more among (39.4%) Harmful Drinkers compared to less Harmful Drinkers (20.6%). (Refer to table 2.3.7)

Figure No. 2.3.1
Company of Others while Drinking



**Table No. 2.3.6
With Whom They Drink**

With Whom	Adult	Adolescent	Spouse
Friends	371	195	65
	80.7%	88.2%	84.4%
Acquaintances	9	1	2
	1.9%	0.5%	2.3%
Co- workers	41	22	10
	8.9%	10.0%	11.1%
Relatives	36	1	2
	7.8%	0.5%	2.2%
Strangers	3	2	0
	0.7%	0.9%	0.0%
Total	460	221	79
	100%	100%	100%

**Table No. 2.3.7
Company While Drinking Vs Harmful Drinking of Adults**

Company while drinking	Category		Total	Chi square
	Less Harmful	Harmful		
Solitary/Alone	91	71	162	23.661**
	20.6%	39.4%		
With others	351	109	460	p=.000
	79.4%	60.6%		
Total	442	180	622	
	100%	100%	623	

A gist of the alcohol use history portrayed that though, the majority of the Alcohol Users were found to be initiated drinking with their peer, Adolescents had received more support from their relatives. The age at first drink was found to be on an average of 20.3years among Adults and 15.2 years among Adolescents. For both of the categories, 'Experimentation', and 'Peer modeling' were the major reasons cited for the initiation of drinking. As for the Adults, they started their regular drinking at the age group of 22-29 years and 'Peer pressure' or 'Wanted to use' were the reasons for the same. Though, a good number of Adolescents were not regular Drinkers, mainly 'Peer pressure'

made, rest of them as regular Drinkers and at an average age of 16 years they started it. Although, most of the Alcohol Users in the sample preferred to drink with their friends, solitary drinking was reported mostly by the Spouses and least by the Adolescents. With regard to the Harmful Drinkers, solitary drinking was found to be more compared to the Less- Harmful Drinkers.

2.4 Extent, Trend, and Patterns of Alcohol Consumption

It is generally observed that variations in alcohol consumption are based on factors like; types of beverages consumed preferentially, occasions on which consumption typically occurs, drinking levels that are considered normal and population subgroups for whom drinking is considered acceptable.

This section highlights the extent, trends and patterns of alcohol consumption among the Alcohol Users in the state of Kerala. The variables considered in this regard were; frequency of drinking, usual time of first drink in a day, usual place of drink, pattern of use, estimated daily use of alcohol, type of alcohol used, average amount spent for alcohol daily and usual mix with alcohol. Besides, a cross analysis of the data with the Harmful drinking of Adults was also carried out wherever necessary.

Frequency of Drinking

Considering the regularity of alcoholic consumption, the alcoholics were categorised into (a) *highly infrequent users* - where the intake of alcohol is less than once a month or two to three days a month, (b) *Infrequent users* - where the frequency of consumption ranges between one to two days in a week to three to four days in a week (c) *frequent users* - who consume alcohol nearly every day or every day and (d) *highly frequent users* - who consume alcohol more than once a day or more than twice a day.

Among the Adults, the data showed that 34.1% were frequent users and 5 % were highly frequent users of alcohol. On the contrary, 48.2% belonged to infrequent category and 12.7% to highly infrequent category.

With regard to Adolescents, only a few (6.1%) were found to be frequent (3.5%) or highly frequent (2.6%) users of alcohol whereas a great majority (93.9%) of them were infrequent (29.7%) or highly infrequent (64.2%).

Most (63.3%) of the Spouses in the sample reported that their husbands were frequent (53.3%) or highly frequent (10%) users of alcohol. 18.9% and 17.7% opined of their husbands' frequency of drinking as infrequent and highly infrequent respectively(Refer to table 2.4.1).

It is to be noted here that while initiating measures to minimize alcoholism, care should be taken to focus more on highly infrequent and infrequent users, as they are prone to become Harmful Drinkers.

**Table No. 2.4.1
Frequency of Drinking**

Category	Adult	Adolescent	Spouse
Highly Infrequent	86	147	16
	13.8%	64.2%	17.8%
Infrequent	301	68	17
	48.4%	29.7%	18.9%
Frequent	206	8	48
	33.1%	3.5%	53.3%
Highly Frequent	29	6	9
	4.7%	2.6%	10%
Total	622	229	90
	100%	100%	100%

Usual Time of First Drink in a Day

Time of first drink in a day is an important variable to be verified as early morning drinking is considered as a habit of Harmful Drinkers.

The intake of first drink in early morning was found to be comparatively more among the Adults (16.4%) than the Adolescents (2.2%). However, the opinions of Spouses regarding their husbands' early morning drinking were reported to be slightly higher (17.8%). Majority of the Adults (61.4%) and Adolescents (73.4%) have their first drink at evenings. 58.9% of the Spouses too reported of the same (Refer to table 2.4.2).

Table No. 2.4.2
Usual Time of First Drink in a Day

Time	Adult	Adolescent	Spouse
Early Morning	102	5	16
	16.4%	2.2%	17.8%
Forenoon	43	16	8
	6.9%	7.0%	8.9%
Afternoon	95	40	13
	15.3%	17.4%	14.4%
Evening	382	168	53
	61.4%	73.4%	58.9%
Total	622	229	90
	100%	100%	100%

Category-wise, majority of the Harmful Drinkers were found to be starting their first drink at early morning (52.2%) or at forenoon (24.4%) while most (85.7%) of the Less-Harmful Drinkers had their first drink at evening hours. (Refer to table 2.4.3).

Table 2.4.3
First Drink in a Day and Harmful Drinking

Usual time of first drink	Category		Total
	Less Harmful	Harmful	
Early Morning	0	94	94
	.0%	52.2%	15.1%
Forenoon	4	44	48
	.9%	24.4%	7.7%
Afternoon	59	40	99
	13.3%	22.2%	15.9%
Evening	379	2	381
	85.7%	1.1%	61.3%
Total	442	180	622
	100.0%	100.0%	100.0%

Early morning drinking has to be seen seriously because those who consume alcohol at early morning have problems in performing day-to-day tasks. Morning drinking, in some cases is a resort to handle the hangover i.e. the feeling of illness and unpleasant physical symptoms in the morning after an

evening of heavy drinking. The regular drinking in the early hours of the day can leave the person more alcohol dependent and later weaken the organism.

Usual Place of Drink

When and where a person drink, the number of times a person drinks heavily, the activities associated with drinking; the types of drinks one consume and the drinking expectations and behaviours make up one's drinking culture.

For most of the Adults, their usual place of drink was 'Bar' (26.5%) or Home (23.9%) whereas for Adolescents, it was 'Friends' house' (32.8%) or 'Home' (24%). Almost half (47.7%) of the Spouses reported that their husbands' usual place of drink is 'Bar' followed by 30% stated it as 'Home'. Though, drinking at public places is prohibited, a good number of Adults (17.2%), Adolescents (10.5%) and Spouses (12.2%) reported of the same. (Refer to table 2.4.4).

Unfortunately, a good number of Adolescents are found to be drinking at their own home, which shows a changing culture of Keralites.

**Table No. 2.4.4
Usual Place of Drink**

Places	Adult (N-622)	Adolescent (N-229)	Spouse (N-90)
Home	148	31	27
	23.9%	13.5%	30%
Friends house	91	75	11
	14.6%	32.8%	12.2%
Public places	107	24	11
	17.2%	10.5%	12.2%
Hotel	15	20	6
	2.4%	8.7%	6.6%
Bar	165	55	43
	26.5%	24%	47.7%
Car	15	7	1
	2.4%	3.1%	1.1%
Club	16	12	1
	2.6%	5.2%	1.1%
Any other place	65	30	3
	10.4%	13.1%	3.3%

Pattern of Use

Depending on the consumption pattern, use of alcoholic beverages can raise the drinker's risk of health problems.

It is inferred from the table that 51.5% of the Adolescents and 45% of the Adults were consuming alcohol at similar amounts every day. However, 47.6% of the Adolescents and 52.9% of the Adults had a consumption pattern of varied quantities on different days. Only very few Adolescents (.9%) and Adults (2.1%) were consuming alcohol continuously for 2-3 days from morning to evening after a gap. None of the Spouses reported of the same pattern of drinking of their husbands. (*Refer to table 2.4.5*)

Table No. 2.4.5
Pattern of Alcohol Use

Pattern	Adult	Adolescent	Spouse
Similar amounts every day	280	118	39
	45.0%	51.5%	43.3%
Varied quantities on different days	329	109	51
	52.9%	47.6%	56.7%
Continuously for 2-3 days from morning to evening after a gap	13	2	0
	2.1%	0.9%	0%
Total	622	229	90
	100%	100%	100%

Estimated Daily Use of Alcohol

The amount of alcohol consumed is of importance, because the alcohol content of beverages is a key risk factor for its various adverse consequences. Alcohol content of beverages is a key risk factor for its various adverse consequences as a biochemical agent in the development of chronic health problems, as an intoxicant involved in accidents and other acute problems, and as a dependence-causing substance in chronic problems (Midanik & Room, 1992)(*WHO Global Status Report on Alcohol, 2004*).

The empirical data in this regard revealed that most (62.2%) of the Adults were consuming about 180ml or more quantity of alcohol. 56.7% of the Spouses too

confirmed the same quantity of consumption by their husbands. Unfortunately, even among Adolescents too, 38.4% were found to be consuming alcohol in the same pattern (*Refer to table 2.4.6*).

The data show the vulnerability of the Alcohol Users; especially the Adolescents to become more Harmful Drinkers.

Table No. 2.4.6
Estimated Daily Use of Alcohol

Quantity of Alcohol	Adult	Adolescent	Spouse
Below 180ml	235	141	39
	37.8%	61.6%	43.3%
180ml or More	387	88	51
	62.2%	38.4%	56.7%
Total	622	229	90
	100%	100%	100%

Average Amount Spent for Drinking

Only the data of Adults were analysed here, as most of the Adolescents and Spouses could not give a clear picture to the query in this regard.

The data revealed that on an average of Rs.130/- has been spent by the Adult Alcohol Users in a day for their drinking. It is varied from below Rs.25/- to more than Rs. 500/- according to frequency and quantity of drinking. However, a good percentage (34.1) were spending an amount ranging from Rs.100/- to Rs.250/- for drinking followed by 22.8% spending between Rs.50/- to Rs.100/-.

A cross examination of the data with the Frequency of Drinking showed that almost all among the highly frequent Drinkers (more than once in a day) spent generously for drinking i.e. an amount of Rs.250/ - Rs.500/- (48.4%) or Rs.100/ - Rs.250/ (45.2%) daily. However, among the frequent Drinkers (daily or almost daily), nearly 60% of them found to be spending an amount of Rs.100/- – Rs.250/- for the same. Alarmingly, even among infrequent Drinkers, most (60%) had to set aside an amount of Rs. 50/- to Rs.100/- or Rs.100/- to Rs.250/- for their drinking habit (*Refer to table 2.4.7*).

Unfortunately, it is seen that a good number of Keralites are setting aside a good part of their income for alcohol consumption; which is much larger than the amount they set aside for any other purposes like; education, health, family entertainment etc.

Table No. 2.4.7
Average amount Spent for Drinking Vs Frequency of Drinking

Frequency of Drinking	Average amount Spent for drinking / Day (In Rs)						Total
	Up to 25	25 - 50	50 - 100	100 - 250	250-500	Above 500	
Highly Frequent	0	0	1	14	15	1	31
	.0%	.0%	3.2%	45.2%	48.4%	3.2%	100.0%
Frequent	0	7	32	127	43	3	212
	.0%	3.3%	15.1%	59.9%	20.3%	1.4%	100.0%
Infrequent	25	81	109	71	14	0	300
	8.3%	27.0%	36.3%	23.7%	4.7%	.0%	100.0%
Highly Infrequent	71	8	0	0	0	0	79
	89.9%	10.1%	.0%	.0%	.0%	.0%	100.0%
Total	96	96	142	212	72	4	622
	15.4%	15.4%	22.8%	34.1%	11.6%	.6%	100.0%

Type of Alcohol Used

Type of alcohol used is an important variable to find out the strength of the alcohol consumed. The choice of brands may vary according to different aspects viz; taste, price, content of alcohol etc. The present study had a look into the most favourite brand of Alcohol Users in the state of Kerala.

A probe in this regard showed that majority of the Adults (45.8%) and Adolescents (50.7%) reported that they have consumed more than one type of alcohol brands. However, 'Brandy' (31.5%) and 'Rum' (10.8%) were found to be the most favourite brands for Adults (31.5%),and Brandy (18%) and Beer

(17.9%)for the Adolescents. A great majority (55.6%) of the Spouses too confirmed ‘Brandy’ as their husbands’ favourite brand. (Refer to table 2.4.8).

It was also learned from the interactions that for most of the Spouses who have not much knowledge about the various brands, ‘Brandy’ was a common brand name for them.

Table No. 2.4.8
Type of Alcohol Used

Type	Adult	Adolescents	Spouse
Arrack	11	-	1
	1.8%	-	1.1%
Brandy	196	39	50
	31.5%	17.0%	55.6%
Whiskey	30	3	1
	4.8%	1.3%	1.1%
Rum	67	14	6
	10.8%	6.1%	6.7%
Vodka	13	11	3
	2.1%	4.8%	3.3%
Gin	-	1	-
	-	0.4%	-
Beer	15	41	0
	2.4%	17.9%	0%
Toddy	4	3	1
	0.6%	1.3%	1.1%
Illicit Liquor	1	1	2
	0.2%	0.4%	2.2%
More than one type of alcohol	285	106	16
	45.8%	50.7%	17.6%
Don't Know	-	-	10
	-	-	11.1%
Total	622	229	90
	100%	100%	100%

According to the statistics of 2001-2008 (data from state beverages corporation) the most selling brand in Kerala was found to be 'Rum' followed by Brandy. 60% of the total liquor sold in 2008 was 'Rum' whereas 38% was Brandy. Whisky (1%) and Gin/Wine/Vodka (1%) constituted only a meagre percent. Interestingly, out of the 10 most selling Indian Manufactured Foreign Liquor (IMFL) brands, 7 were brands of Rum while 3 were of Brandy as per the data in 2008. Further, all of the Rum brands in the list were low cost, i.e. price is varied from Rs.150 to Rs.225/- for 750ml. However, the price of brands of Brandy in the list is found to be higher than that of Rum, i.e. Rs.295 for 750ml (*Refer to table 2.4.9 & 2.4.10*).

Nevertheless, the statistics in 2013 reflected a change in the drinking preference of Keralites. As said in an article on the daily news 'Times of India' on 25th December 2013, Rum, the favorite drink of tipplers in Kerala, lost its edge to brandy in the market. Reflecting a change in the drinking preference of Malayalis, brandy is now topping the drink lists of party planners. Different brands of rum, which accounted for more than half of the market share till two years ago, dropped to 47%, while brandy registered 48%, Bevco sales figures between April 1 and October 31, 2013, said. Since the Rum brands are cheaper than brandy brands, the manufacturers are prompting to push the latter into the market. Suppliers also prefer supplying brandy than rum. According to Beverage sources, though different brands of rum, especially Old Cask, have high demand, the supply has been found to be inadequate. (Sai Kiran, Times of India, 2013)

Further, as per the data for the month of December 2013, of the three top selling IMF liquors in the state, two were the brands of Brandy while in 2008 all the top 3 brands were of Rum. (*Refer to table 2.4.11*)

Thus, the statistics 2013 corroborated with the findings of the present study that the preference of Keralites has changed from Rum to Brandy.

Table No. 2.4.9
Quantity of Liquor Sold – Percentage Value of Different Category (Brand)

Year	Rum	Brandy	Whisky	Gin/Wine/Vodka
2000-01	55%	40%	4%	1%
2001-02	66%	30%	3%	1%
2002-03	65%	32%	2%	1%
2003-04	62%	36%	1%	1%
2004-05	57%	40%	2%	1%
2005-06	62%	35%	1%	2%
2006-07	61%	36%	1%	2%
2007-08	60%	38%	1%	2%
April 1 - October 31, 2013	47%	48%	5%	

Figure No. 2.4.1
Price List (for 750ml) of Top selling 10 brands of IMFL as in January, 2008 in Kerala

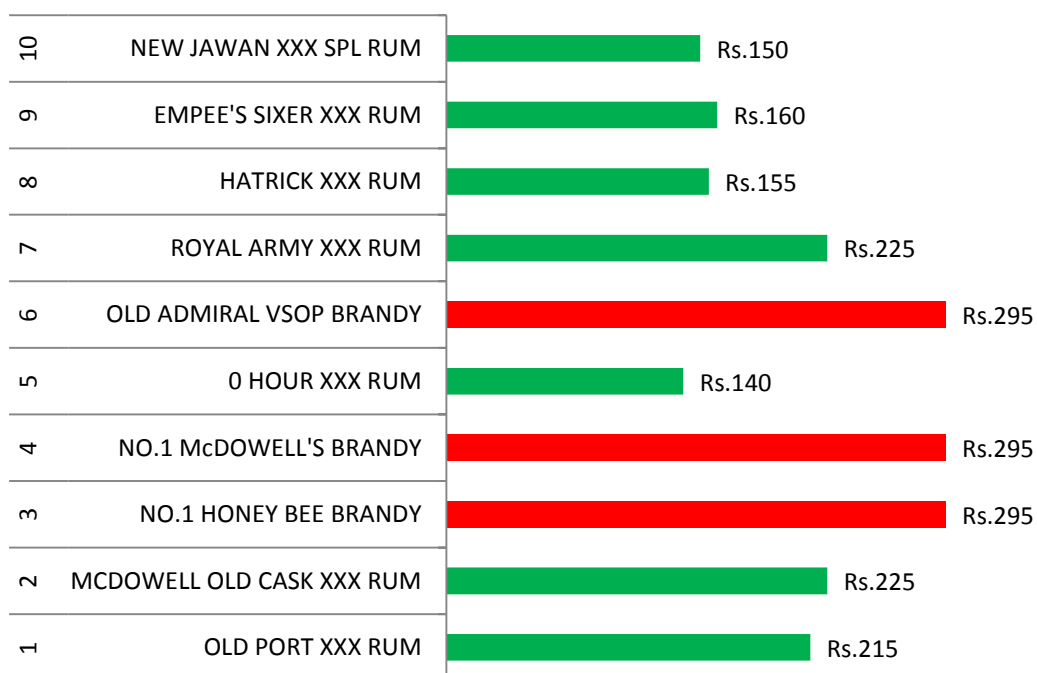


Figure No. 2.4.2
Top selling 10 brands of IMFL as in December, 2013 in Kerala

Position	Name of Brand
1	NO.1 McDOWELL'S BRANDY
2	MC NO.1 CELEB MTD XXX RUM
3	NO.1 HONEY BEE BRANDY
4	TI WHITE HOUSE XXX MA RUM
5	OLD PORT XXX RUM
6	JAI JAWAN XXX SPECIAL RUM
7	OAK VAT MATURD XXX RUM
8	OLD ADMIRAL VSOP BRANDY
9	MANSION HOUSE FRENCH BDY
10	CONTESSA XXX RUM

Usual Mix with Alcohol

Though, most of the Alcohol Users were unaware, the selection of liquids for diluting alcohol has an important role in the pure alcohol consumption. Some uses Water, Soda, Carbonated drinks, or Beer to mix with alcohol, while others use it dry (without mix). Each of these mixing liquids has a different absorption process. Carbonated beverages speed up the absorption process of alcohol while water and fruits mixed with alcohol slow the absorption process. Carbon dioxide speeds the alcohol absorption and creates a rapid rise in Blood Alcohol Concentration (BAC). Distilled liquor, which is highly concentrated alcohol, enters the blood-stream faster than beer and wine, although their alcohol content is equivalent. This can make individuals more susceptible to alcohol toxicity (Prevention Resource Guide, 1990). It is safer to use water to dilute the alcohol.

A probe in this regard showed that the majority of the Adults (74.6%) and Adolescents (52%) usually use water for diluting the alcohol. Most (68.9%) of

the Spouses too kept the same view on their husbands drinking pattern. Soda was found to be more usual among Adolescents (21.8%) compared to Adults (15.1%) and husbands of Spouses (17.8%) in the sample. Of those who reported of the dry consumption of alcohol (19.2% Adolescents and 3.7% Adults), most were found to be using beer as their brand (*Refer to table 2.4.10*).

It is also learnt from the field that water is mainly used by those who are buying liquor from the Beverages Corporation and soda is by those who are consuming alcohol from Bar.

Table No. 2.4.10
Usual Mix

Usual mix of Drink	Adult	Adolescent	Spouse
Dry (beer)	23	44	2
	3.7%	19.2%	2.2%
Water	464	119	62
	74.6%	52.0%	68.9%
Soda	94	50	16
	15.1%	21.8%	17.8%
Carbonated Drinks	41	16	1
	6.6%	7.0%	1.1%
Don't know	-	-	9
	-	-	10.0%
Total	622	229	90
	100%	100%	100%

Source of Alcohol

'Beverage shop' was a major source of alcohol drinks for majority (64.2%) of the Adults, while Bar was another common source reported by 22.3%. Spouses too confirmed 'Beverage shop' (42.2%) as their husbands' main source of alcohol drinks followed by 'Bar' (27.8%). However, among Adolescents, though a majority (38.4%) reported of 'Beverage shop' as their common source, an equal number (37.1%) did not respond to the query (*Refer to table 2.4.11*).

Though the minimum age is raised to 21 years to purchase alcohol the availability of the same to Adolescents is a serious concern to be resolved.

Table No. 2.4.11
Source of Alcohol

Source of Alcohol	Adult	Adolescent	Spouse
Beverages Shop	399	88	38
	64.2%	38.4%	42.2%
Toddy Shop	51	5	3
	8.2%	2.2%	3.3%
Bar	139	12	25
	22.3%	5.2%	27.8%
Individuals	33	24	2
	5.3%	10.5%	2.2%
Others	-	15	1
	-	6.6%	1.1%
Don't Know/ No Response	-	85	21
	-	37.1%	23.3%
Total	622	229	90
	100%	100%	100%

A summing up of the extent, trend and pattern of alcohol consumption portrayed that most of the Adults were either infrequent or frequent users (daily or near to daily) of alcohol while Adolescents were highly infrequent users. The majority of the Spouses reported that their husbands were frequent users. Though, early morning drinking was found to be rare among Adolescents, more than one sixth of the Adults and Spouses each reported about the same. Unfortunately, majority of the Adults and a good number of Adolescents were found to be imbibing alcohol at a quantity of 180ml or more at a time. There was not much difference noticed in the drinking pattern among the different type of Alcohol Users as they consume either similar quantity every day or varied quantity at different days.

Bar and Home were the common places of drinking for Adults, whereas Friends' house, Bar and Home respectively were the places for Adolescents. As

per the data of Beverages Corporation in 2008; Rum was the most selling liquor. However, the present study shows an affection of Alcohol Users towards 'Brandy' which is found to be corroborated with the statistics of 2013. 'Beer' has a prominence among Adolescents as it is said to be a brand of those who just started drinking. Beverages shop is found to be a major source for buying alcohol followed by Bar. In tune with the same, 'Water' was found to be a common mix in the drink followed by soda. It is learned from the informal talks with the stakeholders that while drinking in 'Bar' most prefer soda whereas when buying from 'Beverages', water is the common mix.

2.5 Impact of Alcohol Consumption on the Drinkers in Comparison with Non-Drinkers

The impact of alcohol consumption is multifaceted. Evidences show that alcoholism or chronic alcohol consumption can cause problems to physical and mental health of a person, and his family along with harms on the society where he is living. It is widely known that a higher percentage of highway deaths are alcohol related. Alcohol related crashes are also observed as the leading cause of death for many of the teens. Alcohol is a factor in a large number of suicides, cases of Spouse abuse, and other crimes. A large number of people are arrested each year in the state for drunken driving. It is observed that alcohol costs our nation, a big sum of money each year in lost employment, productivity, and other related costs. In addition, the hidden cost of broken families, abused children, ruined careers, and lives cut short. In short, the impact or loss on our state due to alcoholism is much more than that of the revenue it generates.

Accordingly, this section looks into the impact of alcoholism on the following aspects of Alcohol Users (Drinkers) viz: Physical /Mental health, Psychological well being, Family, Society and Productivity. Further, for a comparative analysis, an Experimental Group of Adult Drinkers (622) comprising Harmful and Less-Harmful Drinkers was cross analysed with a Control Group of Adult

Non-Drinkers (90). Chi-square tests were also performed to prove the statistical significance wherever necessary.

2.5.1 Impact on Physical / Mental Health

It is generally observed that excess alcohol intake can lead to conditions such as cirrhosis of the liver, cancer, strokes, stomach ulcers, pancreatitis, gastritis, high blood pressure, impotence, nerve problems, dementia, mental health problems, etc. To find out the impact of alcohol on the people's health, the present study had a probe into the physical and mental health status of the respondents under study.

Health Problems Identified

Though the majority (67.2%) of the Adult Alcohol Users (Drinkers) were identified with various health problems, 32.8 % had no such issues. Loss of appetite (11.4%) and Deterioration of Health (7.5%) were the major health concerns found among the Adult respondents. 5.8% each reported of the Stomach disease/blood vomiting and Memory problems when not drunk. Miserably, a good number (20.3%) were found to be suffering from multiple health problems i.e. more than one health concerns.

As most of the Adolescents were not regular Drinkers, the majority (58.5%) did not have any of the health problems, whereas 40.6% reported of the presence of one or more health concerns. Loss of Appetite (13.1%) and pancreatic anemia (9.7%) were the common health issues found among them. Feet tingling/feeling numb (7.9%), Weight Loss (6.6%) were also reported by a few. Those who cited of the other health issues were found to be less in number. Interestingly, only 2 (0.8%) Adolescents reported of the multiple health problems.

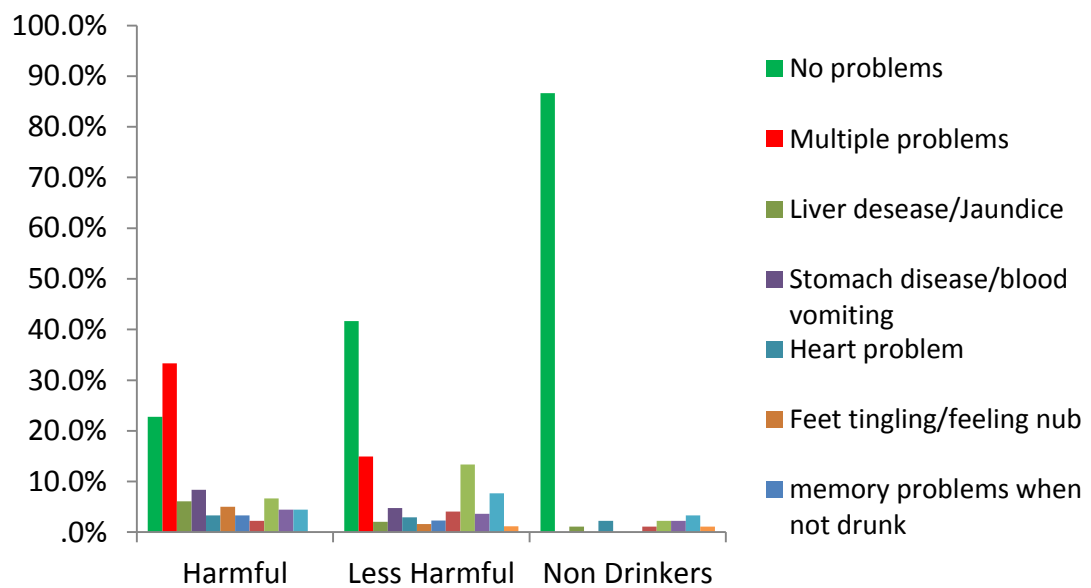
Except a few (13.3%), all the other Spouses reported of the various health problems of their husbands. (*Refer to table 2.5.1.1*)

Table No. 2.5.1.1
Health Problems Identified among Adults and Adolescents

Health Problems	Adult	Adolescent	Spouse
No	204	134	12
	32.8%	58.5%	13.3%
Liver disease/Jaundice	20	4	5
	3.2%	1.7%	5.6%
Stomach disease/blood vomiting	36	3	19
	5.8%	1.3%	21.1%
Heart problem	19	0	5
	3.1%	0.0%	5.6%
Feet tingling/feeling nub	17	18	4
	2.7%	7.9%	4.4%
Memory problems when not drunk	36	1	4
	5.8%	0.4%	4.4%
Pancreatic anemia	22	21	1
	3.5%	9.2%	1.1%
Loss of Appetite	71	30	18
	11.4%	13.1%	20.0%
Weight Loss	24	15	6
	3.9%	6.6%	6.7%
Deterioration of General health	47	1	4
	7.5%	0.4%	4.4%
Multiple Health Concerns	126	2	12
	20.3%	0.8%	13.3%
Total	622	229	90
	100%	100%	100%

Category-wise, almost 90% of the Non-Drinkers had no health problems while 77.2% of the Harmful and 58.4% of the Less-Harmful Drinkers had reported of their health concerns. Multiple health problems were also higher among Harmful Drinkers with 33.3% respondents, followed by Less-Harmful Drinkers with 14.9% respondents, while none of the Non-Drinkers had reported of the same. In short, the data showed the impact of alcohol on the physical health of the Alcohol Users. The chi-square test ($p=.000$) has also proved it to be statistically significant. (Refer to figure 2.5.1.1)

Figure No.2.5.1.1
Health Problems Identified Vs Category of Respondents



Mental Health Problems

The mental health status of the Drinkers was studied using the General Health Questionnaire (GHQ - 12 items). The GHQ was scored as *Not At All* = 0, *No More Than Usual* = 1, *Rather More Than Usual* = 2 and *Much More Than Usual* = 3 for the six questions and reverse score for the other six. The computed score in SPSS produced a score ranging from 0-36 for each respondent. The Mental Health Problems of the respondents were again classified into Severe Mental Health issue (score 24 -36), Potential Mental Health Issue (score 12-24), and No Mental Health Issue (0-12).

Analysis of the data in this regard depicted that a great majority (84.2%) of the Adult Drinkers had potential mental health problems, whereas 12.2% had no problems and a few (3.6 %) reported of the severe problems.

Of the Adolescents, 65.9% and 3.5% respectively had potential and severe mental health problems while 30.6% had no such issues.

Among the Spouses, 73.3% stated about the potential health issues and 15.6% about the severe mental health issues of their husbands whereas 11.1% reported of no mental health issues. (*Refer to table 2.5.1.2*)

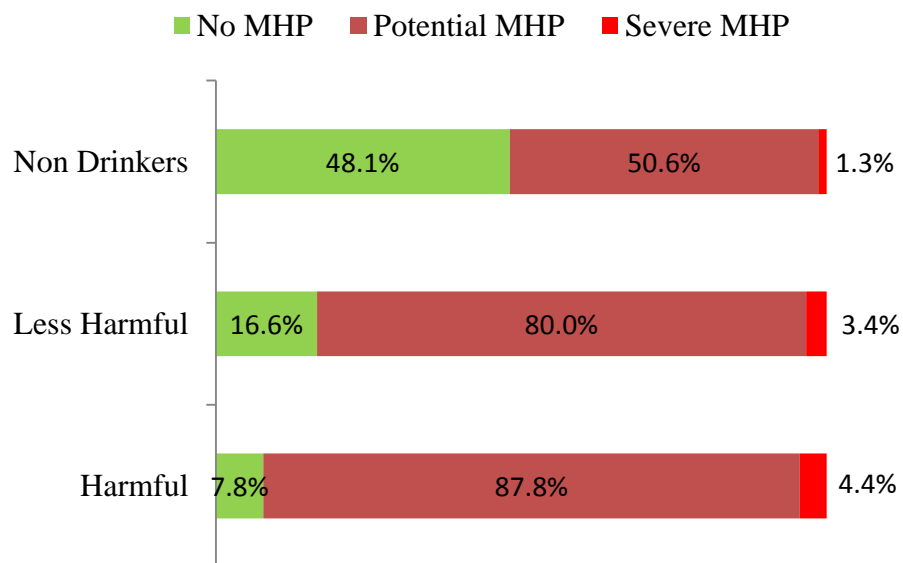
Table No. 2.5.1.2
Mental Health Problems among the Alcohol Users

Mental Health	Adult	Adolescent	Spouse
No Mental Health Issue	76	70	10
	12.2%	30.6%	11.1%
Potential Mental Health Issue	524	151	66
	84.2%	65.9%	73.3%
Severe Mental Health Issue	22	8	14
	3.6%	3.5%	15.6%
Total	622	229	90
	100.0%	100.0%	100.0%

Category-wise, mental health problems were found to be higher among Alcohol Users (Experimental Group) with 92.2% Harmful Drinkers and 83.4% Less-Harmful Drinkers had potential or severe mental health problems; compared to Non-Alcohol Users (Control Group) with 51.9%. The chi-square test ($P=.000$) has also showed statistical significance of the data. (Refer to table 2.5.1.4)

Though, potential mental health problems are found among all categories of respondents, the drinking habit, especially harmful drinking increases the chances of Mental Health problems to a great extent.

Figure No.2.5.1.2
Mental Health Problems Vs Category of Respondents
*Chi-square value – 61.358**, $p=.000$*



2.5.2 Impact on Psychological well being

Alcoholism is a progressive disease that impairs the psychological, emotional, and physical health of both the alcoholic and his or her family. Alcoholism has been labelled as a ‘family disease’ because its effects lead to dysfunctional roles and behaviours of the alcoholic and their family members. The family, friends, employers and communities all suffer along with the heavy drinker.

The present study examined the relationship between alcohol consumption and psychological well being of Alcohol Users. The psychological well being of the respondents were analysed by probing the problems they faced related to; Personal functioning, Functioning of family, Internalising emotions, Externalising emotions and Academic activities of Adolescents.

Problems in Personal Functioning

The psychological well being related to personal functioning was assessed using five dimensions of personal functioning for Adults/Spouses and three dimensions for Adolescents; scored as *Most of the Time (3)*, *Sometimes (2)* and *Never (1)*. The computed score of the questions produced a score ranging from 5 to 15 for Adults/Spouse and 3 to 9 for Adolescents. Higher scores indicated more problems with personal functioning. The scores obtained were further classified into Low (5-8.3 for Adults, 3-5 for Adolescents), Moderate (8.3-11.6 for Adults, 5.1-7 for Adolescents), and High (11.6-15 for Adults 7.1-9 for Adolescents).

With regard to Adult Drinkers, a good number (45.3%) had moderate (32.8%) to high level (14.5%) problems in functioning of their personal activities.

Of the Adolescents, more than half of them had moderate (37.1%) to high (15.7%) level problems.

However, more than three fourth of the Spouses had perceived of moderate (50%) to high (25.6%) level problems due to alcoholism on the personal functioning of their husband. (*Refer to table no. 2.5.2.1*)

Table No. 2.5.2.1
Problems on Personal Functioning

Level of Problems	Adult	Adolescent	Spouse
Low	322	108	22
	52.6%	47.2%	24.4%
Moderate	201	85	45
	32.8%	37.1%	50.0%
High	89	36	23
	14.5%	15.7%	25.6%
Total	612	229	90
	100.0%	100.0%	100.0%

Category-wise, moderate to high-level problems were higher among the Experimental Group of Harmful Drinkers (72.7%) compared to Less-Harmful Drinkers (36.8%) and a Control Group of Non-Drinkers (29.5%). The chi-square test ($p=.000$) was also proved it to be statistically significant. (Refer to table 2.5.2.2).

Table No.2.5.2.2
Problems on Personal Functioning Vs Category of Respondents

Level of Problems	Category of Respondents			Total	Chi-Square
	Harmful Drinkers	Less Harmful Drinkers	Non - Drinkers		
Low	49	278	62	389	90.532**
	27.2%	63.2%	70.5%	54.9%	P=.000
Moderate	78	126	17	221	
	43.3%	28.6%	19.3%	31.2%	
High	53	36	9	98	
	29.4%	8.2%	10.2%	13.8%	
Total	180	440	88	708	
	100.0%	100.0%	100.0%	100.0%	

Problems related to the Functioning of Family

The psychological well being of Alcohol Users related to the functioning of their family was assessed using five dimensions of functioning scored as *Most of the Time (3)*, *Sometimes (2)* and *Never (1)*. The computed score of the questions produced a score ranging from 5 to 15. Higher scores indicated more problems. The scores obtained were further classified into Low (5-8.3), Moderate (8.4-11.6) and High (11.6-15).

A probe in this regard showed that 45.9% of the Adults and 65.5% of the Spouses in the sample reported moderate to high level problems faced by the Alcohol Users in the functioning of their families. (*Refer to table 2.5.2.3*)

Table No. 2.5.2.3
Problems related to the Functioning of Family

Level of Problems	Adult	Spouse
Low	255	31
	54.1%	34.5%
Moderate	146	39
	31.0%	43.3%
High	70	20
	14.9%	22.2%
Total	471	90
	100.0%	100.0%

Category-wise, problems (moderate to high) related to the functioning of the family were more (65.4%) among Experimental Group of Harmful Drinkers compared to Less-Harmful Drinkers (35.9%) and Control Group of Non-Drinkers (20%). Chi-square test ($p=.000$) has also showed the statistical significance of the findings in this regard. (*Refer to table 2.5.2.3*)

Table No.2.5.2.4
Problems related to the Functioning of Family Vs Category of Respondents

Level of Problems	Category of Respondents			Total	Chi-square
	Harmful	Less Harmful	Non-Drinkers		
Low	55	200	64	319	65.172**
	34.6%	64.1%	80.0%	57.9%	P=.000
Moderate	61	85	9	155	
	38.4%	27.2%	11.3%	28.1%	
High	43	27	7	77	
	27.0%	8.7%	8.8%	14.0%	
Total	159	312	80	551	
	100.0%	100.0%	100.0%	100.0%	

Internalising Emotions

The impact of alcohol consumption on the internalising emotions such as fear, guilt, and sadness of Alcohol Users under study were also assessed. The responses of Spouses were not collected in this regard as the responses were based on their perception only.

The empirical data in this regard showed that Moderate to High level emotions were comparatively higher among the Adult (45.5%) Alcohol Users than the Adolescent (26.3%) Alcohol Users. (*Refer to table no. 2.5.2.5*)

Table No. 2.5.2.5
Internalising Emotions

Level of Impact	Adult	Adolescent
Low	339	146
	54.5%	73.7%
Moderate	182	50
	29.3%	25.3%
High	101	2
	16.2%	1.0%
Total	622	198
	100.0%	100.0%

Category-wise, a good number of Experimental Groups of Harmful (48.9%) and Less-Harmful Drinkers (44.1%) had Moderate to High level emotions. However, those who reported of the same were less among the Control Group of Non-Drinkers (10%). Chi square test ($p=.000$) showed the statistical significance of the empirical data in this regard. (Refer to table 2.5.2.6)

Table No.2.5.2.6
Internalising Emotions Vs Category of Respondents

Level of Emotions	Category of Respondents			Total	Chi-Square
	Harmful Drinkers	Less Harmful Drinkers	Non-Drinkers		
Low	92	247	81	420	43.496**
	51.1%	55.9%	90.0%	59.0%	P=.000
Moderate	57	125	9	191	
	31.7%	28.3%	10.0%	26.8%	
High	31	70	0	101	
	17.2%	15.8%	.0%	14.2%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Externalising Emotions

The level of externalising emotions viz; anger, excitement, Confidence, interest, and happiness among Alcohol Users were also probed by the present study.

Among the Adult Drinkers, externalising emotions were found to be high as 68.5% of them had moderate (36.8%) or high (31.7%) level of emotions.

Among the Adolescents, these emotions were found to be less as most (76.9%) of them reported of normal (low) level of emotions. (Refer to table 2.5.2.7)

Table No.2.5.2.7
Externalising Emotions among Alcohol Users

Level of Impact	Adult	Adolescent
Low	197	153
	31.7%	76.9%
Moderate	229	28
	36.8%	14.1%
High	196	18
	31.5%	9.0%
Total	622	199
	100.0%	100.0%

Category-wise, High level of externalising emotions were more (38.9%) among the Experimental Group of Harmful Drinkers compared to Less-Harmful Drinkers (28.5%). However, none of the Non-Drinkers of the Control Group reported of emotions at high level. The chi square value ($p=.000$) has also proved the statistical significance of the same. (Refer to table 2.5.2.8)

Table No.2.5.2.8
Externalising Emotions Vs Category of Respondents

Level of Emotions	Category of Respondents			Total	Chi-Square
	Harmful Drinkers	Less-Harmful Drinkers	Non-Drinkers		
Low	42	155	75	272	102.291**
	23.3%	35.1%	83.3%	38.2%	$P=.000$
Moderate	68	161	15	244	
	37.8%	36.4%	16.7%	34.3%	
High	70	126	0	196	
	38.9%	28.5%	.0%	27.5%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Impact on Academic Activities of Adolescents

The impact of alcoholism on the psychological well being of Adolescents related to their academic activities was assessed using four dimensions; scored

as Most of the Time (3), Sometimes (2) and Never (1). The computed score of the questions produced a score ranging from 4 to 12. Higher scores indicated more negative impact of alcoholism on academic activities. The scores obtained were further classified into Low (4-6.5), Moderate (6.6-9.1) and High (9.2-12).

More than 60% of the Adolescents had either moderate (34.1%) or high (27.1%) level of impact of alcoholism on their academic activities while the rest reported of the impact at normal (Low) level. (*Refer to table 2.5.2.9*)

Thus, the data proved that though most of the Adolescents were not Harmful Drinkers, the drinking habit had a great impact on their academic activities.

Table No.2.5.2.9
Impact on Academic Activities of Adolescents

Level of Impact	Frequency	Percent
Low	89	38.9
Moderate	78	34.1
High	62	27.1
Total	229	100.0

2.5.3 Impact on Family

The other area where the impact of alcoholism probed was related to family of Alcohol Users. The variables analysed in this regard were; General family functioning, Problems with Family members, Relationship with Spouse, Relationship with Children and Acceptance in the Family.

General Family Functioning

General family functioning was assessed using 13 dimensions for Adults/Spouse and 7 dimensions for Adolescents; scored on a five-point scale (Excellent (5), Good (4), Average (3), Fair (2) and Poor (1)). The computed score of the questions produced a score of General Family Functioning ranging

from 13 to 65 for Adult/Spouse and 7 to 35 for Adolescent. Higher scores indicated better General Family Functioning. The scores obtained were further classified into Low (13-30 for Adults & 7-16.3 for Adolescents), Moderate (21-48 for Adults and 16.4-25.6 for Adolescents) and High (49-65 for Adults and 25.7-35 for Adolescents).

About one fourth of the Adults and Spouses in the sample reported of their general family functioning as ‘Low’.

17.3% of the Adolescents too, reported of the general family functioning at Low level. (*Refer to table 2.5.3.1*)

Table No. 2.5.3.1
General Family Functioning

Level of Family Functioning	Adult	Adolescent	Spouse
Low	151	36	24
	24.3%	17.3%	26.7%
Moderate	255	63	37
	41.0%	30.3%	41.1%
High	216	109	29
	34.7%	52.4%	32.2%
Total	622	208	90
	100.0%	100.0%	100.0%

Category wise, Experimental Group of Drinkers; Less-Harmful Drinkers had a better family functioning compared to Harmful Drinkers as only 17.4% of the Less Harmful Drinkers reported of a ‘Low level Functioning’ as against 41.1% of the Harmful Drinkers. Further, none of the Non-Drinkers of the Control Group had reported of a ‘Low’ level general family functioning. Chi-square test ($P=.000$) has also affirmed the statistical significance of the findings in this regard. (*Refer to table 2.5.3.2*)

Table No.2.5.3.2
General Family Functioning Vs Category of Respondents

Level of Functioning	Category of Respondents			Total	Chi-Square
	Harmful	Less Harmful	Non-Drinkers		
Low	74	77	0	151	132.142**
	41.1%	17.4%	.0%	21.2%	P=.000
Moderate	77	178	16	271	
	42.8%	40.3%	17.8%	38.1%	
High	29	187	74	290	
	16.1%	42.3%	82.2%	40.7%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Problems with Family Members

Problems with family members were assessed using 6 dimensions scored as; *No Issues (0), Independent issue (0) and Alcohol related issues (1)*. The computed score of the questions produced a score ranging from 0 to 6. Higher scores indicated more alcohol related family problems. The scores obtained were further classified into Low (0-2), Moderate (2.1-4) and High (4.1-6)

A good number (46.3%) of the Adults disclosed that they had moderate or high level of problems with their family members. Majority (53.3%) of the Spouses too, confirmed the same level of problems in family by their husbands. (*Refer to table 2.5.3.3*).

Table No. 2.5.3.3
Problems with Family Members

Level of Problems	Adult	Spouse
Less	246	42
	53.7%	46.7%
Moderate	101	22
	22.1%	24.4%
High	111	26
	24.2%	28.9%
Total	458	90
	100%	100.0%

Category-wise, problems (at high level) with family members were higher among the Experimental Group; Harmful Drinkers (35.8%) compared to Less-Harmful Drinkers (18.6%) whereas only a meagre (2.7) percent of Non-Drinkers (Control Group) reported of the same. The chi-square test (P=.000) has proved the statistical significance of the above findings. (*Refer to table 2.5.3.4*)

**Table No.2.5.3.4
Problems with Family Members Vs Category of Respondents**

Level of Problems	Category of Respondents			Total	Chi-Square
	Harmful Drinkers	Less Harmful Drinkers	Non-Drinkers		
Low	44	202	60	306	79.837
	29.1%	65.8%	82.2%	57.6%	P=.000
Moderate	53	48	11	112	
	35.1%	15.6%	15.1%	21.1%	
High	54	57	2	113	
	35.8%	18.6%	2.7%	21.3%	
Total	151	307	73	531	
	100.0%	100.0%	100.0%	100.0%	

Relationship with Spouse

Relationship with Spouse was assessed using 2 dimensions scored on a five point scale (*Excellent (5), Good (4), Average (3), Fair (2),and Poor (1)*). The computed score of the questions produced a score of Relationship with Spouse ranging from 2 to 10. Higher scores indicated better Relationship with Spouse. The scores obtained were further classified into Low (2- 4.6), Moderate (4.7- 7.3) and High (7.4-10).

A good number (45.2%) of Adults reported of a poor relationship with their Spouse while almost equal fractions stated of the moderate (27.1%) or good (27.7%) relationships.

Spouses too, followed the same trend with 45.6% opined that their relationship with the husbands was poor while 28.9% and 25.6% respectively reported of a moderate and good relationship with their husbands. (Refer to table no. 2.5.3.5)

**Table No. 2.5.3.5
Relationship with Spouse**

Level of Relationship	Adult	Spouse
Low	258	41
	45.2%	45.6%
Moderate	155	26
	27.1%	28.9%
High	158	23
	27.7%	25.6%
Total	571	90
	100.0%	100.0%

Category-wise, ‘Low Relationship’ was found to be more (47.7%) among the Experimental Group of Harmful Drinkers compared to Less Harmful Drinkers (22.1%) while a great majority of the Non-Drinkers (Control Group) had a ‘High’ relationship with their Spouse. The value (P=.000) of Chi square test revealed the statistical significance of the findings. (Refer to table 2.5.3.6)

**Table No.2.5.3.6
Relationship with Spouse Vs Category of Respondents**

Level of Relationship	Category of Respondent			Total	Chi-Square
	Harmful	Less Harmful	Non-Drinkers		
Low	71	68	2	141	104.280 P=.000
	47.7%	22.1%	2.7%	26.6%	
Moderate	49	95	8	152	28.6%
	32.9%	30.9%	10.7%	28.6%	
High	29	144	65	238	44.8%
	19.5%	46.9%	86.7%	44.8%	
Total	149	307	75	531	100.0%
	100.0%	100.0%	100.0%	100.0%	

Relationship with Children

Relationship with children was assessed using 2 dimensions scored *on a five point scale (Excellent (5), Good (4), Average (3), Fair (2), and Poor (1))*. The computed score of the questions produced a score ranging from 2 to 10. Higher scores indicated better Relationship with Children. The scores obtained were further classified into Low (2- 4.6), Moderate (4.7-7.3) and High (7.4-10).

Among the Adults, about one third (32.6%) of them were on the opinion that their relationship with children was ‘Low’ while the rest (67.5%) stated it as ‘Moderate’ or ‘High’.

Of the Spouses, comparatively more number (41.1%) reported of a ‘Low’ relationship of their husbands with children. (*Refer to table no. 2.5.3.7*)

Table No. 2.5.3.7
Relationship with Children

Level of Relationship	Adult	Spouse
Low	195	37
	32.6%	41.1%
Moderate	188	26
	31.4%	28.9%
High	216	27
	36.1%	30.0%
Total	599	90
	100.0%	100.0%

Category- wise, ‘Low’ relationship with children was found to be more (46.2%) among the Experimental Group of Harmful Drinkers compared to Less-Harmful Drinkers (27.3%). While the respondents having ‘Low’ level relationship with children were only 11.9% among the Non-Drinkers (Control Group). Chi-square test (P=.000) has also proved the statistical significance of the findings. (*Refer to table 2.5.3.8*)

Table No.2.5.3.8
Relationship with Children and Category of Respondents

Level of Relationship	Category of Respondent			Total	Chi-Square Tests
	Harmful Drinkers	Less Harmful Drinkers	Non-Drinkers		
Low	79	107	10	196	83.443**
	46.2%	27.3%	11.9%	30.3%	
Moderate	54	122	7	183	P=.000
	31.6%	31.1%	8.3%	28.3%	
High	38	163	67	268	
	22.2%	41.6%	79.8%	41.4%	
Total	171	392	84	647	
	100.0%	100.0%	100.0%	100.0%	

Acceptance in Family

Acceptance of Alcohol Users in their Family was assessed by using 4 dimensions scored on a five point scale (*Excellent (5), Good (4), Average (3), Fair (2), and Poor (1)*). The computed score of the questions produced a score of Acceptance in Family ranging from 4 to 20. Higher scores indicated better Acceptance in the Family. The scores obtained were further classified into Low (2- 4.6), Moderate (4.7-7.3) and High (7.4-10).

Of the Adults, Low level of acceptance in the family was reported by 19.8% and High level of acceptance by 47.2%.

Among the Adolescent Drinkers, Low level of acceptance was more with 40.1% and High acceptance was less with 13.4% respondents.

Of the Spouses, 45.6% reported of the Low acceptance and 31.1% reported of the high acceptance of their husbands in the family. (*Refer to table 2.5.3.9*)

Table No. 2.5.3.9
Acceptance in the Family

Level of Acceptance	Adult	Adolescent	Spouse
Low	123	87	41
	19.8%	40.1%	45.6%
Moderate	206	101	21
	33.1%	46.5%	23.3%
High	293	29	28
	47.1%	13.4%	31.1%
Total	622	217	90
	100.0%	100.0%	100.0%

Category- wise, high acceptance was found to be less among the Experimental Group of Harmful Drinkers (27.2%) compared to less Harmful Drinkers (55.2%). Significantly high number (86.7%) of Non-Drinkers (Control Group) reported of their acceptance in the family as 'High'. The p-value ($p=.000$) revealed the statistical significance of the empirical data in this regard. (*Refer to table 2.5.3.10*)

Table No.2.5.3.10
Acceptance in the Family Vs Category of Respondents

Level of Relationship	Category of Respondent			Total	Chi-Square Tests
	Harmful Drinkers	Less Harmful Drinkers	Non Drinkers		
Low	64	59	2	125	106.521
	35.6%	13.3%	2.2%	17.6%	
Moderate	67	139	10	216	P=.000
	37.2%	31.4%	11.1%	30.3%	
High	49	244	78	371	
	27.2%	55.2%	86.7%	52.1%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

2.5.4 Impact on Society

The damaging effects of alcohol abuse are not limited to the person and those living closest to them. It has far-reaching effects on the social life of a person. It is linked to many social ills which affect people otherwise unconnected to the drinker. This section examined a few variables to understand the social impact of alcohol on the users under study. The variables analysed in this regard were; acceptance in society, problems in social life, social participation and interaction with society.

Acceptance in Society

Acceptance of Alcohol Users in Society was assessed using 4 dimensions scored on a two point scale (*Good (2) and Satisfactory (1)*). The computed score of the questions produced a score ranging from 4 to 8. Higher scores indicated better Acceptance in the Society. The scores obtained were further classified into Low (4- 5.3), Moderate (5.4-6.7) and High (6.8-8).

High acceptance in the society was found to be higher among the Adolescents (74.7%) compared to the Adults (47.8%) and the husbands of Spouses (33.3%) in the sample. (*Refer to table no. 2.5.4.1*)

Table No. 2.5.4.1
Acceptance in the Society

Level of Acceptance	Adult	Adolescent	Spouse
Low	275	23	43
	44.2%	10.0%	47.8%
Moderate	50	35	17
	8.0%	15.3%	28.9%
High	297	171	30
	47.8%	74.7%	33.3%
Total	622	229	90
	100.0%	100.0%	100.0%

Category-wise, the majority (62.2%) of the Experimental Group of Harmful Drinkers had only 'Low' level acceptance in the society while most (55.4%) of

the Less Harmful Drinkers had a ‘High’ level acceptance. Significantly, a great majority (85.6%) of Non-Drinkers (Control Group) reported of a ‘High’ level acceptance in the society. The chi-square value (P=.000) has also proved the significance of the same. (Refer to table 2.5.4.2)

Table No.2.5.4.2
Acceptance in the Society Vs Category of Respondents

Level of Acceptance	Category of Respondent			Total	Chi-Square Tests
	Harmful Drinkers	Less Harmful Drinkers	Non Drinkers		
Low	112	163	7	282	86.064**
	62.2%	36.9%	7.8%	39.6%	
Moderate	16	34	6	56	P=.000
	8.9%	7.7%	6.7%	7.9%	
High	52	245	77	374	
	28.9%	55.4%	85.6%	52.5%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Problems in Social Life

Problems in Social Life were assessed using 4 dimensions scored on a three point scale (Most of the Time (3), Sometimes (2) and Never (1)). The computed score of the questions produced a score ranging from 4 to 12. Higher scores indicated higher levels of Problems in Social Life. The scores obtained were further classified into Low (4- 6.6), Moderate (6.7-9.2) and High (9.3-12).

Only a less percentage of Alcohol Users from all categories of respondents (9.4% of the Adults, 13.5% of the Adolescents and 17.4% of the Spouses) had stated problems in social life as ‘High’. Those who reported of moderate level of problems were almost equal among the Adults (38.7 %) and the Adolescents (38.0%) while high among the Spouses (53.5%). (Refer to table no. 2.5.4.3)

**Table No. 2.5.4.3
Problems in Social Life**

Level of Problems	Adult	Adolescent	Spouse
Low	307	111	25
	51.9%	48.5%	29.1%
Moderate	229	87	46
	38.7%	38.0%	53.5%
High	56	31	15
	9.4%	13.5%	17.4%
Total	592	229	86
	100.0%	100.0%	100.0%

Category-wise, the majority (70.9%) of the Experimental Group of Harmful Drinkers had ‘Moderate’ to ‘High’ level problems in their social lives while most (60.7%) of the Less-Harmful Drinkers had only ‘Low’ level problems. A good number of Non-Drinkers (65.5%) of the Control Group too reported on ‘Low’ level problems in their social life. Chi-square test (P=.000) has proved the statistical significance of the empirical data. (Refer to table 2.5.4.4)

**Table No.2.5.4.4
Problems in Social Life and Category of Respondents**

Level of Problems	Category of Respondent			Total	Chi-Square
	Harmful Drinkers	Less Harmful Drinkers	Non Drinkers		
Low	48	259	57	364	62.944**
	29.1%	60.7%	65.5%	53.6%	
Moderate	89	140	30	259	P=.000
	53.9%	32.8%	34.5%	38.1%	
High	28	28	0	56	
	17.0%	6.6%	.0%	8.2%	
Total	165	427	87	679	
	100.0%	100.0%	100.0%	100.0%	

Social Participation

Social Participation of Alcohol Users was assessed using 2 dimensions scored on a two point scale (*Good (2) and Satisfactory (1)*). The computed score of the questions produced a score ranging from 2 to 4. Higher scores indicated better Social Participation. The scores obtained were further classified into Low (2- 2.7), Moderate (2.8-3.4) and High (3.5-4).

Of the Adults, 58.9% reported of a ‘High’ level of social participation by them while 31.5% stated of a ‘Low’ level of participation.

With regard to Adolescents, 62.7% had a ‘High’ level of social participation, whereas only 14.2% reported on the ‘Low’ level of participation.

Among the Spouses, Majority (57.8%) reported on the ‘Low’ level of social participation of their husbands and only 31.1% reported of the ‘High’ level of participation. (*Refer to table no. 2.5.4.5*)

Table No. 2.5.4.5
Social Participation

Level of Participation	Adult	Adolescent	Spouse
Low	196	32	52
	31.5%	14.2%	57.8%
Moderate	60	52	10
	9.6%	23.1%	11.1%
High	366	141	28
	58.9%	62.7%	31.1%
Total	622	225	90
	100.0%	100.0%	100.0%

Category-wise, ‘Low’ social participation was found to be higher (48.3%) among the Experimental Group of Harmful Drinkers compared to Less Harmful Drinkers (24.7%). However, a lesser percentage (16.7%) of the Control Group of Non-Drinkers reported on the same in this regard. Further, ‘High’ participation was found to be more among Non-Drinkers (78.9%) and

Less-Harmful Drinkers (67.6%). Chi-square test (P= .000) has also proved the statistical significance of the empirical data. (Refer to table 2.5.4.6).

Table No.2.5.4.6
Social Participation Vs Category of Respondents

Level of Participation	Category of Respondent			Total	Chi-Square
	Harmful Drinkers	Less Harmful Drinkers	Non Drinkers		
Low	87	109	15	211	63.328**
	48.3%	24.7%	16.7%	29.6%	
Moderate	26	34	4	64	P=.000
	14.4%	7.7%	4.4%	9.0%	
High	67	299	71	437	
	37.2%	67.6%	78.9%	61.4%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Interaction with Society

Interaction with Society was assessed using 4 dimensions scored on a two point scale (Good (2) and Satisfactory (1)). The computed score of the questions produced a score ranging from 4 to 8. Higher scores indicated better interaction with Society. The scores obtained were further classified into Low (4- 5.3), Moderate (5.4-6.7) and High (6.8-8).

The majority (65.7%) of the Adults reported of a ‘High’ (46.4%) or ‘Moderate’ (19.3%) level of interaction with the society. However, more than one third of them were on the negative, i.e. ‘Low’ level of interaction.

Category-wise, less (33.5%) among the Experimental Group of Harmful Drinkers had reported of social interaction in ‘High’ level compared to the Less Harmful Drinkers (51.3%). However, more (74.4%) from the Control Group of Non-Drinkers had reported on the ‘High’ level of interaction. Chi-square test (p=.000) has proved the statistical significance of the empirical data in this regard. (Refer to table no. 2.5.4.7)

Table No. 2.5.4.7**Interaction with Society Vs Category of Respondents**

Level of Participation	Category of Respondent			Total	Chi-Square
	Harmful Drinkers	Less Harmful Drinkers	Non Drinkers		
Low	70	138	5	213	47.717**
	40.5%	31.6%	5.8%	30.6%	
Moderate	45	75	17	137	P=.000
	26.0%	17.2%	19.8%	19.7%	
High	58	224	64	346	
	33.5%	51.3%	74.4%	49.7%	
Total	173	437	86	696	
	100.0%	100.0%	100.0%	100.0%	

2.5.5 Impact on Productivity

The workplace is likely to reflect the alcohol issues experienced in the general community. Alcohol burdens individuals, industry, and society in terms of health, social and economic costs and as such signal a major public health problem. The workplace presents particular challenges when attempting to address alcohol and other drug related issues, in part due to the potential for serious harm arising from accidents, injuries, and productivity implications. Alcohol related harm in the workplace may manifest in terms of physical harm, such as fatalities and injuries, and productivity related implications, such as a reduction in the available workforce or poor performance. In addition, alcohol adversely impacts workplace culture and morale and the health and welfare of the workforce. (Lindsay Breugem, 2006)

The variables discussed in this section were, Number of days missed from job, loss of pay, loss of job, disciplinary actions taken, demotion, suspension, accidents at work, decreased efficiency, physical fights, drunken driving, arrests by the police, and accidents.

Days Absent / Missed Days of Work

Though majority of the Adults in the sample had either not responded to the query or not missed any days of work during the last month, 83 (13.3%) reported that they were absent or had missed days of work due to alcohol consumption. Of these, the majority (67 – 10.8%) had missed 1 – 7 days of work in the last month. The responses of Spouses in this regard were not obtained. (*Refer to table 2.5.5.1*)

Table No.2.5.5.1
Days Absent/Missed Days of Work in last one Month

Days absent/ missed	Frequency	Percent
Not responded / No days missed	539	86.7
1 – 2 days	26	4.2
3 – 4 days	26	4.2
5 – 7 days	15	2.4
8 – 15 days	11	1.8
More than 15 days	5	0.8
Total	622	100.0

Loss of Pay

The data in this regard showed that 14.8% of the Adults (including few those who did not respond to the Absent/Missed days) had the problem of loss of pay due to missed work days during the last month.

Slightly a higher number (23.3%) of the Spouses reported of the ‘Loss of pay’, their husbands had in the last month due to their drinking habits. (*Refer to table 2.5.5.2*)

Table No.2.5.5.2
Loss of Pay

Loss of pay	Adults	Spouse
Yes	92	21
	14.8%	23.3%
No	533	69
	85.2%	76.7%
Total	621	90
	100.0%	100.0%

Category-wise, a significantly high percentage of the Experimental Group of Harmful Drinkers (28.3%) had sustained loss of pay compared to the Less-Harmful Drinkers (9.3%). However, only 7.8% of the Non-Drinkers of the Control Group reported of loss of pay due to being absent from job for one or other reasons. Chi-square test ($p=.000$) has also proved the statistical significance of the findings in this regard. (*Refer to table no. 2.5.5.3*)

Table No. 2.5.5.3
Loss of Pay and Category of Respondents

Loss of pay	Category of Respondents			Total	Chi-square
	Harmful	Less Harmful	Non Drinkers		
Yes	51	41	7	99	40.036**
	28.3%	9.3%	7.8%	13.9%	$p=.000$
No	129	401	83	613	
	71.7%	90.7%	92.2%	86.1%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Loss of Job/Dismissal from School

The present study had a probe into the ‘Loss of Job’ of the Adults and husbands of Spouses. Further, the responses of Adolescents in relation to the dismissal from the school were also examined.

Among the Adults, 16.1% had lost their job due to their drinking behaviour while those who had reported on the same among the Spouses were slightly higher than that of the Adults with 22.2%.

With regard to the Adolescents, 11.4% had reported of the dismissal from the school due to their alcohol consumption. (Refer to table 2.5.5.4)

**Table No.2.5.5.4
Loss of Job/Dismissal from School**

Loss of Job	Adults	Spouse	Adolescent
Yes	100	20	26
	16.1%	22.2%	11.4%
No	516	70	203
	83.9%	77.8%	88.6
Total	622	90	229
	100.0%	100%	100%

Category-wise, those who had lost their job were much higher (39.4%) among the Experimental Group of Harmful Drinkers compared to the Less-Harmful Drinkers (6.6%). However, only 4.4% Non-Drinkers of the Control Group had lost their job. Chi square test ($p = .000$) has also proved the statistical significance of the same. (Refer to table. 2.5.5.5)

**Table No. 2.5.5.5
Loss of Job Vs Category of Respondents**

Loss of Job	Category of Respondent			Total	Chi-square
	Harmful	Less Harmful	Non Drinkers		
Yes	71	29	4	104	119.417
	39.4%	6.6%	4.4%	14.6%	$p=.000$
No	109	413	86	608	
	60.6%	93.4%	95.6%	85.4%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Disciplinary Action

8.5% of the Adult Drinkers in the sample had faced disciplinary action due to their drinking habit while those who reported of the same among the Spouses about their husbands were 13.3%. (Refer to table 2.5.5.6)

**Table No.2.5.5.6
Disciplinary Action**

Disciplinary action	Adults	Spouse
Yes	53	12
	8.5%	13.3%
No	569	78
	91.5%	86.7%
Total	622	90
	100.0%	100%

Category-wise, a significantly high percentage of Experimental Group; Harmful Drinkers (16.7%) had undergone disciplinary action at workplace compared to Less-Harmful Drinkers (5.3%). With regard to the Control Group, no one among the Non-Drinkers had faced any disciplinary action from the job. Chi-square test ($p=.000$) carried out in this regard revealed the statistical significance of the empirical data. (Refer to table 2.5.5.7)

**Table No. 2.5.5.7
Disciplinary Action Vs Category of Respondents**

Disciplinary Action	Category of Respondents			Total	Chi-square
	Harmful	Less Harmful	Non Drinkers		
Yes	30	23	0	53	32.681**
	16.7%	5.2%	.0%	7.4%	$p=.000$
No	150	419	90	659	
	83.3%	94.8%	100.0%	92.6%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Demotion

Only a small percent (4.3%) of Adults in the sample had a demotion from their job. However, 8.9% of the Spouses reported on the same faced by their husbands because of drinking. (Refer to table 2.5.5.8)

**Table No. 2.5.5.8
Demotion from Job**

Demotion	Adults	Spouse
Yes	27	8
	4.3%	8.9%
No	595	82
	95.7%	91.1%
Total	622	90
	100.0%	100%

Category-wise, the Experimental Group had a slight margin (9.4%) of Harmful Drinkers with demotion than the Less-Harmful Drinkers (2.5%). However, none of the Non-Drinkers of the Control Group had undergone demotion. Chi-square test ($p=.000$) has also proved the statistical significance of the empirical data. (Refer to table no. 2.5.5.9)

**Table No. 2.5.5.9
Demotion Vs Category of Respondents**

Demotion	Category of Respondents			Total	Chi-square
	Harmful	Less Harmful	Non Drinkers		
Yes	16	11	0	27	18.422**
	8.9%	2.5%	.0%	3.8%	$p=.000$
No	164	431	90	685	
	91.1%	97.5%	100.0%	96.2%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Suspension from Job/School

Suspension from the job due to their drinking habit was found to be less among the Adults (3.5%) and the husbands of Spouses (3.3%) in the sample.

However, the number of Adolescents who got suspended from the school in this regard was comparatively high with 16.8%. (Refer to table 2.5.5.10)

**Table No.2.5.5.10
Suspension from Job/School**

Suspension	Adults	Spouse	Adolescents
Yes	22	3	37
	3.5%	3.3%	16.8%
No	600	87	192
	96.5%	96.7%	73.2%
Total	622	90	229
	100.0%	100.0%	100.0%

Category-wise, the Experimental Group had a slight margin (7.4 %) of Harmful Drinkers suspended from the job compared to the Less-Harmful Drinkers (2.1%). With regard to the Control Group of Non-Drinkers, no one had reported of suspension. Chi square test ($p=.001$) has also proved the statistical significance of the same. (Refer to table no. 2.5.5.11).

**Table No. 2.5.5.11
Suspension Vs Category of Respondents**

Suspension	Category of Respondent			Total	Chi-square test
	Harmful	Less Harmful	Non Drinkers		
Yes	13	9	0	22	14.773*
	7.2%	2.0%	.0%	3.1%	$p=.001$
No	167	433	90	690	
	92.8%	98.0%	100.0%	96.9%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Accidents at Work

One out of every 10 Adult Drinkers in the sample had accidents at work. Further, 2 out of every 10 Spouses reported of the accidents, their husbands had at the workplace. (Refer to table 2.5.5.12)

**Table No.2.5.5.12
Accidents at Work**

Accidents at work	Adults	Spouse
Yes	65	18
	10.5%	20.0%
No	557	72
	89.5%	80.0%
Total	622	90
	100.0%	100.0%

Category-wise, the Experimental Group had a good percentage of Harmful Drinkers (17.8 %) had accidents at work compared to the Less-Harmful Drinkers (7.5%). However, none of the Non-Drinkers of the Control Group had reported of any accidents at work. Chi-square test ($p=.000$) has proved the statistical significance of the empirical data. (Refer to table 2.5.5.13)

**Table No. 2.5.5.13
Accidents at Work Vs Category of Respondents**

Accidents at work	Category			Total	Chi-square test
	Harmful	Less Harmful	Non Drinkers		
Yes	32	33	0	65	26.745**
	17.8%	7.5%	.0%	9.1%	$p=.000$
No	148	409	90	647	
	82.2%	92.5%	100.0%	90.9%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Decreased Efficiency

A probe in this regard depicted that 17% of the Adults had a decrease in their efficiency at work due to drinking behaviour while 21.1% of the Spouses reported of the same problem of their husbands.

Further, 18.3% of the Adolescents affirmed the decrease of their efficiency in education because of their alcohol use. (Refer to table 2.5.5.14)

**Table No.2.5.5.14
Decreased Efficiency**

Decreased efficiency	Adults	Spouse	Adolescents
Yes	106	19	42
	17.0%	21.1%	18.3%
No	516	71	187
	83.0%	78.9%	81.7%
Total	622	90	229
	100.0%	100.0%	100.0%

Category-wise, the Experimental Group had a significantly high percentage of Harmful Drinkers (28.2%) reporting of a decrease in their efficiency compared to Less-Harmful Drinkers (12.7 %). However, only a few (2.2%) Non-Drinkers of the Control Group had reported on the same. Chi square test ($p = .000$) has proved the statistical significance of the findings. (Refer to table 2.5.5.15).

**Table No. 2.5.5.15
Decreased Efficiency Vs Category of Respondents**

Decreased efficiency	Category of Respondents			Total	Chi-square
	Harmful	Less Harmful	Non Drinkers		
Yes	51	55	2	108	38.517**
	28.3%	12.4%	2.2%	15.2%	p=.000
No	129	387	88	604	
	71.7%	87.6%	97.8%	84.8%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Physical Fights

Interestingly, almost equal number of respondents among the Adults (52.1%) and the Adolescents (55.1%) had reported on the incidents of physical fights either at some times or at most of the times.

However, the percentage of Spouses (61.1%) who cited about the physical fights of their husbands was slightly higher than that of the Adults and the Adolescents.(Refer to table 2.5.5.16)

**Table No.2.5.5.16
Physical Fights by Alcohol Users**

Frequency	Adults	Adolescent	Spouse
Most of the times	59	18	13
	9.5%	7.9%	14.4%
Sometimes	266	108	42
	42.8%	47.2%	46.7%
Never	297	103	35
	47.7%	45.0%	38.9%
Total	622	229	90
	100.0%	100.0%	100.0%

Category-wise, the Experimental Group had a significant percentage (71.1 %) of Harmful Drinkers with instances of physical fights compared to the Less-Harmful Drinkers (44.6 %). However, only a less percentage (21.1%) of the Control Group had the Non-Drinkers with instances of physical fights. Chi square test ($p=.000$) performed has also proved the statistical significance of the same. (Refer to table no. 2.5.5.17)

In general, the above data point of the revelation that the alcohol consumption does affect the quietness of a society to an extent. It underlines the assumption that a good number of crimes are stimulated by the use, especially the harmful use of alcohol or drugs.

Table No. 2.5.5.17
Physical Fights Vs Category of Respondents

Physical fights	Category of Respondents			Total	Chi-square
	Harmful	Less Harmful	Non Drinkers		
Most of the times	45	14	4	63	117.635**
	25.0%	3.2%	4.4%	8.8%	p=.000
Sometimes	83	183	15	281	
	46.1%	41.4%	16.7%	39.5%	
Never	52	245	71	368	
	28.9%	55.4%	78.9%	51.7%	
Total	180	442	90	712	
	100.0%	100.0%	100.0%	100.0%	

Drove Vehicle under Intoxication

Though drunken driving at most of the time was reported by a lesser number (about 8% each) of respondents, a good number among the Adults (34.4%), Adolescents (29.3%) and Spouses (36.7%) confirmed the occurrence of the same at some times. (Refer to table 2.5.5.18)

Table No.2.5.5.18
Drove Vehicle under Intoxication

Drove Vehicle	Adults	Adolescent	Spouse
Most of the times	50	19	8
	8.0%	8.3%	8.9%
Sometimes	214	67	33
	34.4%	29.3%	36.7%
Never	358	143	49
	57.6%	62.4%	54.4%
Total	622	229	90
	100.0%	100.0%	100.0%

Category-wise, drunken driving (at some times or most of the time) was found to be more among the Harmful Drinkers (51.7%) compared to the

Less-Harmful Drinkers (38.7%). The statistical significance was proved by the Chi-square test performed ($p=.000$). (Refer to table 2.5.5.19)

Table No. 2.5.5.19
Drove Vehicle under Intoxication Vs Category of Respondents

Drove vehicle	Category		Total	Chi-square
	Less Harmful	Harmful		
Most of the times	23	27	50	18.309**
	5.2%	15.0%	8.0%	
Sometimes	148	66	214	p= .000
	33.5%	36.7%	34.4%	
Never	271	87	358	
	61.3%	48.3%	57.6%	
Total	442	180	622	
	100.0%	100.0%	100.0%	

Arrested and Held at Police station

Of those who reported of the drunken driving, 28% of the Adults and 19.8% of the Adolescents had got arrested and held at the police station.

34.1% of the Spouses too, reported on the arrest of their husbands for drunken driving. (Refer to table 2.5.5.20).

Table No.2.5.5.20
Got Arrested and Held at Police Station

Got Arrested	Adult	Adolescent	Spouse
Yes	74	17	14
	28.0%	19.8%	34.1%
No	190	69	27
	72.0%	81.2%	65.9%
Total	264	86	41
	100%	100%	100%

Category-wise, the Experimental Group had more Harmful Drinkers (33.3%) who got arrested and held at police stations while driving under intoxication than the Less-Harmful Drinkers (12.9%). However, the Non-Drinkers of the Control Group who got arrested while driving for reasons other than drinking were less in number (3.9%). The statistical significance of the above findings

was also proved by the Chi-square test ($p=.000$) performed.(Refer to table 2.5.5.21)

Table No.2.5.5.21
Got Arrested and Held at Police Station Vs Category of Respondents

Got arrested & held at police station	Category of Respondents			Total	Chi-square test
	Harmful	Less Harmful	Non Drinkers		
Yes	31	22	2	55	25.250
	33.3%	12.9%	3.9%	17.5%	P=.000
No	62	149	49	260	
	66.7%	87.1%	96.1%	82.5%	
Total	93	171	51	315	
	100.0%	100.0%	100.0%	100.0%	

Arrested / Paid Penalty for Drunken Driving

Among those who had drunken driving, nearly half among the Adults and husbands of Spouses each were found to be arrested or paid the penalty for the same.

More than one third (36%) of the Adolescents who drove a vehicle under intoxication were also reported to be arrested / paid penalty for the same.(Refer to table 2.5.5.22)

The data corroborate with the statement of the state police department that one of the reasons for the high rate of recorded crimes in Kerala, is the excess number of cases registered for drunken driving and drinking in public places.

Table No.2.5.5.22
Arrested / Paid Penalty for Drunken Driving

Arrested/paid penalty	Adult	Adolescent	Spouse
Yes	129	31	20
	48.9%	36.0%	48.8%
No	135	55	21
	51.1%	64.0%	51.2%
Total	264	86	41
	100%	100%	100.0%

Category-wise, the Experimental Group had a slightly higher percentage (52.7%) of Harmful Drinkers who got arrested/paid penalty while driving under intoxication compared to the Less-Harmful Drinkers (46.8%). However, with regard to the Control Group, only a few (7.8%) of Non-Drinkers had got arrested/paid penalty while driving for reasons other than drinking. Chi square test value (p=.000) also proved the statistical significance of the data. ((Refer to table 2.5.5.23).

**Table No.2.5.5.23
Arrested/Paid Penalty Vs Category of Respondents**

Arrested/ Paid Penalty	Category of Respondents			Total	Chi-square test
	Harmful	Less Harmful	Non Drinkers		
Yes	49	80	4	133	30.343**
	52.7%	46.8%	7.8%	42.2%	P=.000
No	44	91	47	182	
	47.3%	53.2%	92.2%	57.8%	
Total	93	171	51	315	
	100.0%	100.0%	100.0%	100.0%	

Accidents

About one third of the Adults, who drove under intoxication, were reported to have met with accidents, at least once in the course of action.

Alarmingly, nearly half of the Adolescents and husbands of Spouses in the sample also have met with accidents. It is also noted that the accident rate is more among the Adolescents than the Adults. (Refer to table 2.5.5.24)

The present data are in tune with the increasing incidents of road accidents reported by the Home Dept., Kerala. Two wheelers are said to be the prominent ones among the vehicles which caused to the alarming rate of accidents.

Table No.2.5.5.24
Accidents (Injured self/others)

Accidents	Adult	Adolescent	Spouse
Yes	86	40	20
	32.6%	46.5%	48.8%
No	178	46	21
	67.4%	53.5%	51.2%
Total	264	86	41
	100.0%	100.0%	100.0%

Category-wise, the Experimental Group had an almost equal number of Harmful Drinkers and Less-Harmful Drinkers who reported of the accidents and injury to self or others. However, among the Control Group of Non-Drinkers, those who reported of the same were less in number (11.8%). Chi-square test ($p=.000$) has proved the statistical significance of the findings. (Refer to table no. 2.5.5.25)

Table No. 2.5.5.25
Accidents Vs Category of Respondents

Accidents (injured self of others)	Category of Respondents			Total	Chi- Square test
	Harmful	Less Harmful	Non Drinkers		
Yes	28	58	6	92	9.376
	30.1%	33.9%	11.8%	29.2%	.009
No	65	113	45	223	
	69.9%	66.1%	88.2%	70.8%	
Total	93	171	51	315	
	100.0%	100.0%	100.0%	100.0%	

An overview of the impact of alcoholism portrayed that the impact was reported more by the Spouses of Drinkers than the Adult Drinkers. As most of the Adolescents were not regular Drinkers, the impact was found to be comparatively less among them.

The majority of the Adult Drinkers/Alcohol Users and husbands' of Spouses had physical and potential mental health problems. Though, comparatively less

in number, more than half of the Adolescents too reported on the same. With regard to impact on personal being, though the majority of the Drinkers had problems related to the functioning of their personal and familial activities, comparatively more Spouses reported of the same than the Adults. Further, the externalising and internalising emotions were reported to be higher (moderate or high) among the Adult Drinkers compared to the Adolescents.

With regard to the impact on family, almost one fourth of the Adult Drinkers and Spouses of Drinkers had reported of a low level of general family functioning. Further, about half of the Adults and the Spouses each reported on problems with family members. Relationship with Spouse and children were also found to be low among nearly half of the Adults' and one fourth of the Spouses' family. However, 'Acceptance in the family' was moderately or high among most of the Adults or the husbands of Spouses while less among the Adolescent Drinkers.

Regarding the social impact, acceptance in the society was found to be higher among the Adolescents compared to the husbands of Spouses and the Adult Drinkers in the sample. Moderate or high levels of problems in the social life were reported to be more of the Spouses of Drinkers compared to the Adult and the Adolescent Drinkers. As for social participation, Adolescent Drinkers had more participation in the social activities compared to the Adults, especially the husbands of Spouses. Further, the majority of the Adults had a moderate or high level of interaction with the society.

With regard to the impact on productivity, of the 83 (out of the 622) Adults who had reported of the absence or missed days due to alcohol consumption, the majority had missed 1 – 7 days of work in the last month. Regarding the loss of pay, compared to the Adults, a slightly higher number of the Spouses reported of the same about their husbands in the last month. As for the loss of a job, a good number (16.1%) among the Adults had lost their job due to drinking behaviour while those who had reported of the same among the Spouses were slightly higher than that of the Adults. For the Adolescents, more than 10% had

reported of their dismissal from the school due to their alcohol consumption. Though, only a few Adults had reported of the disciplinary action in job and demotion, a slightly higher number of the Spouses reported on the same about their husbands. However, regarding suspension, only a small percent among each of them reported on the same. As for suspension from the school, more than one sixth of the Adolescents had it. For accidents at the workplace, 1 Adult and 2 Spouses out of every 10 respondents each had reported on the same. Decreased efficiency was also reported more by the Spouses of Drinkers compared to Adults and Adolescents. Regarding physical fights, interestingly more than half of the Adults and the Adolescents had reported it. However, the Spouses who cited about the same were slightly higher. Though drunken driving at most of the time was reported by a lesser number, a good number among the Adults, Adolescents and Spouses confirmed the occurrence of the same at some times. Of those who reported of the drunken driving, more than one fourth of the Adults and nearly one fifth of the Adolescents had got arrested and held at the police station. Alarmingly, nearly half of the Adolescents and husbands of Spouses and one third of the Adults in the sample, who drove under intoxication, were reported to have met with accidents at least once in the course of action. It is also noted that the accident rate was more among the Adolescents than the Adults.

Category-wise, with regard to the impact of alcoholism on the physical and mental health, psychological well being, family, society and productivity, the Experimental Group (Drinkers- harmful and less harmful) had shown variations with high impact reported by the Harmful Drinkers compared to the less Harmful Drinkers. However, with regard to the Control Group of Non-Drinkers, the status of physical / mental health, psychological well being, family and societal relationship and productivity was reported to be comparatively higher with those of the Experimental Group of Drinkers.

2.6 Withdrawal, Treatment and Allied Aspects

Alcohol withdrawal (AW) refers to symptoms that may occur when a person try to reduce / cut down alcohol consumption after prolonged periods of excessive alcohol intake. Excessive use of alcohol leads to tolerance, physical dependence, and an alcohol withdrawal syndrome. Alcohol is well known for its propensity to induce physiological dependence. Alcohol withdrawal occurs as a result of neuro-adaptation resulting from chronic exposure to alcohol. It occurs most often in Adults, but may occur in teenagers or children. The more drink every day, the more likely to develop alcohol withdrawal symptoms when stops drinking. There may have more severe withdrawal symptoms if one has certain other medical problems. The common withdrawal symptoms include: Anxiety or nervousness, Depression, Not thinking clearly, Fatigue, Irritability, Jumpiness or shakiness, Mood swings, Nightmares, etc.(NIH MedlinePlus, 2013)

An appropriate treatment can relieve the patient's discomfort, prevent the development of more serious symptoms, and forestall cumulative effects that might worsen future withdrawals. The treatment helps to reduce withdrawal symptoms, prevent complications, and to get stop drinking (abstinence). Treatment may include: Monitoring of blood pressure, body temperature, heart rate, and blood levels of different chemicals in the body, Fluids or medications through a vein (by IV), and Sedation using medication called benzodiazepines until withdrawal is complete.

This section of the chapter portrays the alcohol withdrawal experienced by the Alcohol Users under study, the treatment they received in this regard and allied aspects.

Efforts to Stop/Cut down Drinking

It is known that alcohol withdrawal is shown only when the alcohol user tries to stop / cut down his/her drinking.

A probe in this regard showed that of the Adults, 64.5% and among the Adolescents, 49.8% have tried to stop/cut down their drinking.

The majority (67.8%) of the Spouses reported that their husbands had also tried this. (Refer to table 2.6.1)

Comparatively among the Adolescents, those who tried to stop/cut down drinking were found to be less; perhaps it might be due to the fact that a good number had just started drinking.

**Table No.2.6.1
Efforts to Stop/Cut down Drinking**

Category of Respondents	Yes	No	Total
Adults	401	221	622
	64.5%	35.5%	100%
Adolescents	114	115	229
	49.8%	51.2%	100%
Spouse	61	29	90
	67.8%	32.2%	100%

Category-wise, there was not much difference found among the Harmful Drinkers and Less-Harmful Drinkers in taking efforts to stop / cut down drinking. (Refer to table 2.6.2)

**Table No.2.6.2
Efforts to Stop/Cut down Drinking (Adults) Vs Harmful Drinking**

Efforts to stop/cut down drinking	Harmful/Less Harmful Drinking		Total
	Less Harmful	Harmful	
Yes	279	122	401
	63.1%	67.8%	64.5%
No	163	58	221
	36.9%	32.2%	35.5%
Total	442	180	622
	100.0%	100.0%	100.0%

Abstinence / Cut down Drinking for a Month

The study had a probe into the capability of the Alcohol Users in the sample to stop / cut down drinking for a month.

A query in this regard showed that among those who have tried to stop/cut down drinking, the majority of the Adults (93.0%) and Adolescents (92.9%) could stop/cut down their drinking for one month. Of these, most could make it possible by self initiation (Adults – 86.6%, Adolescents-90.5%) and the rest by force of others.

With regard to the Spouses who reported of the efforts of their husbands to stop/cut down drinking, 98.4% stated about its abstinence for one month. However, a good number (46.7%) stated that their husbands could make it possible by the coercion of others. (*Refer to table2.6.3*)

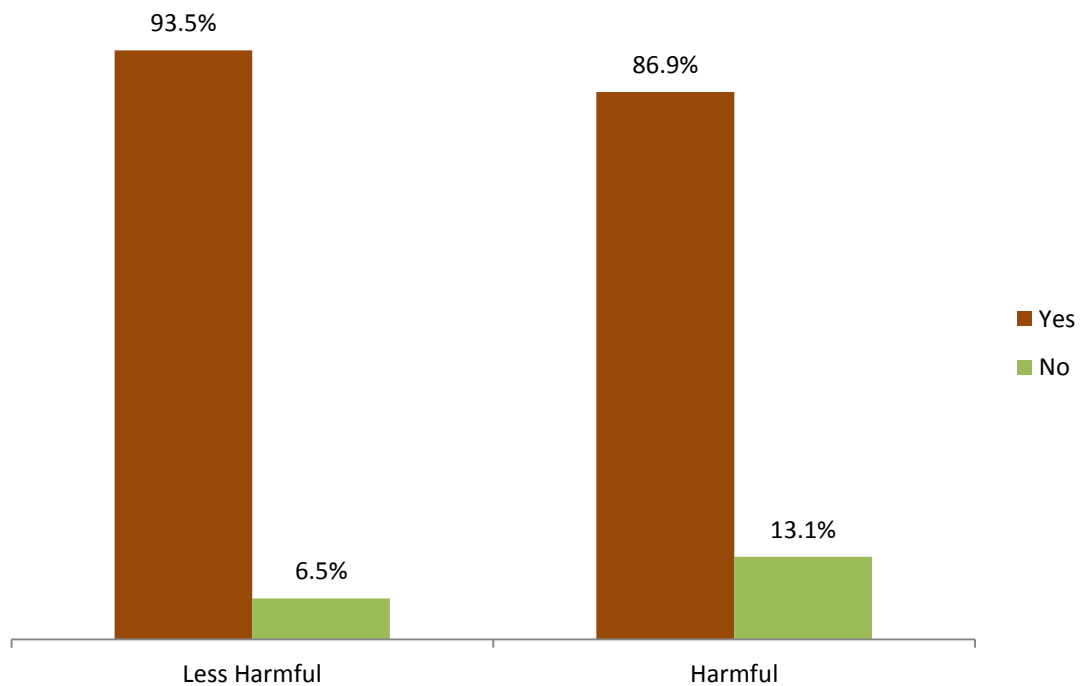
**Table No.2.6.3
Abstain, or Cut down for a Month**

Respondents	Yes	No	Total
Adults	373	28	401
	93.0%	7.0%	100%
Adolescents	105	8	113
	92.9%	7.1%	100%
Spouse	60	1	61
	98.4%	1.6%	100%
Abstinence Made Possible			
	Self Initiative	Coerced by Others	Total
Adults	323	50	373
	86.6%	13.4%	100%
Adolescents	95	10	105
	90.5%	9.5%	100%
Spouse	32	28	60
	53.3%	46.7%	100%

Category-wise, though the majority of the Adult respondents could abstain from drinking for a month, those who could not stop their drinking were comparatively more among the Harmful Drinkers than the Less-Harmful Drinkers. (Refer to figure 2.6.1)

Figure No.2.6.1

Abstain, or Cut down for a Month Vs Harmful Drinking (Adults)



Longest Period of Abstinence

Of the Adults who were abstaining for one month (401), the majority (70.3%) had an abstinence of 1-6 months duration followed by 6 – 12months (18%).

Among the Spouses, the majority (88.5%) reported 1-6months as their husband’s longest period of abstinence from drinking.

With regard to Adolescents, most (84.1%) had not responded to the query. However, 8.8% reported that they had a 1-6 months abstinence from alcohol. (Refer to table 2.6.4)

**Table No.2.6.4
Longest Period of Abstinence from Drinking**

Longest Period	Adult	Adolescents	Spouse
Below 1 month	28	-	1
	7.0%	-	1.7%
1 - 6 months	282	10	54
	70.3%	8.8%	88.5%
6 - 12 months	72	7	3
	18.0%	6.2%	4.9%
1 - 3 years	15	1	2
	3.7%	0.9%	3.3%
Above 3years	4	-	-
	1.0%	-	-
No Response	-	95	1
	-	84.1%	1.7%
Total	401	113	61
	100.0%	100.0%	100%

Compulsion from Others to Stop Alcohol Consumption

Almost an equal number of Adults (32.5%) and Adolescents (34.1%) reported of the compulsion they experienced from others, to stop alcohol consumption. Spouse and other family members were the persons who compelled the Adult respondents to stop consuming, whereas for Adolescents; it was their parents, siblings, friends and teachers. (Refer to table 2.6.5)

**Table No.2.6.5
Compulsion to Stop Alcohol Consumption**

Category of Respondents	Yes	No	Total
Adults	202	420	622
	32.5%	67.5%	100%
Adolescents	78	151	229
	34.1%	65.9%	100%

Reasons for Restart of Drinking after Abstinence

The empirical data in this regard showed that among those who had tried to stop/cut down drinking, 'wanted to use' was one of the main reasons for the

majority (43.4%) of the Adult respondents to restart their drinking after a short /long abstinence. ‘Peer pressure’ was found to be second in the list with 41.6% respondents. Craving and Positive mood were the other major reasons pointed out by 13.7% and 11.2% Adult respondents respectively.

With regard to Adolescents, 61.9% reported that ‘Peer pressure’ was a reason to restart their drinking. However, the next majority, 28.3% restarted drinking due to the feeling of ‘Wanted to use’.

The majority (49.2%) of the Spouses too stressed ‘Peer pressure’ for the restart of their husband’s drinking. ‘Wanted to use’ was the other reason reported by a good majority (29.5%). (Refer to table 2.6.6)

Table No.2.6.6
Reasons for Restart Drinking After Abstinence

Reasons	Adults (N=401)	Adolescents (N=113)	Spouse (N=61)
Craving	55	7	3
	13.7%	6.2%	5.0%
Peer pressure	167	70	30
	41.6%	61.9%	49.2%
Wanted to use	174	32	18
	43.4%	28.3%	29.5%
Withdrawal	14	-	1
	3.5%	-	1.6%
Negative Mood	30	2	4
	7.5%	1.8%	6.5%
Coping with stress	30	2	4
	7.5%	1.8%	6.5%
Retaliation	4	2	1
	1.0%	1.8%	1.6%
Pain	9	-	-
	2.2%	-	-
Boredom	10	1	1
	2.5%	0.9%	1.6%
Positive Mood	45	3	3
	11.2%	2.7%	5.0%
No response (No special reasons)	36	10	2
	9.0%	8.8%	3.3%

Problems Experienced While Tried to Cut Down / Stop Drinking

The present study had a probe into the problems faced by the respondents, while they had tried to stop/cut down drinking. The query was posed only to the Alcohol Users (Adult & Adolescents) and not to the Spouses of Drinkers.

Obviously, it was very pathetic to see that 63.4% of the Adults and 58.4% of the Adolescents have faced problems, while they tried to stop drinking. Further, 37.7% of the Adults had faced multiple problems. Multiple withdrawal problems were found to be comparatively less (15.9%) among the Adolescent Drinkers and headache and fidgety/restless was the major difficulties they faced when they cut down/stopped drinking. Further, 12.4% reported that they had a problem of ‘Unable to sleep’. (Refer to table 2.6.7)

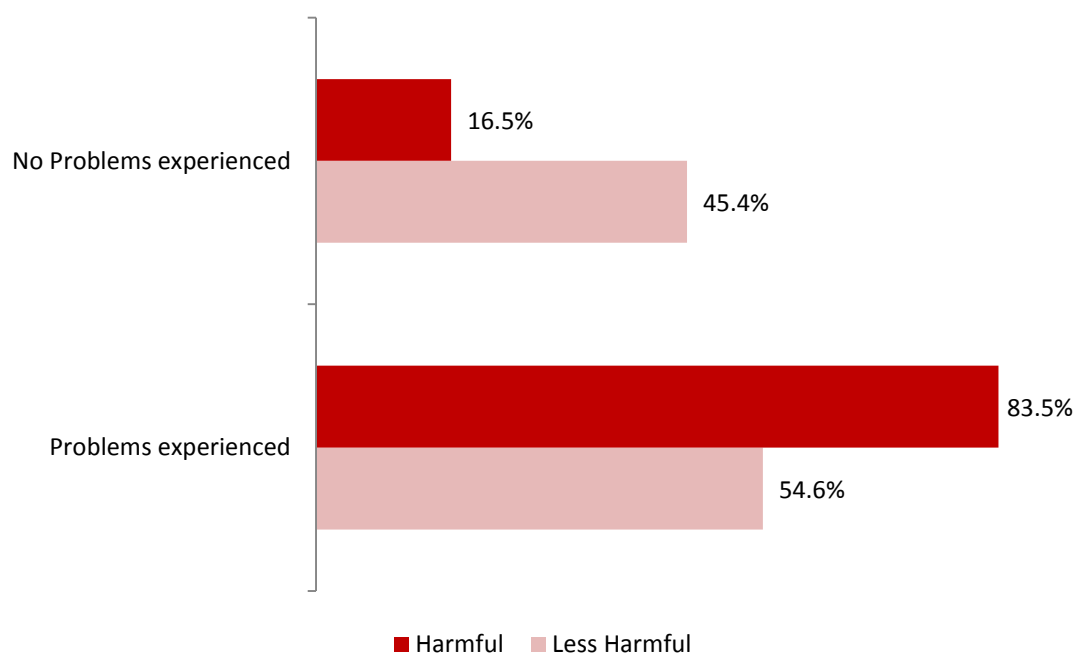
Category-wise, the figure 2.6.2 showed that withdrawal problems were more (83.5%) among the Harmful Drinkers (Adults) compared to the Less-Harmful Drinkers (54.6%).

**Table No.2.6.7
Problems Experienced While Tried to Cut Down / Stop Drinking**

Problems Experienced	Status of Harmful Drinking			
	Adults		Adolescents	
Hand trembling	26	63.4%	4	58.4%
	6.5%		3.5%	
Unable to sleep	21		14	
	5.2%		12.4%	
Feel anxious	16		-	
	4.0%		-	
Feel depressed	15		6	
	3.7%		5.3%	
Feel irritable	6		-	
	1.5%		-	
Increased heart beat	1	1		
	.2%	0.9%		

Sweating	1		4	
	.2%		3.5%	
Felt Physically weak	7		-	
	1.7%		-	
Headaches	6		3	
	1.5%		2.7%	
Fidgety/restless	4		2	
	1.0%		1.8%	
Multiple Problems (<i>more than one</i>)	151		18	
	37.7%		15.9%	
No Problems Experienced	147	36.6%	47	41.6%
	36.6%		41.6%	
Total	401	100%	113	100%
	100.0%		100.0%	

Figure No.2.6.2
Withdrawal Problems when Tried to Cut Down / Stop Drinking
Vs Harmful Drinking of Adults



FITS/Convulsion

A query in this regard showed that 8 Adults and 2 Adolescents in the sample had FITS / Convulsions when they stopped drinking. It was also noticed from the data that of the 2 Adolescents, one had the habit of using Ganja/Charas.

Two Spouses had reported that their husbands too faced the same problem. (Refer to table 2.6.8)

Category-wise, FITS/Convulsion was found to be more (4.1%) among the Harmful Drinkers compared to the Less-Harmful Drinkers (1.1%). (Refer to figure 2.6.3)

Delirium Tremens

Of those who have tried to stop/cut down drinking, 41 Adults had faced the problem of Delirium tremens (Confusion, disorientation, hallucinations, etc.).

None of the Adolescents have reported of the problem, whereas 7 Spouses stated that their husbands had experienced Delirium. (Refer to table 2.6.8)

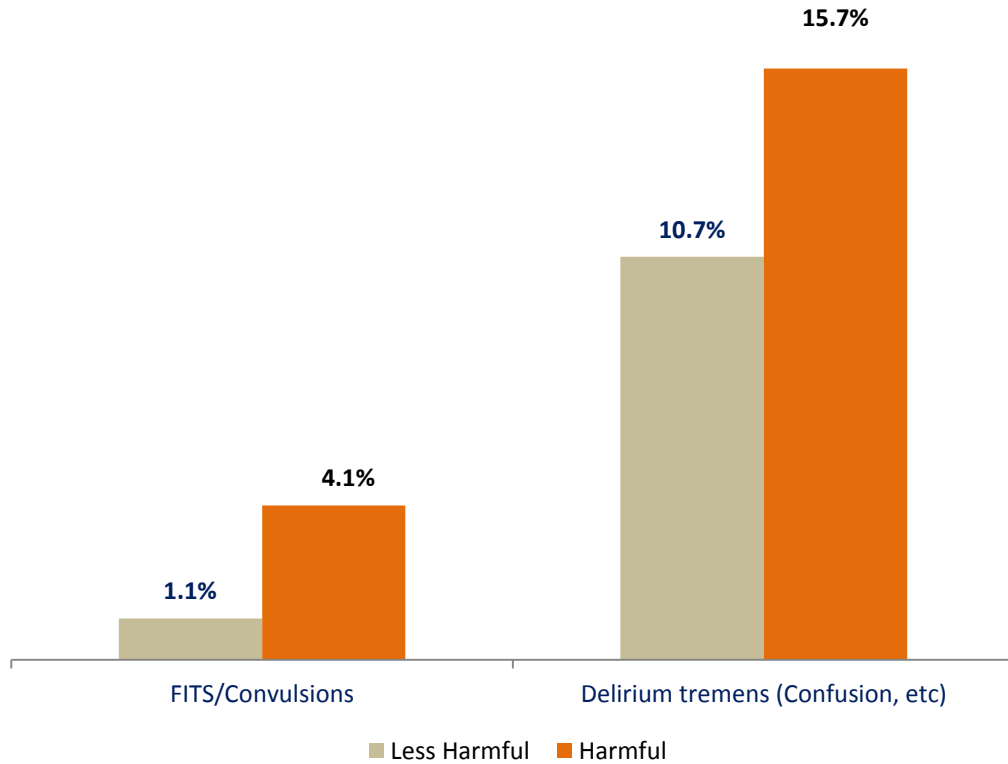
Category-wise, the presence of Delirium tremens(Confusion, disorientation, hallucinations, etc.) in Adult Alcohol Users was comparatively more among the Harmful Drinkers (15.7%) than the Less-Harmful Drinkers (10.7%).(Refer to figure 2.6.3)

Table No.2.6.8
Status of having FITS/Convulsion or Delirium tremens

Problems Experienced	Adults	Adolescents	Spouse
FITS/Convulsions			
Yes	8	2	2
No	393	111	59
Total	401	113	61
Delirium tremens (Confusion, disorientation, hallucinations etc)			
Yes	49	0	7
No	352	113	54
Total	401	113	61

Figure No.2.6.3

FITS/Convulsion / Delirium tremens Vs Harmful Drinking of Adults



Visit/Treatment at De-addiction Centre

An inquiry into how many of the Alcohol Users under study have visited the De-addiction Centre for treatment, only 9.8% among Adults and 5.2% among Adolescents had confirmed the same.

21.1% of the Spouses too reported that their husbands had visited and undergone treatment at the De-addiction Centres.

Further, the majority (67.2%) of the Adults had only one visit while 32.8% had more than one visit. However, cent per cent of the Adolescents had only one time visit while a good number (78.1%) of Spouses reported of more than one time visits of their husband.(Refer to table 2.6.9)

Visit/treatment at De-addiction Centres was reported by a comparatively higher number of Spouse respondents than the Adults and Adolescents.

Table No.2.6.9
Visit / Treatment at De-addiction Centre

Category of Respondents	Yes	No	Total
Status of Visit			
Adults	61	561	622
	9.8%	90.2%	100%
Adolescents	5	224	229
	2.2%	97.8%	100%
Spouse	17	73	90
	18.9%	78.1%	100%
No. of Visits			
	Once	More than Once	Total
Adults	41	20	61
	67.2%	32.8%	100%
Adolescents	5	0	5
	100.0%	0.0%	100%
Spouse	11	6	17
	64.7%	35.3%	100%

Awareness on Nearby Treatment Facility for Alcohol addiction

Kerala has many rehabilitation centers for treating addicted persons of alcohol. Many of them are very highly rated and are well known for their success in treating those with Drug and Alcohol addictions. However, it is well known that there are only very few local self governments equipped with treatment facilities in their areas.

A query in this regard to the respondents revealed that only a few of the Alcohol Users were aware of the treatment facility for alcohol addiction in their respective areas. Around 3 out of every 4 Adults and 4 out of every 5 Adolescents in the sample were unaware of any such facility in their areas.

Comparatively a good number (44.4%) of Spouses had knowledge about treatment facility for alcohol addiction and some of them (nearly 20%) had reported of their husbands' visits at the de-addiction centres. (*Refer to table 2.6.10*)

It is to be noticed that though the revenue generates from the sale of alcohol drinks is very high, a well equipped treatment facilities in the state for the problems due to alcohol consumption is very less.

Table No.2.6.10
Awareness on Nearby Treatment Facility for Alcohol Addiction

Awareness	Adult	Adolescent	Spouse
Yes	164	45	40
	26.4%	19.7%	44.4%
No	458	184	50
	73.6%	80.3%	55.6%
Total	622	229	90
	100.0%	100.0%	100.0%

Attitude towards Treatment

Attitude towards treatment was assessed using 3 dimensions scored on a five point scale (Strongly Agree (5), Agree (4), Undecided (3), Disagree (2), and Strongly Disagree (1)). The computed score of the questions produced a score of Attitude towards Treatment ranging from 3 to 15. Higher scores indicated better Attitude towards Treatment. The scores obtained were further classified into Low (3- 6), Moderate (7-10) and High (11-15).

Compared to the Less-Harmful Drinkers (29.7%), a high number (37.6%) of the Harmful Drinkers had a ‘Low’ attitude towards the de-addiction treatment, i.e. Less-Harmful Drinkers(70.3%) showed a ‘Moderate’ or ‘High’ (better) attitude towards the de-addiction treatment. (Refer to table no. 2.5.4.8)

Table No. 2.6.11
Attitude towards Treatment Vs Harmful Drinking

Attitude Towards Treatment	Category		Total	Chi-square
	Less Harmful	Harmful		
Low	131	67	198	5.454 p= .065
	29.7%	37.6%	32.0%	
Moderate	177	55	232	NS
	40.1%	30.9%	37.5%	
High	133	56	189	
	30.2%	31.5%	30.5%	
Total	441	178	619	
	100.0%	100.0%	100.0%	

In short, the majority of the Adults and husbands of the Spouses of the sample had attempted to stop/cut down alcohol drinking and more than 90% of them succeeded in stop/cut down for a month. It is also noted that normally, the longest period of abstinence for both the groups was found to be 1-6 months. With regard to Adolescents, only just half of them were found to have tried to stop drinking (this may be due to their recent starting of drinking habit) and most among them could stop it for a month. Further, 'Wanted use' and 'Peer pressure' were the main reasons for restart of drinking by most of the Adults, whereas 'Peer pressure' was the reason pointed out by the majority of the Adolescents and Spouses for the same.

Among those who have tried to stop/cut down drinking, the majority had faced some withdrawal problems. Of these, a good number of Adults had one or more problems like; unable to sleep, feel anxious, fidgety/relentless etc. Though, comparatively less in number, Adolescents too had difficulties like; unable to sleep, headache and fidgety/relentless. A few Alcohol Users were also found to be having FITS/Convulsion or Delirium tremens. Of the Adults, it was found more among Harmful Drinkers. However, FITS/Convulsion was seen only in 2 Adolescents, of these, 1 had the habit of using Ganja/Charas whereas none of them had the problem of Delirium.

Regarding the withdrawal treatment, only 5 Adolescents found to have approached a De-addiction centre for treatment, of these 3 had a habit of using Ganja/Charas other than drinking. While nearly 10% of the Adults reported of the treatment at the de-addiction centre, about one fifth of the Spouses confirmed the same for their husbands.

2.7 Suggestions of the Respondents

The previous sections of the report presented key aspects viz: socio-economic profile of the respondents, classification of harmful and less harmful users, their history of alcohol consumption, impact of alcohol consumption in comparison with Non-Drinkers and withdrawal, treatment and allied factors. Alcohol addiction treatment is imperative if an individual is alcoholic and

would like to abstain from the habit and to lead a reformed life. To overcome alcohol obsession is found to be very hard, when a person has been using it for a long period. Many alcoholics consume alcohol frequently and constantly without realizing that they are addicted to the same.

This section has made an attempt to highlight the suggestions of the respondents in relation to: *1. Prevention of initiation of alcohol use; 2. Helping persons from addiction after initiation of alcohol use and 3. Helping alcohol addicted persons to quit alcohol use (treatment).*

Prevention of Initiation of Alcohol Use

Alcohol use by underage Drinkers is a persistent public health problem. A strong relationship appears to exist between alcohol use among youth and many social, emotional, and behavioral problems. In addition to the problems that occur during adolescence, early initiation of alcohol consumption is related to alcohol-related problems later in life. The suggestions of Adult and Adolescent Alcohol Users and Spouses of Alcohol Users were taken into consideration for eliciting information regarding the same.

The data portrayed that most of the Adults (39.7%) suggested for awareness generation on the harmfulness of alcohol. This shows that lack of awareness is a significant reason for alcohol initiation and the subsequent addiction. 19.6% recommended for reduction in the availability of alcohol and its access, 17.8% for ban of alcohol and 9.8% for control measures from family. This was followed by 5.5% who proposed to avoid experimentation, 4.7% to avoid peer group pressure, 2.7% to keep good company and the strict enforcement of law while 0.2% suggested counselling services.

With regard to the Adolescents, in tune with the responses of the Adults, a good number (38%) suggested an awareness generation on the harmfulness of alcohol, which can help avoid the early onset of alcohol that may destroy their future. However, 21% advocated reduction in the availability of alcohol and its access and 15.3% - ban of alcohol, 7.9% - control measures from family, 5.2% - counselling services, 4.4% - avoiding experimentation, another 4.4% -

avoiding peer group pressure and the remaining 3.9% pointed out the need for good company and the strict enforcement of law.

In line with the responses of the Adults and the Adolescents, 35.6% of the Spouses (of alcoholics) too were on the perception that an awareness generation on the harmfulness of alcohol can bring about an improvement in the prevention process. The other suggestions put forth by the Spouse respondents were; to reduce the availability of alcohol and its access (25.6%), ban alcohol (24.4%), control measures from the family (4.5%), counselling services (3.3 %), avoiding experimentation (3.3%), having good friends and the strict enforcement of law (2.2%), and avoid peer group pressure (1.1%). (Refer to table 2.7.1)

**Table No. 2.7.1
Prevention of Initiation of Alcohol Use**

Suggestions	Adult	Adolescent	Spouse
Reduce Availability of Alcohol & its Access	122	48	23
	19.6%	21.0%	25.6%
Ban Alcohol	111	35	22
	17.8%	15.3%	24.4%
Awareness Generation on Harmfulness of Alcohol	247	87	32
	39.7%	38.0%	35.6%
Avoid Experimentation	34	10	3
	5.5%	4.4%	3.3%
Counseling Services	1	12	3
	0.2%	5.2%	3.3%
Avoid Peer Group Pressure	29	10	1
	4.7%	4.4%	1.1%
Control Measures from Family	61	18	4
	9.8%	7.9%	4.5%
Others(Good Friends, Strict Enforcement of Law)	17	9	2
	2.7%	3.9%	2.2%
Total	622	229	90
	100%	100%	100%

Helping Persons from Addiction after Initiation of Alcohol Use

The suggestions for helping persons from addiction after initiation of alcohol use are very important with regard to the prevention activities. A multitude of suggestions has been cited by the various categories of respondents viz; Adult, Adolescent and Spouse in this regard.

The data revealed that a good number (37.1%) of the Adults opted for control measures and family support. This emphasized the fact that family members could play a major role in preventing addiction. The other suggestions put forth were; counselling services (31%), awareness generation (28%), religious activities, and ban of alcohol (2.9%) and to avoid alcohol addicted peer group (1%). (*Refer to table 2.7.2*)

With regard to the Adolescents, a majority (51.5%) suggested for control measures and family support. This accentuates the need for parental supervision. However, 29.7% opted for counselling services, 15.3% for awareness generation, 2.2% for need to avoid alcohol addicted peer group and the rest 1.3% for other activities such as religious practices, yoga etc. (*Refer to table 2.7.2*)

The data clearly spelt out that a good number (34.4%) of the Spouses were of the opinion that counselling services would help persons from addiction after initiation of alcohol use which clearly indicated the need for counselling. This was followed by 27.8% for control measures and family support and 24.4% for awareness generation. The other suggestions were religious activities and ban of alcohol (1.3%) and avoidance of alcohol addicted peer group. (*Refer to table 2.7.2*)

Table No. 2.7.2
Helping Persons from Addiction after Initiation of Alcohol Use

Suggestions	Adult	Adolescent	Spouse
Awareness Generation	174	35	22
	28.0%	15.3%	24.4%
Counseling Services	193	68	31
	31.0%	29.7%	34.4%
Control Measures & Family Support	231	118	25
	37.1%	51.5%	27.8%
Avoid Alcohol Addicted Peer Group	6	5	1
	1.0%	2.2%	1.1%
Others (<i>Ban Alcohol, Religious Activities, Yoga etc.</i>)	18	3	11
	2.9%	1.3%	12.2%
Total	622	229	90
	100%	100%	100%

Helping Addicted Persons to Quit Alcohol Use

Some people with drinking problems work hard to resolve them. With the support of family members or friends, these individuals are often able to recover on their own. However, those with alcohol dependence usually cannot stop drinking through willpower alone. Many of them need outside help. They may need medically supervised detoxification to avoid potentially life-threatening withdrawal symptoms, such as seizures. Once people are stabilized, they need help to resolve psychological issues associated with the problem of drinking. There are several approaches available for treating alcohol problems as no single approach is best for all individuals. (Tasha Foundation)

Following are the suggestions put forth by the respondents for helping addicted persons to quit alcohol use.

The data showed that a good number (35.5%) of the Adult respondents suggested for de-addiction centres and follow-ups to help addicted persons to quit alcohol use. This has highlighted the necessity of medical help in case of

addicted persons. Other suggestions were; family support and social acceptance (29.9%), counselling services (19.9%), religious practices and strict enforcement of law (8.7%), awareness generation (3.4%) and ban of alcohol (2.6%).

With regard to the Adolescents, 31.4% suggested for ‘de-addiction centres and follow-ups’ to help the addicted persons quit alcohol. Thus, the importance of medical help for the addicted was brought to notice. 27.1% of them suggested family support and social acceptance, followed by counselling services (24.5%), ban of alcohol (9.2%) and awareness generation (7.9%).

Among the Spouses too, the majority (61.1%) opined that the de-addiction centres and follow-ups would help addicted persons to quit use of alcohol, which again stressed on the importance of medical help. 23.3% stressed the importance of family support and social acceptance. Further, 8.9% suggested for ban of alcohol, 4.4% for counselling services and 2.2% for awareness generation. (*Refer to table 2.7.3*)

Table No. 2.7.3
Helping Addicted Persons to Quit Alcohol Use

Suggestions	Adult	Adolescent	Spouse
De-addiction Centres & Follow up.	221	72	55
	35.5%	31.4%	61.1%
Ban Alcohol	16	21	8
	2.6%	9.2%	8.9%
Awareness Generation	21	18	2
	3.4%	7.9%	2.2%
Counseling Services	124	56	4
	19.9%	24.5%	4.4%
Family Support & Social Acceptance	186	62	21
	29.9%	27.1%	23.3%
Others (<i>Religious Practices, Strict Enforcement of Law</i>)	54	0.0	0.0
	8.7%	0.0%	0.0%
Total	622	229	90
	100%	100%	100%

To sum up the suggestions, with regard to prevention of initiation of alcohol consumption, the majority of the respondents opted for Awareness Generation on Harmfulness of Alcohol, Reduction in the availability of alcohol and its access and ban on alcohol. As for Helping Persons from Addiction after Initiation of alcohol use, most of them were for; Control Measures & Family Support, Counseling Services and Awareness Generation. Regarding Helping Addicted Persons to Quit Alcohol Use, a good number suggested for De-addiction Centres & Follow ups, Family Support & Social Acceptance and Counseling Services.

2.8 Views of Key Informants

For a long time, there are many people in the state who have been working relentlessly against the consumption of alcohol. Further, there are many other people who have been providing services directly or indirectly to the families of alcoholics by themselves or through the institutions viz; hospitals, de-addiction centres, NGOs, Local Self Governments, Police stations, Excise Offices, School/Colleges, Health Centres, ICDS offices, etc. In this regard, 3-5 persons from each of the selected districts were also included in the study as key informants because of their frequent interaction and exposure with a multitude of alcoholic persons as well as cases of alcoholic incidences. Hence, to have an enhanced understanding on the prevalence and impact of alcoholism, the present study sought the views of these key personnel. The key informants in this regard contacted were; Anti - Alcoholic Activists, Police / Excise Officers, Local Self Government Representatives, Social Workers, Women Activists, Counsellors from De-addiction Centres / Hospitals, Teachers, Health Workers, etc. Every 6 out of 10 Key personnel interviewed were males and majority belonged to the age group of 35-45years or below 35years. A good number of them were in the 45-60yearsof age group.

The views of the Key Informants sought were mainly related to; *Extent of Alcohol Consumption in the Region, Major Factors Influencing Alcohol Use among Adults, Most Commonly used Alcohol in the Region, Common Place of*

Drink, Other Commonly Used Substances, Common Physical Complications Associated with Drinking and Impact of Alcoholism. Their suggestions were also drawn in this regard.

Extent of Alcohol Consumption in the Region

The majority (87.8%) of the key informants rated the alcohol consumption in their area as ‘high’. However the rest (12.2%) rated it as ‘medium’. (*Refer to table 2.8.1*)

**Table No.2.8.1
Extent of Alcohol Consumption in the Region**

Extent of Alcohol Consumption	Frequency	Per cent
High	36	87.8
Medium	5	12.2
Low	-	-
Total	41	100

Major Factors Influencing Alcohol Use among Adults

‘Peer pressure’ was reported by the majority (61%) of the Key informants as a main factor that influencing the alcohol use of Adults. Easy availability (56.1%), Efforts to keep the social status (39%), Problems in the family(31.7%) including financial and sexual problem, Peer modelling (31.7%), Stress from the job/work etc. were the other factors which contributing to the rise in alcohol consumption among Adults, according to a good number of key informants. Few of them blamed the present social phenomenon of supply of drinks in every social function, Increase of wage, aimless life, low morale, alcoholic background of the family, etc. Some of them blamed media and film heroes for influencing the people to use alcohol.

Most Commonly used Alcohol in the Region

Brandy and Rum was reported to be the most common used alcohol in their region by 85.4% and 75.6% respondents respectively. 70.7% voted for Whisky

as one of the common brand of alcohol used in the area. Toddy (24.4%) and Vodka (19.5%) were also reported in this regard. (Refer to table 2.8.2)

Table No.2.8.2
Most Commonly used Alcohol in the Region (N*=41)

Type of Alcohol	Frequency	Percent
Arrack	5	12.2
Brandy	35	85.4
Whisky	29	70.7
Rum	31	75.6
Vodka	8	19.5
Gin	4	9.8
Toddy	10	24.4
Beer	3	7.3
Illicit Liquor	4	9.8

Common Place of Drink

Interestingly, most (63.4%) of the Key personnel reported ‘Public places’ as the most common place of drinking; despite drinking at public places is prohibited. More than half (51.2%) of them each stated that ‘Home’ and ‘Bar’ respectively as the commonplaces of drink. Hotel (43.9%), Friends’ house (34.1%), and Car (22%) were the other major locations mentioned by the Key personnel.(Refer to table 2.8.3)

Table No.2.8.3
Common Places of Drink (N=41)

Places	Frequency	Per cent
Home	21	51.2
Friend's House	14	34.1
Public places	26	63.4
Hotel	18	43.9
Bar	21	51.2
Car	9	22.0
Club	6	14.6
Festival Place, Marriage place	2	4.9

Other Commonly Used Substances

The majority (87.8%) of the key informants were on the opinion that smoking tobacco is the most common substance used by the Alcohol Users other than

drinking. Pan parag (58.5%) and Oral tobacco (56.1%) was the other major ones reported by a good number of them.(Refer to table 2.8.4)

Table No.2.8.4
Other Commonly Used Substances (N=41)

Substances	Frequency	Per cent
Smoking Tobacco	36	87.8
Oral Tobacco	23	56.1
Ganja/Charas	5	12.2
Morphine/heroin/pethidine IDU	5	12.2
Pan Parag	24	58.5
Sniffing(Correction fluid/whitener)	10	24.4

Common Physical Complications Associated with Drinking

A great majority (78%) of the key personnel reported that Liver Disease / Jaundice is the most common physical problem they found among the Alcohol Users. More than half of them stated of ‘Stomach disease / blood vomiting’ as a problem suffered by a large number of Drinkers. A good number stated of Heart problems (46.3%), Loss of Appetite (31.7%), Weight loss (31.7%) and Memory problems when not drunk (31.7%) as the other common physical complications associated with the habit of alcohol consumption.(Refer to table 2.8.5)

Table No.2.8.5
Common Physical Complications Associated with Drinking

Diseases	Frequency	Percent
Liver Disease/Jaundice	32	78.0
Stomach disease/blood vomiting	23	56.1
Heart Problems	19	46.3
Feet tingling/feeling numb	8	19.5
Memory problems when not drunk	13	31.7
Pancreatitis Anaemia	11	26.8
Loss of Appetite	13	31.7
Weight loss	13	31.7
Deterioration of general health	3	7.3

Impact of Alcoholism

The key informants were sought for their views on the impact of alcoholism from their experiences with the Alcohol Users. They were queried on the extent of impact and the way it impacted on the alcoholics, their family and the society. The variables considered in this regard were; Impact on family and personal aspects.

Impact on Family Aspects

Impact on the family aspects of Alcohol Users include; impact on household responsibility, marital relationship, suspicious towards Spouse, parenting responsibilities, and family finance.

Household Responsibilities

With regard to the impact of alcoholism on the family, the key personnel reported that alcoholism has a negative impact on the household responsibilities of the Alcohol Users with a distribution of 58.5% as 'Most of the time' and the rest (41.5%) as 'Some times'. (*Refer to table 2.8.6*)

Marital Relationship

Except one, all the others were of the opinion that alcohol consumption has a long lasting impact on the marital relationship of a person with 'most of the time' reported by 75.6% and 'some times' by 22%. (*Refer to table 2.8.6*)

The Key personnel reiterated that alcoholism affects the marital relationship very badly; the alcoholics abuse their Spouses, and they became irresponsible towards their partner and their children. Sexual problems and extra-marital relationships also contribute to the deterioration of marital relationship. Domestic violence and separation of life are reported to be a few of the outcomes of the harmful drinking of a person.

Suspicious towards Spouse

90% of the key personnel opined that the alcohol consumption makes a person suspicious towards Spouse -Most times-51.2% and Sometimes-39. (*Refer to table 2.8.6*)

Parenting Responsibilities

As a child ventures out and experiences the world around him, several influencing factors help shape him into the person he will eventually become. Parents sit at the top of the list of the important and powerful role models in a child's life and influence a lot in moulding their personality.

In tune with this view, 92.7% of the key persons opined that the drinking behaviour of a person definitely will have an impact on the parenting responsibilities as Majority (65.9%) stated it as 'Most of the times' and 26.8% as 'Sometimes'. (*Refer to table 2.8.6*)

The key informants also perceived that the drunkards influence their children badly by presenting themselves as a wrong model. Further, the family problems, child abuse, withdrawal from the parental responsibility, etc. affect the children very badly at their younger ages. Most of the time they forget to give the necessary care to their children.

Family Finance

Of the 41 Key informants interviewed, the majority (38 – 92.7%) stated that alcohol consumption had an impact at 'Most of the times' (68.3%) and 'Sometimes' (24.4%). (*Refer to table 2.8.6*)

A few viewed that for a low salaried person having drinking behaviour has been spending a major part of his salary for drinking. Once he loses his economic balance, he will become a debtor leading him to psychological problems and subsequent increase in his consumption of alcohol. Then, the person is forced to borrow more from the relatives and friends and it reduces his repayment capacity. Some others were of the impression that a regular drinker could not produce any savings at all.

Impact on Personal Aspects

The variables discussed in this regard were; Impact on Personal Activities, Emotional Status, Physical health, Social Responsibilities, and Work responsibilities of Alcohol Users.

Personal Activities

Around 95% reported that the alcohol consumption will cause a negative impact on personal activities of a person either at 'Most of the times' (53.7%) or at 'Some times' (41.5%). (*Refer to table 2.8.6*)

Emotional Status

Impact on the emotional status of an alcohol user was stated by 90% of the key informants under study with a distribution of; 'Most of the time' by 65.9% and 'Some times' by 24.4%. (*Refer to table 2.8.6*)

Physical health

According to 88% of the Key informants, drinking behaviour has an impact on Physical health of a person. (*Refer to table 2.8.6*)

Social Responsibilities

Alcoholism and alcohol abuse have a far-reaching effect on society in many areas. A query in this regard to the Key informants revealed that the majority (95%) were of the opinion that alcoholism withdraws a person from his social responsibilities. (*Refer to table 2.8.6*)

According to them, alcoholics make the social life worsened. They are involving in many anti-social activities like robbery, public nuisance, physical fights, etc. Further, they lose commitment towards the society, criminal culture is formed, and accidents are increasing.

Work responsibilities

Except 5%, all other Key persons (95%) reported that the drinking habit of a person would have an impact on their work responsibility. The majority (51.2%) stated the extent of impact as 'Most of the time' whereas 43.9% mentioned it as 'Some times'. (*Refer to table 2.8.6*)

To the query on how the alcoholism affects the work and productivity, the Key informants reported that the harmful consumption of alcohol affects; the efficiency, physical health and mental health and concentration on the work. Further, the alcoholic became lazy and lose their motivation which leads to

absenteeism and loss of job. Those people are also confronted with other disciplinary actions like loss of pay, suspension etc.

Table No.2.8.6
Impact of Alcoholism

Impact of Alcoholism	Most of the time	Some time	Never	Total
On Family				
Household Responsibilities	24	17	-	41
	58.5%	41.5%	-	100%
Marital Relationship	31	9	1	41
	75.6%	22.0%	2.4%	100%
Suspicious towards Spouse	21	16	4	41
	51.2%	39.0%	9.8%	100%
Parenting Responsibilities	27	11	3	41
	65.9%	26.8%	7.3%	100%
Family Finance	28	10	3	41
	68.3%	24.4%	7.3%	100%
On Personal				
Personal Activities	22	17	2	41
	53.7%	41.5%	4.9%	100%
Emotional Status	27	10	4	41
	65.9%	24.4%	9.8%	100%
Physical Health	27	9	5	41
	65.9%	22.0%	12.2%	100%
Social Responsibilities	22	17	2	41
	53.7%	41.5%	4.9%	100%
Work Responsibilities	21	18	2	41
	51.2	43.9	4.9	100.0

Legal Complications

The harmful drinking of alcohol not only affects a person's life, but also makes many legal complications to the society. The key informants, including legal experts, responded to the query on the legal complications of alcohol use. The majority pointed out that the increase of accidents and violation of traffic rules are some of the results of drunken driving. Further, the drinking habit produces

the crimes like; physical fights, possession and sale of drugs, immoral activities, sexual harassment, abuse of family, etc. Some of the key informants perceived the relationship between crime and use of alcohol and drugs.

Nearby Treatment Facilities

To the query about the availability of treatment facilities for alcohol addicted persons in their area, although the majority were on the positive, nearly 30% reported that either there were no such facilities or the existing facilities were not functioning properly.

Private and Public De-addiction Centres, Church based facilities, Herbal medical treatment facility, Inpatient and Outpatient treatment centres, Counseling centres, Therappy centres, etc. were the facilities reported by the key informants in this regard.

Suggestions by the Key Informants

The present study has also elicited suggestion from the 41 key persons; for preventing initiation of alcohol use, for helping persons from addiction after initiation and for assisting an addicted person to quit alcohol use.

For Preventing Imitation of Alcohol Use

- Prohibit the use and sale of alcohol.
- Reduce / cut down the sources of availability.
- Implement necessary restrictions on the sale of alcohol.
- Conduct Awareness programmes among the public.
- Give Awareness to parents for becoming a role model to their children.
- Provide awareness among the children in their childhood or teenage.
- Carry out awareness programmes at schools and include a topic in the school curriculum.

To help Persons from Addiction after Initiation of Alcohol use

- Introduce Counselling Classes to students.
- Organise Group support Programmes for students.
- Initiate Yoga classes for students.

For helping Addicted Persons to Quit Alcohol Use

- Ensure support from family to quit alcohol use.
- Provide Treatment and Counselling services.
- Start Counselling Centres / De-addiction centres by the government in all the local self government areas.
- Provide treatment to alcohol addicted persons free of cost by the hospitals and de-addiction centres functioning under the Government.

2.9 Anecdotes

This section presents 18 anecdotes highlighting the factors contributing to the high and low levels of consumption of alcohol in a particular locality. The anecdotes were prepared from the information collected from the 18 Grama Panchayats (GPs) of the 9 districts under study. From each of the districts, 2 GPs - one with a high level of alcohol consumption and the other with the least consumption were selected. The selection was based on consultations with the Officials of Beverages Corporation (Bevco) in terms of Outlets with the minimum/maximum sale of liquor in the districts under study.

For collecting the data, the investigators had a detailed interaction with the key respondents viz; Panchayat president, Counsellor, Social activist, Health workers, and Religious persons of the respective GPs. The selection of Grama Panchayats (high/low consumption) was on the basis of information provided by the Beverages Corporation, regarding the outlets with high or low sale of Indian Manufactured Foreign Liquor (IMF) during the preceding year of the study. The 18 anecdotes are presented under the heads viz; 1. Anecdotes of Grama Panchayats (GPs) with Low Consumption of Alcohol and 2. Anecdotes of Grama Panchayats with High Consumption of Alcohol.

2.9.1 Anecdotes of Grama Panchayats with Low Consumption of Alcohol

Following is the district-wise presentation of the anecdotes of 9 panchayats under study.

Anecdote - 1

(Manickal GP-Thiruvananthapuram District)

Manickal Grama Panchayat (GP) was selected as a locality with low consumption of alcohol in the district. An enquiry into the reasons for less consumption of alcohol in the area showed that the services of a well functioning de-addiction centre (St.John's Hospital, Pirappancode) in the panchayath as well as the relentless efforts from the part of a number of institutions, religious groups, women's organizations, educational institutions, cultural organizations etc. had played a major role in the low consumption of alcohol in the area. In addition to de-addiction treatment, these institutions are delivering services like; close monitoring of those who underwent de-addiction treatment, conduct of awareness programmes, implementation of peer group activities, etc. Increased literacy and higher education of a good number of people in the area too contributed in the minimisation of alcohol consumption in the panchayath.

Anecdote – 2

(Thenmala GP - Kollam District)

Thenmala Gramapanchayat was reported as one of the localities in the district with the least consumption of alcohol. Working class families were found to be a major chunk of the buyers of liquor in the area followed by estate workers. Less availability of liquor was cited as an important reason for the less consumption of alcohol in this locality. It is to be noted that there is only one outlet of Beverages Corporation functioning in the panchayath. The low density of population of the panchayath was also cited as an influencing factor leading to the comparatively low sale of alcohol in the outlet of Thenmala GP.

The role played by the Excise and Police Departments is reported as a significant factor in reducing the alcohol consumption in the area. There is strict checking on homemade scotch by the Excise and the Police Departments in this regard. Checking is very strict in the forest areas where illegal making of liquor is rampant. Further, the respondents pointed out that the Mahathma

Gandhi National Rural Employment Guarantee Scheme (MNREGS) does play a prominent role in the reduction of illegal making of homemade scotch among the female members of the locality. The efforts carried out by the Local Self Government (LSG) in conducting awareness programmes periodically in the Grama Sabhas and other meetings had a crucial role in the reduction of alcohol consumption in Thenmala Grama Panchayat as reported by the respondents.

Anecdote – 3

(Arookutty GP -Alappuzha District)

Arookutty Grama Panchayat is found to be one of the LSGs in the Alappuzha district with less alcohol consumption. Religious and family status of the people and the location of the Beverages outlet in the panchayath were the main reasons pointed out in this regard by the informants. The majority of the people living in and around the panchayat belonged to the Muslim community for whom alcohol consumption is 'haram' (*prohibited by religion*). Further, a good number of males in the locality are overseas employees resulting in the reduction of alcohol consumption in the area. Another reason cited was the less accessibility of Beverages Outlet as it is located in a distant or remote region where there is insufficient public transport system.

Anecdote – 4

Mankulam Grama Panchayath - Idukki district

Mankulam grama panchayath is found to be one of the least alcohol consuming panchayats in the district. Less accessibility / availability of Beverages Corporation (BEVCO) Outlet was reported as the main reason for the less consumption of alcohol in the area. The panchayath is in a remote area and has only one BEVCO outlet. No Bar attached hotels are situated in the locality. Further, most of the natives prefer toddy or arrack, than the Indian Manufactured Foreign (IMF) liquor. A good number of people have the habit of chewing Betel with Areca nut other than consumption liquor. The majority of the people belonged to low income or BPL category. Further, a good number

of families follow traditional religious belief resulting in a comparatively low consumption of alcohol.

Anecdote – 5

Kizhakkambalam GP- Ernakulam district

As per the statistics of Beverages Corporation, the outlet in *Kizhakkambalam* Grama Panchayat is found to be one of the least IMF liquor selling outlets in Ernakulam District. It is learnt that the panchayath has a prominence of middle-class families having a thirst for keeping a better standard of living contributing to the less consumption of alcohol. Further, a good number people in the area are having higher education which might have reduced the drinking habit of the population.

Anecdote – 6

(Melloor GP - Thrissur District)

The extent of alcohol consumption among the people in Melloor grama panchayath is found to be low compared to some other LSGs in the district. The majority of the population in the panchayath is agriculturists or agriculture labourers. The Beverages outlet in the panchayath is at Adichili. Though, illicit liquor is also available in various parts of the panchayath, the effective interventions by the Excise Dept. and the Anti Alcohol movements reduced the availability of the same in the area. Further, the Women Vigilance Committee (Mahila Jagratha Samithi) is formed in every wards of the panchayath and are actively involved in the anti alcoholism activities with the support of the political parties including youth organisations.

Functioning of the three major institutions for treating the alcoholics; one at Govt. level (*De-addiction Centre in Santhipuram*), and two at Private level, i.e. St. James Hospital ,Chalakudy and Divine Retreat Centre, Muringoor -; are the major positives of the Melloor panchayat in this regard. ‘Divine Retreat Centre’ has a special wing for the implementation of the Scheme for Prevention of Alcoholism and Substance (Drugs) Abuse supported by the Ministry of Social Justice and Empowerment, Govt. of India. Detoxification, Counselling,

Awareness campaigns, Couple counselling, and Classes are being conducted by these institutions.

Anecdote – 7

(Thiruvambadi - Kozhikode district)

Among the LSGs with low consumption of alcohol in the district, *Thiruvambadi* Gramapanchayath was selected for the anecdote. The majority of the people here are farmers.

An inquiry in to the reasons for less consumption of alcohol in the area showed the relentless efforts by De-addiction centres and Alcoholic Anonymous (AA) Group in the locality. The AA Group organises frequent meetings of de-addicted persons wherein they share their experiences before and after the treatment. Frequent follow ups and necessary support given by the Group to the de-addicted persons were instrumental in minimising the problem to a great extent. Further, the Churches in the area are reported to be playing a vital role in this regard through the religious talks of the priests. In addition, the efforts of Excise Department are also reported to be very fruitful. Nevertheless, according to Beverages source, the low sale in the outlet is a recent phenomenon which might be due to the economic crisis confronted by the farmers in the panchayath.

Anecdote - 8

(Dharmadam GP - Kannur District)

The Beverages Outlet in Dharmadam Grama Panchayath (GP) was found to be one of the Outlets in the district with least sale of alcohol. A look into the profile of the Dharmadam GP showed that it is a densely populated area. As per the historical documents, the GP was a former Buddhist Centre. The educational standard of the GP was reported as good and has sufficient educational institutions at all levels from nursery to university Centre. With regard to the sources of alcohol, the LSG has one Beverage outlet and three toddy shops.

A query into the factors which led to the low sale of IMF liquor in the Beverages outlet of Dharmadam GP revealed the existence of liquor shops in Mahi - a Union Territory, situated near to Dharmadam GP, from where a good number of people in the panchayath are buying liquor at low cost. Further, there is a notable influence of Buddhist culture and rituals of Andaloor Kavu temple wherein during festival season people abstain from alcohol consumption and discourage others from its consumption resulting in the reduction of sale of IMF liquor. The role played by the Excise and Police departments is also commendable to an extent. In addition, the mass campaigns against the ill effects of alcoholism organised by the LSG in association with the youth clubs and libraries have also contributed to the low consumption of alcohol in the panchayath.

Anecdote - 9

(Vythiri GP -Wayanad district)

Vythiri GP was found to be one of the least alcohol consuming panchayaths in the Wayanad district. An inquiry in this regard showed that though there are many reasons for the less consumption of alcohol in the area, the prominent one has been reported as low density of population since major part of the panchayath is occupied by tea plantations or Sugandagiri cardamom project. Less accessibility to the Beverages outlet is another reason pointed out by the respondents i.e. the majority of the people in the GP are labourers of tea estates and settle in remote areas while the Beverages outlet is situated in the town. Adding to this, there is no adequate transportation facility. Further, the efforts of the Grama Panchayath (LSG) and School authorities by way of frequent meetings and awareness programmes along with the proactive steps taken by the Police dept. were also effective in tackling the menace to an extent. The awareness campaigns and regular family meetings of the Alcoholic Anonymous (AA) Group deserve special mention in this regard.

2.9.2 Anecdotes of Grama Panchayaths with High Consumption of Alcohol

Anecdotes numbering 10 – 18 of 9 Grama Panchayaths (GPs) with high consumption of alcohol are scripted below against the respective districts.

Anecdote - 10

(Anad GP – Thiruvananthapuram)

Anad grama panchayath is a locality selected with high consumption of alcohol in the district. Easy availability of liquor was reported to be a prominent reason in this regard. It was also noted that there are no adequate anti-alcohol movements or activities in the area. Further, the Anad panchayath had a history of alcoholism. Lower level of education of the people in the area too contributed to the drinking habit of the people. The other reasons reported by the respondents were; Unhealthy relationships among the people, family problems, stress, strain etc.

Anecdote - 11

(Ochira GP– Kollam)

Ochira Grama Panchayath was reported as one of the LSGs with the highest consumption of alcohol in Kollam district. A significant reason pointed out by most of the respondents for high consumption of alcohol in the area was the easy availability of liquor, i.e., there are three outlets functioning in the area within the 6 kilometres radius, besides the excess number of Bars and the prevalence of illicit liquor. The construction workers and fishermen are found to be a major chunk of the alcohol consumers in the area. The other reason cited for the increased sale of alcohol here is the buyers from the nearby localities viz; Alappad, Clappana and Krishnapuram. Lack of adequate awareness programmes on the negative impact of alcoholism was also a reason cited in this regard. The cultural anarchy is reported as another reason for the high consumption. The area has also witnessed an increase in the number of female Alcohol Users.

Anecdote - 12

(Harippad GP- Alappuzha)

Harippad Grama Panchayath was selected as one of the LSGs with high consumption of alcohol in the district. The easy access to the Beverages Corporation's outlet is cited as a prominent reason for the same as it is situated near to KSRTC and Private Bus stands. The occupational status of the people too had an influence in the high consumption of alcohol, i.e. majority of them are daily wage workers and fishermen. Scheduled Caste (SC) and Other Backward Class (OBC) have a good representation in the population. According to informants, the lifestyle of people also has influenced the higher sale of alcohol in the area.

Anecdote - 13

(Kattappana GP – Idukki)

Kattappana Panchayath is considered as a major town of the Idukki district with high consumption of alcohol. The Beverages outlet in the town is reported to be one of the highest alcohol selling outlets in the district, though there are three bars functioning near to the outlet. A major reason for the same is attributed to the inflow of people from nearby localities to this outlet. The other important reasons cited for the high sale of Indian Manufactured Liquor (IMF) in the area are the importance of the locality as it is a major town and trading centre (especially spices) of the district, and the high density of population. Further, people in the area are said to be economically sound enough to procure alcohol from their spice trading activities and there is no effective 'Anti alcoholic movement' in the panchayath.

Anecdote - 14

(Vadakkekara GP – Ernakulam)

Vadakkekara Grama Panchayath is reported as one of the highest alcohol consuming localities in the district. The social and economic conditions of the families have a vital role in the high consumption of alcohol in the area. More than half of the population are found to be engaged in low profile jobs and

from low income group. It is to be noted that low income groups are considered as a major chunk of consumers of alcohol in the state of Kerala. Further, the low educational status of the people and their lack of awareness on the ill effects of alcohol consumption have also contributed to the present state of affairs.

Anecdote - 15

(Mala GP – Thrissur)

Mala, a special grade Grama Panchayath in Mala Block is reported as one of the LSGs with the highest alcohol consumption in Thrissur district. The employment status of the people in the panchayath ranges from agriculturists/agriculture labours to commercial and industrial workers. The public and private transport systems fair better compared to other places of Kerala, which results in the inflow of people to this place. Further, famous tourist locations viz; Athirappally and Vazhachall Waterfalls are nearby and subsequently, the tourists are passing through this panchayath.

To the query on reasons for high consumption of alcohol in the area, it was reported as 'easy availability of alcohol' due to an outlet of the State Beverages Corporation at Valiaparambu and two bars - one in Mala town and another at Ashtamichira, functioning in the Grama Panchayath. The illicit liquor is also available there at frequent intervals in Vadama region. Though there are active health care systems in the GP, availability of a De-addiction Centre or a Counselling centre is zero. Change in the attitude of the people towards alcohol, an increase of wages, emergence of a new culture and loosening of state regulations are reported to be significant factors behind the increasing incidence of alcohol consumption. Further, the anti-alcoholism campaigns organised by the social or political parties were not strong enough to fight against the alarming rate of alcoholism in the Panchayath.

Anecdote - 16

Ramanattukara GP - Kozhikkode

With regard to the high consumption of alcohol in Kozhikkode district, *Ramanattukara Grama Panchayath* was selected for the study. An overview of the responses portrayed that the location of the Beverages outlet played a significant role in the increased sale of alcohol in the area. The outlet is situated in a main junction where there is a convergence of vehicles from Kozhikkode, Palakkad, Malappuram and Thrissur. Increase of migrant labourers was also pointed out as a reason for the high consumption of alcohol. Further, social inventions against alcoholism are reported to be less in the panchayath. The activist groups are very few and people are not interested in the social issues like alcoholism, drug addiction etc.

Anecdote - 17

(Cherupuzha GP – Kannur)

Cherupuzha Grama Panchayath was one of the LSGs with high consumption of alcohol in the district. A look into the profile of the panchayath shows that most of the people in the Panchayath are depending more on agriculture for their livelihood. There is no middle or large scale industry in the Panchayath. The Educational Institutions for higher studies are absent and drop out students are also high in the area. Christian community is found to be a major chunk of the LSG population.

The prominent reason cited by the respondents for the high consumption of alcohol in the area is Easy availability of alcohol as the GP has 6 toddy shops, 1 Bar and a Beverages outlet. Adding to it, there is sufficient supply of illicit liquor too. The LSG has no Police station or Excise office within the area to control the supply of illicit liquor. However, the absence of Beverages outlets in the nearby panchayaths viz; Udayagiri and East Eleri, have also contributed to the higher sale of alcohol in this panchayath. Community-wise, the people have a liberal approach to the consumption of alcohol.

Anecdote - 18

(Panamaram GP – Wayanad)

The panchayath with high consumption of alcohol in the district, selected for the study was **Panamaram** as it has a Beverages Corporation's outlet with the maximum sale of Indian Manufactured Foreign Liquor. Scheduled Tribes are the main consumers of alcohol in the panchayath. About 200 tribal families are situated in Panamaram gramapanchayath alone. Females are also consuming alcohol in some of the tribal hamlets. Most of the people in the tribal hamlets are casual laborers.

The main reason for the high sale of alcohol in the outlet is its easy accessibility. I.e. the outlet is situated about 500mts from the town and on the road side of Kalpetta- Manathavady state Highway. Being the centre of Wayanad, Panamaram has better connectivity with other towns and rural areas. Hence, the people from in and around can easily reach at the destination. The highest density of population was also reported as an important reason for the high sale of alcohol in the area. Panamaram and its neighboring gramapanchayaths viz, Poothady and Kaniyambatta are comparatively highly populated and Alcohol Users in these LSGs depend heavily on Panamaram outlet for buying liquor. Recent increase in wages had also attributed to the higher consumption of alcohol than before. Moreover, rice distributed through PDS either free or for Rs.1/- which enable them to have excess money over daily living and use it for the purchase of alcohol.

An Overview of the Anecdotes

An overview of the anecdotes of the 18 Grama Panchayaths of the 9 districts of Kerala under study showed that there were many common factors which had contributed to the high or low consumption of alcohol in the respective areas. The common factors for the same are scripted below;

1. Accessibility / Availability of Liquor

Accessibility towards the Beverages outlet or easy availability of liquor has an important role in the consumption of alcohol in a particular area. The anecdotes

revealed that the outlets situated in remote areas or having less transportation facility were found to be low consumption of alcohol or less sales of IMF liquor. However, the easy availability of liquor was found to be a major reason for the high consumption of alcohol in most of the LSGs. Outlets situated in the main centres like town, trade centre or wayside of a tourist destination, etc. are reported to be having a large sale of foreign liquor. Further, more outlets in minimum distance, excess number of Bars, sale of illicit liquor, etc. increase the alcohol consumption of a locality

2. Services of De-addiction Centres and Other Anti-alcohol Organisations

LSGs having the services of a well functioning De-addiction Centres or any Other Anti-alcohol Organisations like; Alcoholic Anonymous (AA) Groups, Religious groups, Women's organizations / groups, Educational institutions, Cultural organizations, etc. have a great influence in reducing the liquor consumption in a particular area. In contrary, all the Grama panchayaths under study with high alcohol consumption was found to be lacking the services of these institutions.

3. Women Vigilance Committee (Mahila Jagratha Samithi)

Formation of Women Vigilance Committee (Mahila Jagratha Samithi) in every ward and their involvement in the anti alcoholism activities with the support of political parties, including youth organisations were found to be successful in some panchayaths contributing to the low consumption of alcohol there.

4. Anti-Alcohol Movements and Awareness Programmes

Few LSGs with less alcohol consumption were found to be organizing awareness programmes and anti alcohol activities in association with some the other institutions. The GPs with high alcohol consumption are devoid of adequate social interventions, anti-alcohol movements or awareness programmes.

5. Strict Enforcement of Law

Most of the GPs with less alcohol consumption were reported to be having the advantage of strict enforcement of law by the Excise Dept. and the Police Dept.

However, a panchayath having a high sale of illicit liquor is found to be devoid of such benefits due to the absence of services by Excise or Police Depts.

6. Educational Status

The LSGs having people with high educational status were reported to be having less consumption of alcohol. However, lower level of education of the people, absence of adequate educational institutions, students drop outs, etc. were found to be the contributing factors towards the increase of alcohol consumption.

7. Employment status of the people

Employment status of the people in the panchayaths was also seen as instrumental in deciding its alcohol consumption pattern. The construction workers, fisherman, and daily wage workers were found to be a major chunk of the alcohol consumers in some of the LSGs with high consumption of the same.

8. Religious Reasons

Few panchayaths under study had some religious reasons for its less alcohol consumption. In some Muslim dominated areas, the alcohol consumption is found to be less as most of the males of these families are working abroad. Further, some rituals (among Hindus) in festival season make the people to abstain from a particular period. Buddhist culture has also had an influence in the low consumption of alcohol in a location.

9. The Density of Population

Less populated localities under study were found to be having less sales of IMF liquor and densely populated panchayaths had a high consumption of alcohol.

10. Family Income

Low income groups are considered as a major chunk of consumers of alcohol in the state of Kerala.

11. Other Reasons

Change in the attitude of people/society towards alcohol consumption, increase of wage, change in culture, loosening of state regulations, alcohol consumption history of the panchayath, cultural anarchy, life style of people, social and economic conditions, increase of migrant labours etc. were reported as some other factors contributed to the increasing trend of alcohol consumption in the state.

2.10 Case Studies

Case studies (in-depth analysis of typical cases) were carried out in the present study for having a better understanding of the various factors involved in the consumption of alcohol by the different categories of respondents and its multifaceted impact on the family and the society.

The respondent categories included; Potentially hazardous and Hazardous Alcoholics from the Adolescents and Adults respectively. The criteria for the selection of respondents were based on the parameters viz.: frequency of drinking, quantity of drinking and time of drink. Accordingly, 18 respondents constituting 9 Potentially hazardous Adolescents and 9 Hazardous Adults were identified from the nine districts under study with a distribution of one Adolescent and one Adult each per district.

Regarding the socioeconomic background of the Adult Drinkers; the majority were from the panchayath areas (rural) belonging to the age group of 30 to 58 years with secondary or higher secondary education. Most of the respondents belonged to the Hindu community followed by Christian and Muslim communities. The majority of the Adults were from the lower economic background. Regarding the Adolescent respondents, the majority belonged to the rural areas with their age ranging from 15 to 18years. Education-wise, most of them were having higher secondary education. Hindu community was found to be prominent followed by Christian and Muslim communities. Almost all of them were from the families in the middle or lower economic background.

The analysis was mainly centered on the following dimensions viz.: 1. Alcohol use history 2. Life situation 3. Personal attributes 4. Drinking habit and patterns 5. Alcohol related problems 6. Family 7. Economic impact 8. Social support and service and 9. Suggestions for prevention. Further, conclusions and recommendations derived from the 18 case studies were also presented here.

Alcohol Use History

The history of consumption of alcohol commenced for the Adolescents at an average age of 14.6 years and for the Adults at 22 years. Interestingly, the majority of the Adolescents initiated it with their peers and peer pressure was pointed out as a reason for the regular use of alcohol. However, among the rest, for one person, it was his father who sent him to toddy shop for buying toddy and for the other, it was his uncle, the manager of a toddy shop, instrumental in initiating the drinking. With regard to Adults too, most of them started drinking with peers on an experimental basis.

The data from the case studies revealed that most of the respondents were initiated into alcohol consumption by the prevailing patterns of social drinking, i.e. drinking at festivals, celebrations, etc. and gradually switched over to habitual and harmful drinking. For a few Adults, it was their employment situation and additional income earned from the jobs which encouraged them to adhere to habitual drinking.

After the initiation, many *factors* fuel the alcohol consumption of a person; which may be social, cultural, emotional or economic. The qualitative data in this regard portrayed that most of the Alcohol Users; if it is Adolescent or Adult had a general tendency to use alcohol as a self medication for the frustrations in their life. The Adults in the sample have been using it whenever they have a feeling of loss, failures, severe guilt, inadequate achievements, conflicts both with family and workplace, economic problems, inadequate care of the family members, loss of position in the family etc. In short, they had a tendency to avoid the conflicts instead of accepting it and facing it proactively. *Alcohol becomes the easily available and accessible medicine for*

relieving/reducing their psychological pain. Some others had a pressure from peer group to drink regularly. For the Adolescents, most had faced various emotional/psychological problems viz: loss of confidence, loss of self esteem, low acceptance in the family etc. due to their drinking behaviour. Poor academic performance and disciplinary actions of school authorities were also reported by a few. Two respondents had health problems like; loss of appetite, weight loss and deterioration of general health with the use of alcohol. Adults had suffered severe health issues, family problems and social problems along with economic constraints. A few had a feeling of loss of confidence and low self esteem.

Among the Adolescents, severe punishments, critical comments and hostility among teachers and parents, etc. reduce the self esteem of the children and compromise on their self confidence. Various kinds of rejections would result in severe psychological pain and leads to some kind of avoidance mechanism. Lower performing students should be provided with adequate emotional support and ensure their self esteem through investing on multiple intelligence concepts, that each child is unique and are different in their capabilities. Provide them with sufficient opportunities to sharpen it and mould it to make them contributing citizens of the country.

It is learnt that most of the respondents i.e., Adults and Adolescents, have a *family history of alcohol consumption* or alcohol addiction. Most of the time, it was their father who has been using alcohol in the family while in some other cases, it was the other members in the family or their relatives.

The majority of the respondents was found to be having very crucial *family environmental hazards* like; impoverished family environment, family having the history of alcohol consumption, unscientific disciplining, harsh punishments, poverty, inadequate opportunities of growth, continuous negative comments, and family with high conflicts. For a few; though they have a good family relation and sound economic support, their enormous relationship with

the society as well as with the people lead to the habit of consumption of alcohol.

Life Situation

Nature of work and Work environment

Nature of work and work environment is a predictor of mental health in the workplace. Work may be more stressful when job demands are high, but control over how the job is done is low (high strain job). It can also be stressful when both job demands and degree of control are low (passive job). Further, work may be more alienating when a job is very routine, closely supervised and not complex – meaning it requires little initiative, judgment or interaction with others.

A probe in this regard showed that the majority of the Adult Alcohol Users did not have a satisfying job. Most of them were involved in hard physical labour like; Coolie, Mahatma Gandhi National Rural Employment Guarantee Scheme (MNREGS), Automobile and other full time works. They were not receiving substantial benefits for their work. According to a teacher interviewed, his job satisfaction depended primarily on the intake of alcohol and he could not concentrate much on his profession (due to harmful drinking). Though, economically not very bad, emotionally he is very weak. It was also found that those who have regular job had severe job stress or problems with colleagues. Some of them were easily bored with their work and left (Probably that job may not be their cup of tea). Nature of work and financial gain from it were reported to be crucial in determining their satisfaction.

Current Job Engagement Pattern

Job engagement pattern is an indicator of the extent to which alcoholism has affected the persons' work pattern. Most of the Adults who are addicted (hazardous) have been unable to go to work regularly. It is to be noted that the majority of them was not having any permanent job or regular income. It has serious economic consequences too. Regarding those who had a full time job, absenteeism was noticed and they were unable to concentrate on their work.

They were under the threat of peer rejection and losing of their job. As for the students in the sample who drank heavily had lost their motivation to study and did not want to continue their studies resulting in adverse consequences for them and their families.

Economic Stress

Economic stress is an important factor for many to resort to alcohol consumption.

With regard to the Adults in the sample, economic stress was reported to be very high. Heavy debt, inadequate economic gains and severe financial problems had contributed to their economic stress. *There should be adequate pay for their work, ample employment opportunities to reduce the economic stress of the people.*

With regard to the Adolescents, nearly half of them were from the families with medium level of economic background. Generally, these students initiated drinking as a means to spend the excess money they had obtained from their parents/guardians towards incidental expenses. However, the rest were from the lower economic background. Most of the time, the students from low economic background were found to be engaged in part time works like; catering services, newspaper distribution, etc. and spent a major chunk of their earning for consuming alcohol especially 'Beer', with their friends.

Emotional Stress

Most of the Adults reported of emotional stress due to reasons viz.; marital problems, family conflicts, inadequate parental support/spousal support, family rejections, peer rejection, etc. However, two of them stated that they had not confronted with any emotional problems. With regard to the Adolescents, the emotional problems which stimulated the drinking behavior were; disappointments, less tolerance in controlling anger, depression, lack of confidence, lack of interest in studies, lack of familial support etc.

Personal Attributes to Alcoholism

Growth and development of the person, successfully completing all the challenges of the milestones of development is a positive indicator of their mental health outcomes in the future. It is evident that most of the respondents did not have a positive childhood experience. Parenting was not proper and most of them have insecure and superficial attachment to their parents. The same pattern is followed throughout their life.

Overall Stressors

Insecure and superficial attachment led the Alcohol Users to interpersonal problems with family members and colleagues which in turn added on to severe stress. To avoid such stress, the persons resorted to alcohol and tried to be under the spell of alcohol to escape from the distressing thoughts and problems. Subsequently, alcohol has taken control over their behaviour resulting in their losing of capability to cope up with the situations. With regard to Adolescents, the problems with the family as well as the friends contributed to severe stress. Some of them had faced low acceptance from the family and kept the minimum level of communication with the family members. Problems with friends like; unnecessary talks and physical and verbal fights were also added on to the stress situations. These factors stimulated the drinking among Adolescents and subsequently they lost interest in studies and led to their poor performance in the exams.

Defences

Though most of the respondents did not state any defence points related to their drinking habit, a few had shown a tendency to deny that they were depended on alcohol and were unable to come out of it without the professional help.

Drinking Habit and Patterns

Quality of Alcohol

Low quality alcohol leads to many serious health problems.

Unfortunately, majority of the Adult heavy Drinkers in the sample were consuming low quality alcohol in large quantity. And some others reported that

they consumed whatever they get and not very particular about any specific brand. However, Adolescents were found to be keeping preferences regarding the selection of the brand as well as the quality. Most of them were using Brandy or Beer as their brand, while a few were using whisky or vodka.

Alcohol Drinking Pattern

As usual, all Adults were found to be daily users of alcohol; some were in it from early morning onwards, while the rest were from forenoons or evenings. Most of them were consuming more than 180ml per day. In contrary the Adolescents, (mainly students) were not very frequent users of alcohol. The consumption pattern of most of them was varied from 1-3 days a month to 1-2 days in a week and the timings were at evenings or forenoons.

Cognitive

Suspicious nature was seen in a few of the Adults. Low self-esteem and low confidence level resulted in the suspicious nature of these people. Though the cognitive problems were found to be less among the Adolescents, some have reported of memory problems or loss of concentration.

Emotional Fluctuations

Emotional fluctuations were found to be very common in the Adults as well as in the Adolescents after alcohol consumption. Some of the Adults in the sample reported to be showing mood irritation, continues laughing, temper tantrums, etc. whereas the Adolescents expressed; mood irritations, anger, depression, happy mood, decrease of confidence, etc. They also showed violent behavior, use abusive language and pick up quarrel with family members, neighbors and relatives. But, most of them reported that they were showing huge mood variations which caused humiliation to them and their family members.

Behavioural Changes and Its Manifestations including Abuse and Violence

A good number showed behavioural changes after drinking; the Adults become rougher, irresponsible, and suspicious of wife, use abusive words to family members and demonstrates violent attitude, while the Adolescents were found to be engaged in unnecessary arguments with teachers, parents or friends, bunk classes and display violence nature and irresponsibility.

Alcohol Related Problems

Physical Health

The heavy Drinkers in the sample were found to be having physical problems like; Heart problems, Deterioration of physical health, Liver sclerosis, Peptic Ulcer, Respiratory problems, Weight loss, or Loss of appetite. A few of them were under treatment. But, still all of them were continuing with their drinking habit. It was also noted that many of them left the physical problems unattended and untreated, which has a life threatening consequences. Due to their poor communication with the family members, they were unable to share their problems with them. That could be the other reason for leaving these physical issues untreated.

Mental Health

Most of the respondents; either Adults or Adolescents reported of 'No mental health issues'. However, a few mentioned about the problems like; depressive symptoms, memory loss, lack of concentration etc.

Legal Issues

Though majority had no legal issues, two of the Adults had accident under the influence of alcohol and the case is pending. One had a petty case for drunken driving. One Adolescent reported of a criminal case registered with him.

Relationships

The Adults are reported to have usually good relationship with the friends especially with those who share drinks with them or provide drinks for them. Very rarely, they pick up quarrel with them. However, all of them have frequent quarrel with the Spouse and other family members. Domestic violence is also very common. A few have very difficult relationship with their neighbours. With regard to Adolescents; though most had a good relationship with the family members, two had an average and one had a poor relationship with the family, friends and relatives.

Family Related Aspects

Role Functioning

The Adult respondents, many a time failed to fulfil their roles and responsibilities in the family. Some of them had withdrawn from the

responsibilities. A situation emerges wherein their wives compensate the gap which makes the men feel ashamed and creates stress on them. In turn, there occurs ill feeling in the family against the father. Mother and children stand against the father, which again gives these persons severe stress. Almost all the Spouses have also engaged in some jobs to earn a living for the family. Thus, the alcohol consumption disrupts normal family patterns and procedures. Regarding the role functioning of Adolescents too, most were backward in fulfilling their household responsibilities, and which in turn minimise their acceptance in the family.

Family Communications and Conflicts

Of the Adults (9), though a few reported of a good (2) or moderate (1) communication in the family, majority (6) had only a very minimal communication. And in some cases; they tried to retain their position in the family by force which had culminated in domestic violence, those who were suspicious, tried to enforce control and took decisions without any consultation. The majority (6) of the Adolescents too were in negative communication with the family members.

Parenting

Though, parents are considered as role models of children, the majority (6) of the Adult Alcohol Users failed to carry out their responsibilities as a father. They were not at all involved in it resulting in heavy pressure on their spouses. Fathers' role is also equally important in the upbringing of children. Since they were not involved, the children may have deficits in emotional expressions, behaviour and cognitive functioning. So alcoholism will have far reaching consequences even for future generation.

Economic Related Aspects

Debt

The most significant result of the heavy drinking is financial constraints. As the majority of the Adult respondents were from lower class families and having jobs of an irregular nature like; daily wage, agricultural labour, automobile mechanic etc. they had debts of one mode or the other. It is a common fact that

the alcoholics from the lower economic background keep regularity in their drinking despite of irregularity in the job and the income they earn from a job which in turn leads to taking of debts from money lenders or other easy reachable sources in the expectation of pay off it at the next working day.

The data in this regard portrayed that one respondent had taken a loan from a bank to make up his debts due to alcoholism. Two reported of the money borrowed heavily from their friends and mortgage of gold ornaments and land respectively. Another alcoholic confirmed Rs. 200,000/- as their debt due to alcoholism.

Almost half of the Adults in the sample had very weak productivity patterns. They had a loss of job, infrequency in attendance, etc. due to alcoholism and related issues. However, the other half had no such problems due to alcoholism. With regard to Adolescents, almost all of them were on the negative note that they admitted the reduction in their efficiency or performance as a result of alcohol consumption. It is a common fact that alcoholism badly affects the studies of students and a good number of them became drop outs.

One third of the Adults had a very weak or unstable economic situation. However, the rest had an average or comparatively better situation. Nearly half of the Adolescents also were from the family with a poor economic background and the rest had either good or average economic stability. Two reported of the 5 cent land and house of their own.

Overall, the data indicated that heavy alcoholism disrupted the economic stability of the family seriously and they happened to be considered by the family members as a burden. In alcoholism, we see a dual burden of loss of job or productivity and loss of assets and family economic equilibrium.

As for the case of Adolescents, almost all of them did not have any debt due to alcoholism.

Assets

The assets were very nominal for almost all of the Adults interviewed. In many cases, it was not in their name but their Spouses' name to protect the property. Even some ancestral property, though they were entitled to get in their names, was given in the Spouses' name by the parents as a precautionary measure to protect it. That means, the entire family had not shown any confidence in them. In most of these families, the family exchequer was controlled by the Spouses and they played the role of the provider. Some of them considered it as humiliation. The Adolescents did not respond to this aspect of asset as they did not have it.

Social Support and Services

Access

Majority of the Adults and Adolescents interviewed had either no social support services like de-addiction treatment/ counselling services, in their area or yet not accessed the same by them. The knowledge about the availability of these services is an issue. Dissemination of information about the existing such facilities as well as the introduction of more such Centres within the Govt. sector is very important in this regard.

In some of the families, the Alcohol Users have been lacking the capacity to cope with the difficult situations in the families. Under such circumstances, some Spouses are found to be brave enough to handle the situations.

Suggestions by the Respondents

For Primary Prevention

- Massive awareness programmes on the negative impact of alcoholism should be organized at the Grama Panchayath, Block panchayath and District levels.

For Secondary prevention

- All the heavy Drinkers require de-addiction treatment. Existence of De-addiction Centres should be publicised for better out-reach.

FINDINGS AND RECOMMENDATIONS

Alcohol plays too significant a role in society today and should be an afterthought as opposed to the most essential addition to any social event. Alcohol creates numerous social, economic, and health problems that could very easily be stopped if it plays a less influential role in everyday events. (Zomerpenales, 2009). Alcohol not only affects the individual drinker, but people around them and society as a whole. It has a big impact in workplace with absences, work accidents, and lower performance which can lead to unemployment (Courtney, 2013). This costs the employee, employer, and social security system. People who are alcoholic often will spend a great deal of their time drinking, making sure they can get alcohol, and recovering from alcohol's effects, often at the expense of other activities and responsibilities. Although people who abuse alcohol are not physically dependent, they still have a serious disorder. They may not fulfil responsibilities at home, work, or school because of their drinking. They may also put themselves in dangerous situations (like driving under the influence) or have legal or social problems (such as arrests or arguments with others) due to their drinking. (NIH Medline Plus, 2013)

Like many other diseases, alcoholism is typically considered chronic, meaning that it lasts a person's lifetime. However, we continue to learn more and more about alcohol abuse and alcoholism; and what we're learning is changing our perceptions of the disease. (NIH Medline Plus, 2013)

It is in this context that the present study has made an attempt to understand the extensive use of alcohol in Kerala and the related problems. Thus, the study on 'Alcoholism in Kerala' has been envisioned with the following objectives:

1. To find out the socio-economic profile of the respondents viz: Drinkers (Alcohol Users), Spouses of Drinkers and Non-Drinkers (Non-Alcohol Users).
2. To trace out the history of consumption and circumstances stimulating the drinking behaviour.
3. To highlight the extent of alcohol consumption across the cross section of the society (among the various segments of the people).
4. To know the trends and patterns of alcohol consumption in the state and to differentiate between Hazardous and Potentially Hazardous Drinkers.
5. To find out the impact of alcohol consumption on physical /mental health, psychological well being, family life, social relationships and productivity of the Drinkers (Alcohol Users).
6. To compare the status of physical /mental health, psychological well being, family life, social relationships and productivity of the Drinkers (Experimental Group) with that of the Non-Drinkers (Control Group).

The data in this regard were collected from the 1031 primary respondents comprising; 941 Experimental Group respondents viz: 622 Adult Drinkers, 229 Adolescent Drinkers and 90 Spouses of Drinkers and 90 Control Group respondents of Adult Non-Drinkers, 18 case study respondents, 18 anecdotes and 41 Key Informants. Thus, a total sample size of 1108 respondents came under the purview of the study.

Further, for a comparative analysis, 622 Adult Drinkers from the Experimental Group and 90 Non-Drinkers from the Control Group were cross examined on selected variables.

The tools used for eliciting information included; *Pre-tested interview schedule* for the selected respondents viz; Drinkers, Non-Drinkers and Spouses of Drinkers, *Interview guide* for Key Informants, *Case Study format* for selected alcoholics and *Anecdote format* for respondents from Panchayaths with high and least alcohol consumption.

3.1 MAJOR FINDINGS

3.1.1 Socio- Economic Profile of the Respondents

Locality

- Of the Adults, 74.8% of the Drinkers and 66.7% of the Non-Drinkers were from the rural region.
- Of the Adolescent Drinkers, 83.8% belonged to the rural areas.
- Among the Spouses of Drinkers too, the majority (86.7%) were hailing from the rural region.

Gender

- Among the Adults, 89.5% of the Drinkers and 86.5% of the non-Drinkers were males.
- Of the Adolescents, 82.5% of them were males.

Age

- Of the Adult Drinkers, the majority (40%) belonged to the age group of 30 – 44years followed by the Middle aged (45-59years) and Youth (21-29years) with 28.8% and 21.9% respectively. Their mean age was found to be 40.6years.
- With regard to Adult Non-Drinkers too almost similar distribution of age was noticed.
- Gender-wise distribution of the Adult Drinkers showed that most (41.5%) of the female Drinkers belonged to the middle aged (45-59years) followed by 30plus (29.2%) category.
While majority of the male Drinkers were 30plus (41.3%) followed by middle aged (27.3%) and youth (22.8%).
- Of the Spouses (of Drinkers), most of them were in the thirty plus (30-44years) age category, followed by the middle aged and youth category with 27.8% and 16.7% respectively.
- With regard to Adolescents, almost all of them belonged to the age group of either 17-19years (56.3%) or 15-17years (41%).

Educational Qualification of the Respondents

- Of the Adult Drinkers, nearly half (45%) of them were secondary educated. I.e. having educational qualification of 6-10years. 18.8% and 15.4% respectively were with higher secondary education and graduation or post graduation.
- Educated people were found to be more among the Non-Drinkers than the Drinkers with 33.3% graduates, 18.9% postgraduates, and 6.7% professionals. None among the Non-Drinkers were illiterates.
- Among the Adolescents, most (52.8%) were higher secondary students followed by (25.7%) degree students.
- Of the Spouses, the majority (70%) were either secondary (51.1%) or primary (18.9%) educated.

Parents' Educational Qualification

- Among the Adults, only just above 10% of the Drinkers had their parents with higher secondary or more educational qualification. The majority had their parents with secondary (Father -31.7%, Mother-29.6%) or primary (Father-29.1%, Mother-28.8%) education. Unfortunately, parents of a good number (Father-28.3%, Mother-32.5%) were even uneducated i.e. illiterates or literate with no formal education.
- With regard to Adolescents, nearly one third of them (Father -34.1%, Mother-31.8%) had their parents with higher secondary or more education while the majority (46.7% each) had them with secondary education.

Religion

- Of the Adult Drinkers, the majority (62.7%) were Hindus, followed by Christians (32.6%) and Muslims (4.7%).
- With regard to Adult Non-Drinkers, 78.9% of them were Hindus backed by Muslims (11.1%) and Christians (10%).
- Among the Adolescents too, most (54.1%) were Hindus followed by Christians (43.7%) and Muslims (2.2%).

- Regarding the Spouses, 64.4% were Hindus followed by Christians (31.1%) and Muslims (4.4%).

Type of Family

- Of the Adults, the majority (79.9%) of the Drinkers and Non-Drinkers (71.1%) were from the Nuclear families.
However, those belonged to the Joint (18.9%) or Extended (10%) families were slightly higher among the Non-Drinkers than the Drinkers with 12.9% and 7.2% respectively.
- Of the Adolescents and the Spouses too, most (88.6% and 80%, respectively) were hailing from the Nuclear families.

Marital Status

- Among the Adults, most of the Drinkers (71.2%) and Non-Drinkers (83.3%) were married while 24.4% of the Drinkers and 16.7% of the Non-Drinkers were single.
Separated, Divorced, Widowed, or Cohabiting were present in the sample of Drinkers while these categories were absent in the sample of Non-Drinkers.

Use of Other Substances

- Of the Adult Drinkers, most (74%) had a habit of using substances other than alcohol while majority (92.2%) of the Adult Non-Drinkers had not.
Of the substance abuse, Smoking tobacco was found to be a common habit for the majority of the Drinkers followed by oral tobacco (11.6%) and Gunja (0.5%).
However, the Non-Drinkers were indulged in smoking tobacco only.
- With regard to the Adolescents, a good number (46.3%) were not indulged in substance abuse while among the rest 'smoking Tobacco' was found to be a common habit.

- Among the Spouses, the majority (92.2%) reported of the substance abuse of their husbands and smoking tobacco was reported by most (73.3%).

It is to be noted that the Alcohol Users were not only affected by the alcohol but also by the substance abuse as most of them had a habit of using other harmful substances. Smoking Tobacco was found to be the most common among them. Alcohol consumption itself is reported to be a cause of cancer and smoking Tobacco increases the vulnerability.

Employment Status

- Of the Adults, the majority of the Drinkers (80.8%) and Non-Drinkers were reported to be employed.

Most were daily wage workers, skilled workers viz; drivers, carpenters, mechanics, etc. Other categories were; businessmen, agricultural workers, office staff/executives, fishermen, private employees, and professionals.

- Of the Spouses, more than half of them were unemployed and among the rest most were daily wage earners.
- Self employed, NREG Workers, employees of private firms, etc. were the other categories among the Spouses.

Monthly Income of the Family

- Among the Adult Drinkers, the majority (42.3%) of them belonged to a lower income category of Rs.5,000-Rs.10,000/- followed by Rs.10000-25,000/- (33.8%).
- Adult Non-Drinkers were from a slightly higher economic background with more than half of them belonging to either Rs.10,000 – Rs.25,000/- (32.2%) or Rs.25000 – Rs. 50000/- (20%) income category, followed by Rs.5000 – 10,000/- (27.8%) category.
- Of the Adolescents, more than one third (35.8%) of them belonged to the families of having a monthly income of Rs.10000-25,000/- .

25.4% and 24.5% each belonged to the category of below Rs.5000/- and Rs.5000/- to Rs.10000/- respectively.

- Among the Spouses, more than 60% of them belonged to the families of having a low monthly income of either Rs. 5000/- to Rs.10000/- (44.4%) or below Rs.5000/- (18.2%).

However, 34.4% of them had a monthly income of Rs.10000 – Rs.25000/-.

2.2. Classification of Respondents: Harmful and Less Harmful Drinkers

For a comparative analysis, a score matrix was prepared to classify the Drinkers (Adults and Adolescents) into Harmful and Less Harmful on the basis of the three variables viz; Frequency of drink, Quantity of consumption and Time of the first drink in a day. .

2.2.1. The Score Matrix

Total Score – 10,

Harmful Drinkers - above 6, *Less Harmful Drinkers* - 6 and below

2.2.2. Harmful drinking Vs Adults and Adolescents

Harmful Drinking Vs Adults

- Out of every 10 Adults, about 3 were Harmful Drinkers and 7 were less-Harmful Drinkers. Average score of Adults is 5.7, which is almost near to the cut of score 6.

It is to be noted here that there is every possibility of the less harmful category being prone to harmful drinking, as alcoholism is a progressive disease and can be a terminal illness if untreated.

Harmful Drinking Vs Adolescents

- Of the Adolescents, most (95.2%) were Less Harmful Drinkers and the rest (4.8%) were Harmful Drinkers. The mean score has been just above 4 which means they are a little far from the cut off score or harmful drinking.

2.2.3 Harmful Drinking of Adults and Socio-Demographic Variables

Harmful Drinking of Adults and Age

- Age-wise, harmful drinking was found to be more among the older age groups compared to younger age groups. I.e., senior / aged people (48.2%), followed by middle aged groups (33%) and thirty plus category (31.3%)

Harmful Drinking of Adults and Gender

- Gender-wise, harmful drinking was much higher among men (31.8%) compared to women (4.6%).

Harmful Drinking of Adults and Education

- Education-wise, harmful drinking was found to be less among the respondents with higher education (post graduates – 4.3% and graduates – 9.6%) compared to those with lower education (primary educated – 38.8%, secondary educated- 37.1% and uneducated-28%).None of the professionals in the sample belonged to the Harmful Drinkers' category.

2.3 Alcohol Use History

With whom the respondents initiated Alcohol Use

- Of the Adults, the majority (71.7%) initiated drinking with their peers, 13.1% by themselves, and 11.7% with their relatives.
- Among the Adolescents too, most (55.5%) initiated drinking with their peers while 22.7% with their relatives, 18.8% by self.

Age at First Drink

- Of the Adults, more than half (61.7%) of them had their first drink at the age group of 15-21 years.

However, 20.4% had it at the age group of 22-29 years, 10.1% at less than 14 years, and 7% in the age group of 30-44years while only 0.8% at above 45 years.

The average age at first drink was found to be 20.3years.

- Among the Adolescents, a good number (33.6%) were below 14years when they had their first drink while the majority (66.4%) had their first drink at age of 15-21 years.

The mean score of age at first drink for them was found to be 15.2years.

It is to be noted that the earlier the age at which youth take their first alcoholic drink, the greater will be the risk of developing alcohol related problems.

Reasons for First Alcohol Use

- Of the Adults, most (47.4%) initiated drinking for just experimentation, while 40.5% for ‘modelling the peer’.
- For the Adolescents too, ‘Experimentation’ (46.7%) and ‘Peer modelling’ (43.7%) were the main reasons for their first intake of alcohol.

Age at Onset of Regular Drinking

- Among the Adults, most (41.3%) started regularly drinking at the age group of 22-29years followed by 15-21 years (20%), 30-44 years (19.8%), and above 45 years (2.5%).

A few (0.8%) started regularly drinking at the age of even 14years or before.

- Of the Adolescents, 60.7% started regularly drinking at the age group of 15-21 years.

Shockingly, 10.9% had started it in their 14 years or before.

- Among the Spouses, 27.8% reported that their husbands had started regularly drinking at the age group of 22-29 years, followed by 22.2% in 30-44 years. However, a few (3.1%) reported of the initiation of drinking of their husbands at the age of 14 years or before.

Reasons for Regular Drinking

- For the majority (47%) of the Adults, ‘Peer pressure’ was reported as a main reason for regular drinking followed by feelings of ‘wanted to use’ (35%) and ‘craving’ (13.3%).

- For the majority (61.1%) of the Adolescents too, ‘peer pressure’ was a main reason to use alcohol regularly while for 23.1% it was ‘wanted to use’.
- Majority (63.3%) of the Spouses too blamed ‘peer pressure’ for their husbands drinking habit. 18.9% and 13.3% stated it as ‘craving’ and ‘wanted to use’ respectively.

Company of Other Persons while Drinking

- Of the Adults, about three fourth (74%) of them had a company of others while drinking, especially of their friends followed by co-workers and relatives.

A cross analysis between the Adult Harmful and the Less-Harmful Drinkers in this regard showed that ‘solitary drinking’ was found to be more (39.4%) among Harmful Drinkers compared to Less-Harmful Drinkers (20.6%).

- Among the Adolescents, interestingly almost all (96.5%) of them, usually drink with the company of others like; friends, part-time workers, etc.
- Of the Spouses too, most (87.8%) reported of the company of others while their husbands drink.

2.4 Extent, Trend, and Patterns of Alcohol Consumption

Frequency of Drinking

- Among the Adults, 34.1% were frequent and 5 % were highly frequent users of alcohol.

On the contrary, 48.2% belonged to the infrequent and 12.7% to the highly infrequent category.

- Of the Adolescents, a great majority (93.9%) of them were infrequent (29.7%) or highly infrequent (64.2%) Drinkers. Only a few (6.1%) were found to be frequent (3.5%) or highly frequent (2.6%) Drinkers.
- Among the Spouses, most (63.3%) reported on the frequency of their husbands drinking as frequent (53.3%) or highly frequent (10%).

Time of First Drink in a Day

- Majority of the Adults (61.4%), Adolescents (75.5%), and Spouses (58.9%) reported of the time of first drink in a day as ‘evenings’.
- Of the Adults, 16.4% had a habit of early morning drinking while among the Adolescents; it was comparatively less with 2.9%.
- With regard to the Spouses, 17.8% reported of the early morning drinking of their husbands.
- Category-wise analysis showed that the majority of the Harmful Drinkers had their first drink in the early morning (52.2%) or in the forenoon (24.4 %) while most of the Less-Harmful Drinkers had it in the evenings (85.7%).

Early morning drinking has to be considered seriously because those who consume alcohol at early morning have problems in performing day-to-day tasks. Morning drinking, in some cases is a resort to handle the hangover i.e. the feeling of illness and unpleasant physical symptoms in the morning after an evening of heavy drinking. The regular intake of alcohol in the early hours of the day can leave the person more alcohol dependent and later weaken the organism.

Usual place of Drink:

- For most of the Adults, their usual places of drinking was reported to be ‘Bar’ (26.5%) or ‘Home’ (23.9%)
- For the majority the Adolescents, it was ‘Friends’ house’ (32.8%) or ‘Home’ (24%).
- With regard to most of the Spouses, their husbands’ usual place of drinking was reported to be ‘Bar’ (47.7%) or ‘Home’ (30%).
- A few of the Adults (17.2%), Adolescents (10.5%) and Spouses (12.2%) were also reported of drinking in public places. \

Unfortunately, a good number of Adolescents were found to be drinking at their own home, which shows a changing culture of the Keralites

Pattern of Use

- Most of the Adults (45%) and the Adolescents (51.5%) were found to be consuming alcohol in a pattern of similar amounts every day.
- While 52.9% of the Adults and 46.7% of the Adolescents had a consumption pattern of varying quantities on different days.

Estimated Daily Use of Alcohol

- Of the Adults, most (62.2%) were consuming 180ml or more quantities of alcohol.
- Regarding the Spouses, most (56.7%) had also reported of the same pattern of alcohol consumption of their husbands.
- Even among Adolescents too, 38.4% had a consumption pattern of 180ml or more quantity of alcohol.

The data show the vulnerability of the Alcohol Users; especially the Adolescents becoming more Harmful Drinkers.

Average Amount Spent for Drinking by Adults

Depending upon the frequency and quantity, the amount spent in drinking varied from below Rs.25/- to more than Rs. 500/-.

A good percentage (34.1) of Adult Drinkers in the sample was spending an amount ranging from Rs.100/- to Rs.250/- followed by 22.8% spending between Rs.50/- to Rs.100/-.

On an average Rs.130/- per day was spent by the Adult Drinkers.

- Category-wise, almost all among the highly frequent Drinkers (more than once in a day) spent generously for drinking per day. I.e. an amount of Rs.250/ - Rs.500/- (48.4%) or Rs.100/ - Rs.250/ (45.2%).
- However, among the frequent Drinkers (daily or almost daily), nearly 60% of them were found to be spending an amount of Rs.100/ – Rs.250/- for the same.
- Alarmingly, even among infrequent Drinkers, most (60%) had to set aside an amount of Rs. 50/- to Rs.100/- or Rs.100/- to Rs.250/- for their drinking habit.

It is revealed from the study that a good number of Keralites are setting aside a comparatively big portion of their income for alcohol consumption; which is a lot bigger than the sum of money they put apart for whatever other purposes like; education, health, family, entertainment etc.

Type of Alcohol Used

- Majority of the Adults (45.8%) and the Adolescents (50.7%) in the sample were consuming more than one brand of alcohol drinks.
- For Adults, 'Brandy' (31.5%) and 'Rum' (10.8%) were found to be the most favourite brands.
- For Adolescents, Brandy (18%) and Beer (17%) were the beloved drinks.
- For the Spouses, the majority (55.6%) confirmed 'Brandy' as their husbands' favourite drink.

Usual Mix with Alcohol

- The majority of the Adult (74.6%) and the Adolescent (52%) Drinkers usually mixed water with alcohol.
- Most (68.9%) of the Spouses hold the same view on their husbands' drinking pattern.
- Soda was found to be used more by the Adolescents (21.8%) than the Adults (15.1%) and the husbands of Spouses (17.8%).

It is also learnt from the field that water is mainly used by those who are buying liquor from the Beverages Corporation and soda is by those who are consuming alcohol from Bar.

Source of Alcohol

- For the majority (64.2%) of the Adults, 'Beverage shop' was the main source of alcohol followed by 'Bar' (22.3%).
- Among the Adolescents, the majority (38.4%) reported of 'Beverage shop' as their common source.

- Spouses too confirmed ‘Beverage shop’ (42.2%) as their husbands’ main source of alcohol drinks followed by ‘Bar’ (27.8%).

Though the minimum age is raised to 21 years to purchase alcohol, the availability of the same to Adolescents is a serious concern to be resolved.

2.5 Impact of Alcohol Consumption

2.5.1 Impact on Physical / Mental Health

Health Problems Identified

- Of the Adult Drinkers, the majority (67.2%) were identified with the various health problems like; Loss of appetite (11.4%) and Deterioration of health (7.5%), Stomach disease/blood vomiting and Memory problems when not drunk (5.8% each).

A good number (20.3%) were found to be suffering from multiple health problems.

- Of the Adolescents, the majority (58.5%) had not reported of any of the health problems while the rest had.

Loss of appetite (13.1%) and pancreatic anemia (9.7%) were the most common health issues found among the Adolescent Drinkers.

Only 2 (0.8%) reported of the multiple health problems.

- Of the Spouses, the majority (86.7%) reported of the health problems faced by their husbands due to the drinking habit.
- Category-wise, the majority (77.2%) from the Experimental Group of Harmful Drinkers had health problems compared to less Harmful Drinkers (58.4%).

However, nearly 90% of the Non-Drinkers (Control Group) had reported of any health problems.

- Multiple health problems were also more (33.3%) among the Harmful Drinkers compared to the Less Harmful Drinkers (14.9%).

None of the Non-Drinkers had reported on the multiple health problems.

- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Mental Health Problems

- Of the Adults, a great majority (84.2%) had potential mental health problems and 3.6% had severe problems whereas 12.2% had not reported of any.
- Of the Adolescents, 65.9% and 3.5% had potential and severe mental health problems while 30.6% had no such issues.
- Among the Spouses, 73.3% stated about the potential health issues and 15.6% about the severe mental health issues of their husbands whereas 11.1% had not reported of any.
- Category-wise, mental health problems were found to be higher among the Experimental Group of Drinkers with 92.2% Harmful Drinkers and 83.4% less Harmful Drinkers having potential or severe mental health problems compared to the Control Group of Non-Drinkers with 51.9%.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

2.5.2 Impact on Psychological well being

Personal Functioning

- With regard to Adult Drinkers, a good number (45.3%) had moderate (32.8%) or high level (14.5%) problems in their personal functioning.
- Of the Adolescents, more than half of them had moderate (37.1%) or high (15.7%) level problems.
- More than three fourth of the Spouses had reported of moderate (50%) or high (25.6%) level problems of their husbands.
- Category-wise, moderate or high level problems were higher among the Experimental Group of Harmful Drinkers (72.7%) compared to the Less-Harmful Drinkers (36.8%). However, only a less number (29.5%) of Non-Drinkers from the Control Group had reported of the same.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Family Functioning

- 45.9% of the Adults and 65.5% of the Spouses of the sample reported on moderate or high level problems in their family functioning.
- Category-wise, problems (moderate to high) in family functioning were reported to be more (65.4%) among the Experimental Group of Harmful Drinkers compared to the less Harmful Drinkers (35.9%). However, Problems were comparatively less among the Control Group of Non-Drinkers (20%).
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Internalising Emotions

- Of the Adults 45.5% reported of the moderate or high level of internalising emotions.
- Among the Adolescents, 26.3% reported of the emotions at moderate or high level.
- Category-wise, a good number of the Experimental Group of Harmful (48.9%) and the Less Harmful Drinkers (44.1%) had reported of Moderate or High level of emotions whereas the same was less among the Control Group of Non Drinkers with 10%.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Externalising Emotions

- Of the Adults, the majority (68.5%) had moderate to high level of externalising emotions.
- 23.1% of Adolescents too reported of the moderate to high level of emotions.
- Category-wise, emotions at high levels were more (38.9%) among the Experimental Group of Harmful Drinkers than the less-Harmful Drinkers (28.5%). None of the Control Group of Non-Drinkers had reported of high level of externalising emotions.

- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Impact on Academic Activities among Adolescents

- More than 60% of the Adolescents had either moderate (34.1%) or high (27.1%) level impact on their academic activities.

2.5.3 Impact on Family

General Family Functioning

- Of the Adults and Spouses, about one fourth of them each reported of the ‘Low’ level of general family functioning.
- Of the Adolescents, 17.3% of them had a ‘Low’ level of general family functioning.
- Category-wise, the Less-Harmful Drinkers from the Experimental Group had a better family functioning compared to the Harmful Drinkers, as only 17.4% of the Less Harmful Drinkers reported of a ‘Low level of Functioning’ as against the 41.1% of the Harmful Drinkers. However, none of the Non-Drinkers from the Control Group had reported of the functioning of their family as ‘Low’.
- Chi-square test ($p=.000$) has proved the statistical significance of the empirical data.

Problems with Family Members

- 46.3% of the Adults and 53.3% of the Spouses had reported of moderate to high level problems.
- Category-wise, family problems at high levels were higher among the Experimental Group of Harmful Drinkers (35.8%) compared to the Less-Harmful Drinkers (18.6%). However, among the Control Group of Non-Drinkers only a few (2.7%) reported on the same.
- Chi-square test ($p=.000$) has proved the statistical significance of the empirical data.

Relationship with Spouse

- Of the Adults, a good number (45.2%) stated about the poor relationship with their Spouse while almost equal fractions reported of the moderate (27.1%) or good (27.7%) relationships.
- Among the Spouses too, a good number (45.6%) reported of a poor relationship with them by their husbands. 28.9% and 25.6%, respectively reported of a moderate and good relationship with their husbands.
- Category-wise, 'Low' level of Relationship' was more (47.7%) among the Experimental Group of Harmful Drinkers compared to the Less Harmful Drinkers (22.1%). However, High level of relationship was more among the Control Group of Non-Drinkers.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Relationship with Children

- Of the Adults, almost one third (32.6%) of them opined that their relationship with children was 'Low.'
- A good number (41.1%) of Spouses reported of a 'Low' relationship of their husbands with the children.
- Category-wise, 'Low' level of relationship with children was found to be more (46.2%) among the Experimental Group of Harmful Drinkers compared to the Less Harmful Drinkers (27.3%). However, only a few (11.9%) among the Control Group of Non-Drinkers reported about their relationship with children in the same manner.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Acceptance in Family

- Of the Adults, 47.2% of them had reported of a 'High' acceptance in the family.
- Among the Adolescents, only 13.4% reported of the 'High' acceptance.

- 31.1% of the Spouses too confirmed the acceptance of their husbands in the family as 'High' while 45.6% reported it as 'Low'.
- Category-wise, 'High' acceptance in the family was found to be less among the Experimental Group of Harmful Drinkers (27.2%) compared to the less Harmful Drinkers (55.2%). However, 'High' acceptance was more among the Control Group of Non-Drinkers.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

2.5.4 Impact on Society

Acceptance in the Society

- Of the Adults, 47.8% reported of 'High' acceptance in the society.
- However, among the Adolescents, most (74.7%) reported of 'High' acceptance.
- Of the Spouses, 47.8% reported of the 'Low' acceptance of their husbands in the society.
- Category-wise, the majority (62.2%) of the Harmful Drinkers from the Experimental Group had experienced a 'Low' acceptance in the society while most (55.4%) of the Less Harmful Drinkers had a 'High' acceptance. Significantly, a great majority (85.6%) of the Non-Drinkers from the Control Group reported of a 'High' acceptance in the society.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Problems in Social Life

- Only a less percentage of Alcohol Users from all categories (9.4% of the Adults, 13.5% of the Adolescents and 17.4% of the Spouses) had stated problems in social life as 'High'.
- Those who reported of 'Moderate' level of problems were almost equal among the Adults (38.7 %) and the Adolescents (38.0%) while high among the Spouses (53.5%).

- Category-wise, the majority (70.9%) of the Experimental Group of Harmful Drinkers had ‘Moderate’ to ‘High’ level problems in their social life while most of the Less Harmful Drinkers (60.7%) had only ‘Low’ level of problems. A good number (65.5%) from the Control Group of Non-Drinkers too reported of a ‘Low level’ of problems in social life.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Social Participation

- ‘Low’ participation in society was reported more by Spouses (57.8%) and Adults (31.5%) while less (14.2%) by Adolescents.
- Category-wise, social participation was found to be ‘Low’ among the Experimental Group of Harmful Drinkers (48.3%) compared to Less Harmful Drinkers (24.7%). However, only a few (16.7%) from the Control Group of Non-Drinkers stated it as ‘Low’ while the majority (78.9%) reported it as ‘High’.

Interaction with Society

- Category-wise, less (33.5%) among the Experimental Group of Harmful Drinkers had reported of social interaction in ‘High’ level compared to the Less Harmful Drinkers (51.3%). However, more (74.4%) from the Control Group of Non-Drinkers reported on the ‘High’ level of interaction
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

2.5.5 Impact on Productivity

Number of Days of absence / Missed Days of Work

- Of the Adults, 13.3% reported that they were absent or had missed days of work due to alcohol consumption while a good number not responded to the query.

Loss of Pay

- 14.8% of the Adults had the problem of loss of pay due to missed work days during the previous month.
- Slightly a higher number of Spouses reported of the 'Loss of pay', their husbands had in the last month due to the drinking habit.
- Category-wise, a significantly high percentage of the Experimental Group of Harmful Drinkers (28.3%) had loss of pay compared to the less-Harmful Drinkers (9.3%). However, only 7.8% of the Control Group of Non-Drinkers had reported on the same.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Loss of Job/Dismissal from School

- Among the Adults, a good number (16.1%) had lost job due to their drinking behaviour.
- Of the Spouses, slightly higher number (22.2%) reported on the loss of the job of their husbands.
- Of the Adolescents, 11.4% had a dismissal from the school due to their alcohol consumption.
- Category-wise, comparatively more (39.4%) from the Experimental Group of Harmful Drinkers had lost their job than the Less-Harmful Drinkers (6.6%) while only few (4.4%) from the Control Group of Non-Drinkers reported on the same.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Disciplinary Action

- Of the Adults, only below 10% had faced a disciplinary action due to their drinking behaviour.
- Of the Spouses, 13.3% reported on the same about their husbands.
- Category-wise, a significantly high percentage of the Experimental Group of Harmful Drinkers (16.7%) had undergone disciplinary action

at workplace compared to the Less-Harmful Drinkers (5.3%). However, none of the Non-Drinkers from the Control Group had faced the same.

- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Demotion

- 4.3% of the Adult Drinkers had demotion in their job.
- 8.9% of the Spouses too reported on the same about their husbands.
- Category-wise, Demotion in job was found to be more among the Experimental Group of Harmful Drinkers (9.4%) compared to the Less-Harmful Drinkers (2.5%) while none of the Non-Drinkers from the Control Group had demotion in the job.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Suspension from Job/School

- Only a few of the Adults (3.5%) and the Spouses (3.3%) reported of the suspension from job.
- 16.8% of the Adolescents had suspended from the school due to alcohol consumption.
- Category-wise, suspension from the job was found to be more among the Experimental Group of Harmful Drinkers (7.4 %) compared to the Less-Harmful Drinkers (2.1%) while none of the Non-Drinkers from the Control Group had reported on the same.
- Chi-square test ($p=.001$) has proved the statistical significance of the findings.

Accidents at Work

- Of the Adults, 1 out of every 10 had accidents at workplace.
- Of the Spouses, 2 out of every 10 had reported on the same about their husbands.
- Category-wise, the Harmful Drinkers (17.8 %) from the Experimental Group had more instances of accidents at work compared to the less-

Harmful Drinkers (7.5%) while none of the Non-Drinkers from the Control Group reported of the accidents at workplace.

- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Decreased Efficiency

- Of the Adults, 17% of them had a decrease in their efficiency at work due to drinking behaviour.
- Among the Spouses, 21.1% reported on the same problem of their husbands.
- Of the Adolescents, 18.3% confirmed the decrease of their efficiency in education because of alcohol use.
- Category-wise, more Harmful Drinkers (28.2%) from the Experimental Group had reported of a decrease in their efficiency compared to the less-Harmful Drinkers (12.7%). While only a few (2.2%) from the Non-Drinkers of the Control Group reported on the same.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Physical Fights

- More than half of the Adults (52.1%) and the Adolescents (55.1%) were reported of the incidences of physical fights.
- 61.1% of the Spouses too confirmed the same about their husbands.
- Category-wise, most (71.1%) of the Harmful Drinkers from the Experimental Group had more instances of physical fights compared to the Less-Harmful Drinkers (44.6 %). However, only a lesser number (21.1%) of the Non Drinkers from the Control Group reported on the same.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

In general, the above data point out the revelation that the alcohol consumption does affect the quietness of a society to an extent. It underlines the

assumption that a good number of crimes are stimulated by the use, especially the harmful use of alcohol or drugs.

Drove Vehicle

- Of the Adults, 42% had driven the vehicle after intoxication at some time or more times.
- Of the Spouses, 45.6% reported of the drunken driving of their husbands.
- Among the Adolescents, 37.6% reported of their drunken driving.
- A cross analysis has shown that the more number (51.7%) of Harmful Drinkers had instances of driving a vehicle under intoxication compared to the Less Harmful Drinkers (38.7%).
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Get arrested and held at Police Station

- 28% of the Adults and 19.8% of the Adolescents who had drunken driving had got arrested and held at the police station.
- 34.1% of the Spouses too reported of the arrest of their husbands for drunken driving.
- Category-wise, more number (33.3%) of Harmful Drinkers from the Experimental Group had got arrested and held at police station than the Less Harmful Drinkers (12.9%) for the drunken driving.
However, only a lesser number (3.9%) of the Non-Drinkers from the Control Group had got arrested and held at police station due to reasons other than drinking.
- Chi-square test ($p=.000$) has proved the statistical significance of the findings.

Arrested / Paid penalty for Drunken Driving

- Of those who had drunken driving, nearly half among the Adults and husbands of Spouses were found arrested or paid the penalty for the same.

- More than one third (36%) of the Adolescents was also reported to be arrested / paid penalty for drunken driving.
- Category-wise, those who got arrested/paid penalty while driving at intoxication were slightly higher among the Experimental Group of Harmful Drinkers (52.7%) than the Less Harmful Drinkers (46.8%). While only a less number (7.8%) among the Control Group of Non-Drinkers had got arrested/paid penalty while driving for reasons other than drinking.

The data corroborate with the assertion of the state police department that one of the causes for the high rate of recorded crimes in Kerala, is the surplus number of cases registered for drunken driving and drinking in public places.

Accidents

- Of the Adults, about one third of them had accidents while driving.
- Alarmingly, nearly half of the Adolescents and husbands of Spouses, who had a drive after drinking, were reported to be having accidents, at least once in the course of action.

The present data are in tune with the increasing incidents of road accidents reported by the Home Department of the state. Two wheelers are said to be the prominent ones among the vehicles which caused to the alarming rate of accidents.

- Category-wise, there is not much difference in the instances of accidents among the Experimental Group of Harmful (30.1%) and Less Harmful Drinkers (33.9%). However, the instances of accidents while driving were less among the Control Group of Non-Drinkers (11.8%).

2.6 Withdrawal, Treatment and Allied Aspects

Efforts to Stop/Cut down Drinking

- 64.5% of the Adults and half of the Adolescents had tried to stop/cut down alcohol consumption.
- Majority (67.8%) of the Spouses too reported on the same about their husbands.

Comparatively among the Adolescents, those who tried to stop/cut down drinking were found to be less; perhaps it might be due to the fact that a good number had just started drinking.

Abstinence / Cut down Drinking for a Month

- Of those who had tried to stop/cut down drinking, the majority of the Adults (91.5%) and Adolescents (92.1%) could stop/cut down it for one month and most were made it possible by self initiated (Adults – 88.3%, Adolescents-88.6%).
- Spouses who stated about the abstinence of their husbands from drinking for one month, constituted 98.4%, and a good number (46.7%) among them made it possible by the coercion of others.
- Category-wise, most of the Harmful Drinkers could not stop their drinking compared to less Harmful Drinkers.

Longest Period of Abstinence

- Majority (70.3%) of the Adults had an abstinence of 1-6 months duration followed by 6 – 12months (18%).
- 1-6months duration was also reported by the majority (88.5%) of the Spouses in the sample as their husbands' longest abstinence from drinking.
- With regard to Adolescents, only 8.8% reported on 1-6 months abstinence from alcohol.

Compulsion from Others to Stop Alcohol Consumption

- Almost an equal number of Adults (32.5%) and Adolescents (34.1%) reported about the compulsion they had from others, to stop alcohol consumption.
- 'Spouse' and 'other family members' were the persons who compelled Adult respondents to stop alcohol consumption, whereas for Adolescents; it was 'their parents', 'siblings', 'friends and teachers'.

Reasons to Restart Drinking after Abstinence

- ‘Wanted to use’ was one of the main reasons for the majority (43.4%) of the Adult respondents to restart their drinking after a short /long abstinence. ‘Peer pressure’ was found to be second in the list with 41.6% respondents. Craving and positive mood were the other major reasons pointed out by the 13.7% and 11.2% Adults respectively.
- ‘Peer pressure’ was a reason for 61.9% of the Adolescents to restart drinking. ‘wanted to use’ was reported by 28.3% of the Adolescents
- ‘Peer pressure’ was stressed by majority (49.2%) of the Spouses for the restart of their husbands’ drinking. ‘Wanted to use’ was the other reason reported by the next majority (29.5%) of the Spouses.

Problems Experienced While Tried to Cut Down / Stop Drinking

- 63.6% of the Adults and 59.4% of the Adolescents had faced one or more withdrawal problems while they tried to stop drinking.
- 37.7% of the Adults had faced more than one problem. It was comparatively less (15.9%) among Adolescent Drinkers.
- Unable to sleep’, headache, fidgety/restless, etc. were the major problems reported by the Adolescents.
- Category-wise, most of the Harmful Drinkers (83.5%) had Withdrawal problems compared to the less Harmful Drinkers (54.6%).

Status of having FITS/Convulsion

- 8 Adults, 2 Adolescents and husbands of 2 Spouses in the sample had FITS / Convulsions when they stopped drinking. Of the 2 Adolescents, one had the habit of using Ganja/Charas.
- FITS/Convulsion was found to be comparatively more among Harmful Drinkers (4.1%) than less Harmful Drinkers (1.1%).

Status of having Delirium Tremens

- Of those who had tried to stop/cut down drinking, 41 Adults faced the problem of Delirium tremens (Confusion, disorientation, hallucinations, etc.) while they stopped drinking.

- None of the Adolescents had reported of experiencing the same whereas 7 Spouses in the sample reported that their husbands had this problem.
- The presence of Delirium tremens (Confusion, disorientation, hallucinations, etc.) in Adult Alcohol Users was comparatively more among Harmful Drinkers (15.7%) than the less Harmful Drinkers (10.7%).

Visit/Treatment at De-addiction Centre

- 9.8% of the Adults and 5.2% of the Adolescents had visited the De-addiction Centre for alcohol treatment.
- Husbands of 21.1% of the Spouses too were treated at the De-addiction centre.
- Majority (67.2%) of the Adults had only one visit at the Centre while 32.8% had more than one visit.
- Cent per cent of the Adolescents had made only one visit.
- A good number (78.9%) of Spouses reported on more than one visits of their husbands.

Visit/treatment at De-addiction Centres was reported by a comparatively higher number of Spouse respondents than the Adults and Adolescents.

Awareness on Nearby Treatment Facility for Alcohol Addiction

- Of the Adults, around 3 out of every 4 were unaware of the nearby treatment facilities in their areas.
- Of the Adolescents, 4 out of every 5 were also unaware of the same in their areas.
- Comparatively a good number (44.4%) of the Spouses had knowledge about treatment facility for alcohol addiction in their area and some of them (nearly 20%) had reported on their husbands' visits at the de-addiction centres.

It is to be noticed that though the revenue generates from the sale of alcohol drinks is very high, a well equipped treatment facilities in the state for the problems due to alcohol consumption is very less.

Attitude towards Treatment

- Compared to the less Harmful Drinkers (29.7%), a high number (37.6%) of the Harmful Drinkers had a lower attitude towards the de-addiction treatment.

3.2 RECOMMENDATIONS

Generally, the Alcohol Users can be divided into two categories viz; Potentially Hazardous Drinkers and Hazardous Drinkers. Potentially Hazardous Drinkers are those who used/experienced alcohol, but not addicted to it and are vulnerable to hazardous drinking. Hazardous Drinkers are the addicted persons with alcohol. Normally, Adolescents and young Adults constitute the Potentially Hazardous Drinkers– as most of them is not having long experience of drinking; but vulnerable to harmful drinking while mostly the Hazardous Drinkers are Adults and are addicted to the habit of harmful drinking. In this regard, it cannot be fruitful to formulate similar policies for Potentially Hazardous and Hazardous Drinkers. Hence, care should be taken to prepare separate intervention programmes exclusively for Adolescents and Adults.

Drinking during the critical growth periods – adolescence and young Adulthood can lead to lifelong damage in brain function, particularly as it relates to memory, motor skills (ability to move) and coordination. Experts have found that there are a number of risk factors that make Adolescents more likely to have problems with Alcohol and other drugs use in the future. These include individual, family, and community risk factors (*Goldstein, 2011*). Individual risk factors include untreated mental health issue, low self-esteem, poor grades in school, and poor social and coping skills. Family risk factors include: family history of alcohol and drug abuse, poor modeling from parents, chaos at home, and poor communication between parents and children. Community risk factors are high prevalence of alcohol and other drug abuse and availability of drugs in the community (*Matheson J.L, 2011*).Further, the

present study shows that most of the Alcohol Users had initiated drinking at their adolescence or younger adulthood. Moreover, the Adolescents in the sample are found to be vulnerable to harmful drinking in terms of quantity of drinking as most of them have been using alcohol at a quantity of 180ml or more. In this backdrop, the intervention programmes among the Adolescents and young Adults is an urgent need of the hour. Apparently, if an Adolescent never encounters alcohol or other drugs, they have no opportunity to use, thereby reducing their risk of addiction to zero. For this reason, experts believe in limiting adolescences' access to alcohol and individuals who use alcohol, is the very best protective factor for long-term health.

Adults comprise a major chunk of the Alcohol Users in the state; which includes youth, middle aged or aged. Harmful drinking and subsequent complicated problems are more observed in the Adults. As per the present study, harmful drinking is found to be increasing with the increase of age. Hence, the interventions for this group should be mainly to prevent harmful drinking and to help those addicted to harmful drinking.

At this juncture, the present study will be helpful to the planners and policy makers to prepare a plan document taking into consideration the recommendations emerged from the study. The *recommendations* based on the analysis and subsequent interpretation of the data from the following respondents viz; (i) Primary respondents – Adult and Adolescent Alcohol Users and Spouses of Alcohol Users (ii) Anecdote respondents – elected representatives, social activists, health workers, religious persons and (iii) Key Informants - social worker, representatives of the de-addiction centres, educational institutions, excise/police depts. and corporate bodies. The recommendations are summed up under the major heads viz; 1. Identification of alcohol prone areas 2. Formulation of alcohol consumption policy 3. Annual year marking of funds by the LSGs, Government departments, and Corporates for undertaking relevant programmes 4. Revision of curriculum in the

schools/colleges and 5. Other Significant recommendations for inclusion into the plan document for mitigating the problem of alcoholism.

1. Identification of Alcohol-prone Areas

The findings of the present study, especially the anecdotes carried out in the regions of the 18 Local Self Governments of the 9 districts in the sample revealed the following parameters for identification of the alcohol prone areas/places in the state of Kerala.

- The places where the liquor is easily accessible/available, i.e. commercial areas, cities, or towns having Bevco outlets and Bars and places with an excess number of Outlets and Bars.
- The areas devoid of adequate services of de-addiction centres / anti-alcohol groups.
- The locations with lack /absence of the services of excise and police departments.
- The places where there is a lacunae in the strict enforcement of law.
- The localities characterised by the residents with low socio-economic background, especially in the education and employment fields.

2. Alcohol-consumption Policy

An alcohol consumption policy can be devised by taking into consideration the significance of the following indicators observed in the study such as: Purchase of alcohol, Retail sale and Monitoring visits by the enforcement authorities.

i. Purchase of Alcohol

- Reduce the working hours of Beverage outlets in the state, i.e. from the existing schedule of 10am - 9pm to 11am – 6pm as availability of liquor is found to be one of the major reasons for high consumption of alcohol in the study area.
- Incorporate the provision for showing the age proof to buy liquor from Beverage outlets or from Bars as most of the Adolescents (under aged) under study are found to be getting liquor from there.

- Introduce *Permit Card system* for all buyers, which in turn will reduce the accessibility and availability of alcohol.

ii. Retail Sale

- Reduce the number of Bevco outlets and Bars as the anecdotes revealed that liquor is easily available due to the functioning of a large number of Beverage outlets and Bars.
- Shift the existing Bevco. outlets in the commercial / cities /town areas to remote settings as easy accessibility was found to be one of the major reasons for high consumption of alcohol in a particular area as revealed by the present study.

iii. Monitoring Visits by the Enforcement Authorities

- Ensure periodic visits by the law enforcement authorities in the Bevco outlets and Bars as the study revealed that the rules and regulations are not strictly followed in relation to (i) Sale of liquor to adolescents and (ii) Supply of prescribed quantity.

3. Annual earmarking of funds by LSGs, Govt. Depts, and Corporates

Even though, a major chunk of our state revenue is generated from the sale of alcohol, the allocation of funds towards mitigating the problems arising out of alcoholism is not quite appropriate. As the LSGs, Govt. Departments and Corporate bodies could play a very significant role in this regard, earmarking of funds by these institutions is very essential. Specific responsibilities to be carried out by the respective agencies are the following;

Local Self- Governments (LSGs)

- Allocate a fixed percentage of the Plan fund towards organizing anti-alcoholism activities as the study revealed that in most of the high alcohol consuming localities, anti-alcohol campaigns or awareness programmes (seminars /camps/street plays/production of IEC materials) were absent or considerably lacking. Following are the activities;

- i. Organisation of ward/locality level community awareness workshops/camps for the various stakeholders viz; students, youth, adults and migrant labour force on the social, economic and familial impact of alcohol consumption. A minimum of 5-6 such awareness seminars / camps should be made mandatory.
 - ii. Encouraging the arts and sports clubs by providing incentives, for attracting the Adolescents in its activities and diverting their affinity towards alcoholism and allied tendencies.
 - iii. Creating and distributing *Information, Education and Communication (IEC) materials* viz; leaflets, pamphlets, booklets on 'Alcoholism and its negative impacts'.
 - iv. Displaying *posters and signboards* at the public places of every ward of the panchayath regarding the harmful effects of alcohol.
 - v. Linking the *IEC/ Behaviour Change Communication (BCC) programmes* (display boards, posters, leaflet distribution, etc.) to the *beverage outlets* for better coverage.
 - vi. Instructing the Community Development Society (CDS) members of Kudumbasree to conduct *frequent conscientisation programmes* for Self Help Groups (SHGs) and Families regarding alcoholism and its negative impact.
 - vii. Focussing more on Adolescents and Young adults regarding preventive interventions as harmful drinking could be prevented as there is a time period between initiation of drinking and regular drinking / harmful drinking.
 - viii. Allocating funds to youth clubs from the State Youth Welfare Board and Nehru Yuva Kendra to organize peer based intervention programmes for behavioural change of youths.
- Earmark a fixed percentage of the plan fund towards grant-in-aid to NGOs for setting up or maintaining the de-addiction / counselling centres in their

locality as the majority of the respondents reported of the absence of de-addiction centres / counselling centres in their areas.

Govt. Departments and Corporate Bodies

- Make it mandatory for the Govt. Departments and Corporate bodies to earmark a minimum fund towards the anti-alcohol interventions (seminars/other relevant programmes) for its employees as the study pointed out that harmful drinking had significant impact on the work performance in terms of loss of pay, loss of job, disciplinary action, demotion, suspension, accidents at work and decreased work efficiency. Following are the measures to be taken in this regard;
 - i. *Compulsory interventions at workplaces* in both the organized and unorganized sectors in identifying /screening, and treating the Harmful Drinkers as the majority of the Harmful Drinkers start their drinking early in the morning which in turn has shown an impact on the work performance and productivity.
 - ii. Initiation of peer and workplace based intervention programmes for behaviour change as majority initiated the drink with peers and peer pressure maintains the drinking behaviour to a great extent.
 - iii. *Integration of* mental health screening with workplace interventions and de-addiction treatment.
 - iv. Preparation and maintenance of appropriate referral directory for effective mental health care.
 - v. Conduct of *research studies* on mental health status of Harmful Drinkers for evolving suitable mental health strategies since higher levels of mental health problems are found among Harmful Drinkers.

4. Revision of Curriculum in Schools/Colleges

Adolescence is a crucial period where the children learn all the positive and negative traits on account of their socialization with their peers and neighbourhood groups. School is an important socializing agency and the curriculum followed here is very vital for the formation of their character and

behaviour. Since, alcoholism among the student community is slowly emerging a revision in the school/college curriculum incorporating the following topics is of utmost importance.

- Incorporate a module on the impact of alcoholism as the majority of the Adolescents in the sample reported of initiating drinking at the age of below 15 years or 15-21 years.
- Include the topics viz; individual/group counselling and yoga as the majority of the Adolescents in the study cited; Family/Social problems and resultant stresses and strains as the major reasons for their initiation / continuance of drinking. This would facilitate the teachers understand the initiation/continuance of drinking by the students and prepare them to cope up with the problematic situations.
- Introduce Life skills education in the curriculum for equipping the students with skills essential for a better living.
- Organise awareness classes for parents by the school authorities viz; PTA, HM etc. for preventing them from being a negative role model and for conscientizing them to observe the peer group and their activities closely.

5. Other Significant Recommendations

Other significant recommendations are scripted under the following heads viz; Treatment related, Law related and Media related.

Treatment Related

- Set up more treatment centres for de-addiction.
- Initiate tobacco cessation programmes along with de-addiction treatment as tobacco is found to be the other major addictive substance used by the Alcohol Users other than drinking followed by Gunja/Charas/Sniffing (correction fluid /whitener /kerosene).
- Start a cell at hospitals/clinics/PHCs for providing consideration services to patients with alcohol use disorders as Harmful drinking is found to be associated with multiple health concerns.

- Include *family interventions* with de-addiction treatment in order to strengthen the family bonding and to enhance the family's involvement in the treatment process for speeding up the recovery (abstinence) process as most of the Harmful Drinkers had a significant impact on personal and family functioning.
- *Keep a track record* of all alcoholic patients treated at the De-addiction Centres and conduct strict *follow up* of their treatment and status quo.
- Utilize *experiences of ex-addicts/members of AA* (Alcoholic Anonymous) for community based sensitization/awareness programmes as the Harmful Drinkers under study were less aware of and had a low attitude towards De-addiction treatment.
- Promote measures for networking and linkages with all govt. departments viz; social welfare, health and labour, in order to identify, treat and rehabilitate the alcoholics.

Law Related

- Strictly *enforce the law* related to the *age of buying liquor* (21years).
- Strengthen *enforcement of law* to address conflicts and violation of laws due to harmful use of alcohol as physical fights and drunken driving were reported more among the Harmful Drinkers.

Media Interventions

- Utilize the *Services of Celebrities and Role models* to advertise the harmful effects of alcohol consumption.

APPENDICES

I. Tools of Data Collection

1.1 Interview Schedule for Adults

1.2 Interview Schedule for Spouses

1.3 Interview Schedule for Adolescents

1.4 Interview Guide for Key Informants

1.5 Anecdote Format

1.6 Case study Format

1.7 Interview Schedule for Adults - Non-Drinker

II. References

III. Abbreviations

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Interview Schedule for Adults

1. Wayanad, 4. Thrissur 7. Alappuzha
2. Kozhikode 5. Ernakulam 8. Kollam
3. Kannur 6. Idukki 9. Trivandrum

Name of the Investigator:

Category of the respondent: 1) Male 2) Female

Date of interview:

I. Socio Economic & Employment Status Profile

1. Name and Address of the Respondent:

Mobile:

2. Age :

3. Marital status: 1) Single 2) Married 3) Separated
4) Divorced 5) Widowed/Cohabiting

4. Education:

- 1) Cannot Read and Write 2) Literate (No formal education)
3) Primary (1-5 years) 4) Secondary 6-10 years)
5) Higher Secondary (+2) 6) Graduate 7) Post-graduate
8) Professional

5. Education of the Spouse :

- 1) Cannot Read and Write 2) Literate (No formal education)
3) Primary (1-5 years) 4) Secondary 6-10 years)
5) Higher Secondary (+2) 6) Graduate 7) Post-graduate
8) Professional 9) Not Applicable

6. Education of Father :

- 1) Cannot Read and Write 2) Literate (No formal education)
3) Primary (1-5 years) 4) Secondary 6-10 years)
5) Higher Secondary (+2) 6) Graduate 7) Post-graduate
8) Professional

7. Education of Mother :
- 1) Cannot Read and Write 2) Literate (No formal education)
 3) Primary (1-5 years) 4) Secondary 6-10 years)
 5) Higher Secondary (+2) 6) Graduate 7) Post-graduate
 8) Professional
8. Locality: 1)Urban 2)Rural
9. Religion: 1)Hindu 2)Christian 3)Muslim
10. Income of the family (Monthly) :
11. Sources of Income:
12. Average income per day :
13. Type of family: 1)Nuclear 2)Extended 3)Joint
14. Current Occupational Status
 1. Unemployed 2. Employed Specify.....
15. How long you are working in the present job.....years.....months

II. Alcohol Use History

a. First Use

16. With whom did you have the first alcohol use?
 1) Self 2) With Peers 3) Relatives (Specify.....)
 4) Others (Specify.....)
17. Age at first drink
18. What was the Reason for your first alcohol use.....
 1) Experimentation 2) Peer Modeling 3) Modeling of significant adults
 4) To maintain social status 5) To relieve negative mood states
 6) To enhance positive mood states 7) to relieve physical problems
 8) To cope with stress 9) Others (Specify.....)

b. Regular Drinking

19. Age at onset of regular drinking –
20. Why do you drink regularly?
 1) Craving 2) Peer pressure 3) Wanted to use 4) Withdrawal
 5) Negative mood 6) Coping with stress 7) Retaliation 8) Pain
 9) Boredom 10) Positive mood
21. Generally, with whom do you drink with?
 1) Solitary/Alone 2) With Others
22. If with others, Specify
 1) Friends 2) Acquaintances 3) Co-workers 4) Relatives
 5) Stranger

III. Extent, trends and patterns of Alcohol Consumption

23. Frequency of Drinking
- 1) Less than once a month
 - 2) Once a month
 - 3) 2-3 days/month
 - 4) 1-2 days /week
 - 5) 3-4 days/week
 - 6) Nearly every day
 - 7) Every day
 - 8) More than once a day
 - 9) More than twice a day
24. What is the usual time of your first drink in a day?
- 1) Early Morning
 - 2) Forenoon
 - 3) Afternoon
 - 4) Evening
25. What is the usual place of drink?
- 1) Home
 - 2) Friend's House
 - 3) Public Places
 - 4) Hotel
 - 5) Bar
 - 6) Car
 - 7) Club
 - 8) Any Other Place (Specify.....)
26. Pattern of use
- 1) Similar quantity every day
 - 2) Varied quantities on different days
 - 3) Continuously for 2-3 days from morning to evening after a gap of several days/months (Binge drinking)
27. Use of Other substances
- 1) Smoking Tobacco
 - 2) Oral Tobacco
 - 3) Ganja/Charas
 - 4) Morphine/heroin/pethidine (IDU)
 - 5) Pan Parag
 - 6) Sniffing (Correction Fluid/whitener/kerosene)
 - 7) Others Specify.....
28. Estimated daily use of alcoholml
29. Type of Alcohol used
- 1) Arrack
 - 2) Brandy
 - 3) Whisky
 - 4) Rum
 - 5) Vodka
 - 6) Gin
 - 7) Beer
 - 8) Toddy
 - 9) Illicit Liquor
 - 10) Others Specify.....
- 31.1 From where do you buy the liquor
- 1) Beverages shop
 - 2) Toddy Shop
 - 3) Bar
 - 4) Individuals
 - 5) Others Specify-----
30. Average amount spent for alcohol every day-----
31. What do you usually mix with alcohol before drinking
- 1) Nothing (dry)
 - 2) Water
 - 3) Soda
 - 4) carbonated drinks (Coke/Pepsi/Sprite etc)
 - 5) Beer
 - 6) Others Specify.....

IV. Impact of Alcohol Consumption

a) Impact on Physical Health

32. Have you been affected with the following health concerns?
- 1) Liver disease/jaundice
 - 2) Stomach disease/blood vomiting
 - 3) Heart Problems
 - 4) Feet tingling/feeling numb
 - 5) Memory problems when not drunk (excluding blackouts)
 - 6) Pancreatitis Anemia
 - 7) Loss of Appetite
 - 8) Weight loss
 - 9) Deterioration of general health
 - 10) Any other- Specify

33. What was your response on identification of these health problems?

- 1) Did not bother of the heath issue and Continued to drink
- 2) Was worried of the problem, but failed to stop drinking
- 3) Sought medical help 4) Discontinued drinking
- 5) Sought treatment for drinking behavior

b) Impact on Psychological well being

34. What have been the impact of your Drinking/being drunk/hangover negatively affected the

- a) Work responsibilities 1)Most of the Time 2)Sometimes 3)Never
- b) Household responsibilities 1)Most of the Time 2)Sometimes 3)Never
- c) Marital relationship 1)Most of the Time 2)Sometimes 3)Never
- d) Suspicions towards spouse 1)Most of the Time 2)Sometimes 3)Never
- e) Parenting responsibilities 1)Most of the Time 2)Sometimes 3)Never
- f) Social Responsibilities 1)Most of the Time 2)Sometimes 3)Never
- g) Personal activities 1)Most of the Time 2)Sometimes 3)Never
- h) Family Finance 1)Most of the Time 2)Sometimes 3)Never
- i) Emotional status 1)Most of the Time 2)Sometimes 3)Never
- j) Physical Health 1)Most of the Time 2)Sometimes 3)Never

35. Indicate to what extent you have felt this way in the past few weeks: (0 = not at all; 5 = moderately; 10 = extremely)

- 1) Afraid 2) Angry 3) Guilty 4) Sad
- 5) Happy 6) Excited 7) Confident 8) Interested

c) Impact on productivity

36. Number of days absent/missed days of work due to alcohol consumption in last one month

37. Loss of pay because of being absent from job: 1)Yes 2) No

38. If yes, how much

39. Number of jobs held in last one year

40. Have you ever faced any of the following work related problems?

- a. Loss of job 1)Yes 2)No
- b. Disciplinary Actions 1)Yes 2)No
- c. Demotion 1)Yes 2)No
- d. Accidents at Work 1)Yes 2)No
- e. Suspensions 1)Yes 2)No
- f. Decreased Efficiency 1)Yes 2)No

41. Did you engage in the following activities after drinking?

- a) Physical fights 1) Most of the Times 2) Sometimes 3) Never
- b) Drove vehicle 1) Most of the Times 2) Sometimes 3) Never
- c) Got arrested and held at a police station 1)Yes 2) No
- d) Arrested/paid penalty for drunken driving 1)Yes 2) No
- e) Accidents (Injured self or others) 1)Yes 2) No
- f) Alcohol along with potentially dangerous medication 1)Yes 2)No

- n) Religious practices in the family 1)Excellent 2) Good 3)Average
4) Fair 5) Poor
- o) Family time together 1)Excellent 2) Good 3) Average
4) Fair 5) Poor
- p) Family celebrations 1)Excellent 2)Good 3) Average
4) Fair 5) Poor
- q) Your acceptance in the family 1)Excellent 2) Good 3) Average
4) Fair 5) Poor
- r) Respect for your views in the family 1)Excellent 2) Good 3) Average
4) Fair 5)Poor
- s) Communication with family members 1)Excellent 2) Good 3) Average
4) Fair 5) Poor
- t) Involvement in parenting 1)Excellent 2)Good 3) Average
4) Fair 5) Poor
- u) Sexual life 1)Excellent 2)Good 3) Average
4) Fair 5) Poor

e) Social Impact

44. Have you faced any of the following due to your drinking behavior?

- a) Objections from family 1) Most of the Times 2)Sometimes 3) Never
- b) Objections from friends 1)Most of the Times 2)Sometimes 3) Never
- c) Objections from employers 1)Most of the Times 2) Sometimes 3) Never
- d) Arguments with others 1)Most of the Times 2) Sometimes 3) Never
- e) Hit family members 1)Most of the Times 2) Sometimes 3)Never

45. How have been your social life in the following domains?

- a) Participation in social activities
1) Good/Satisfactory 2) Not Satisfactory(Poor)
- b) Contribution to social activities
1) Good/Satisfactory 2) Not Satisfactory (Poor)
- c) Interaction with friends
1) Good/Satisfactory 2) Not Satisfactory(Poor)
- d) Interaction with colleagues/workmates
1) Good/Satisfactory 2) Not Satisfactory (Poor)

- e) Interaction with employers/authorities
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- f) Interaction with religious organizations(Church/temple/mosque etc.)
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- g) Acceptance in social groups/neighbors
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- h) Acceptance from friends
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- i) Acceptance from relatives
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- j) Value for your opinion in social forums
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)

46. Alcohol addiction is a disease

- 1) Strongly Disagree
- 2) Disagree
- 3) Undecided
- 4) Agree
- 5) Strongly Agree

47. It is essential for a person addicted to alcohol to seek treatment to get rid of the problem

- 1) Strongly Disagree
- 2) Disagree
- 3) Undecided
- 4) Agree
- 5) Strongly Agree

48. Treatment is effective for the stopping alcohol use

- 1) Strongly Disagree
- 2) Disagree
- 3) Undecided
- 4) Agree
- 5) Strongly Agree

49. Are you aware of any treatment facility for treatment of alcohol addiction in your area

- 1) Yes
- 2) No

50. If yes specify the name of the organizations and the services available

f) Withdrawal, Treatment and Allied Aspects

51. Have you ever tried to stop/cut down your drinking? 1)Yes 2) No

52. Were you been able to abstain, or cut down for a month? 1)Yes 2) No

53. How have been the abstinence made possible?

- 1) Self Initiated
- 2) Coerced by Others

54. Have you been to a de-addiction center for stopping alcohol use?

- 1) Yes
- 2) No

55. How many times you had been to the de-addiction center

56. Did anyone compel you to stop consuming alcohol 1)Yes 2) No

57. If yes, specify _____
58. What has been your longest period of abstinence? ----- months
59. What made you to restart drinking after abstinence
- 1) Craving 2) Peer pressure 3) Wanted to use
 4) Withdrawal 5) Negative mood 6) Coping with stress
 7) Retaliation 8) Pain 9) Boredom
 10) Positive mood 99) others (Specify) -----
60. Did you experience the following problems when you tried to cut down or stopped drinking?
- 1) Hands trembling 2) Unable to sleep 3) Feel anxious
 4) Feel depressed 5) Felt irritable 6) Increased heart beat
 7) Sweating 8) Nausea/vomiting 9) Felt physically weak
 10) Headaches 11) Fidgety/restless
 99) Not applicable (Never tried to cut down)
61. Did you experience the following problems when you tried to cut down or stopped drinking?
- 1) FITS/Convulsions
 2) Delirium tremens (confusion, disorientation, hallucinations etc.)

General Health Questionnaire (GHQ)

Have you recently:	Not at all	No more than usual	Rather more than usual	Much more than usual
62. Been able to concentrate on what you're doing?				
63. Lost much sleep over worry?				
64. Felt that you are playing a useful part in things?				
65. Felt capable of making decisions about things?				
66. Felt constantly under strain?				
67. Felt you couldn't overcome your difficulties?				
68. Been able to enjoy your normal day to day activities?				
69. Been able to face up to your problems?				
70. Been feeling unhappy or depressed?				
71. Been losing confidence in yourself?				
72. Been thinking of yourself as a worthless person?				
73. Been feeling reasonably happy, all things considered?				

74. What are your suggestions for preventing initiation of alcohol use?
75. What are your suggestions to help persons from addiction after initiation of alcohol use?
76. What are your suggestions for helping addicted persons to quit alcohol use?

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Interview Schedule for Spouses

- | | | |
|---------------------------------------|---------------------------------------|--|
| 1. Wayanad, <input type="checkbox"/> | 4. Thrissur <input type="checkbox"/> | 7. Alappuzha <input type="checkbox"/> |
| 2. Kozhikode <input type="checkbox"/> | 5. Ernakulam <input type="checkbox"/> | 8. Kollam <input type="checkbox"/> |
| 3. Kannur <input type="checkbox"/> | 6. Idukki <input type="checkbox"/> | 9. Trivandrum <input type="checkbox"/> |

Name of the Investigator:

Date of interview:

I. Socio Economic & Employment Status Profile

1. Name and Address of the Respondent:

Mobile:

2. Age :

3. Education:

1) Cannot Read and Write 2) Literate (No formal education)

3) Primary (1-5 years) 4) Secondary 6-10 years)

5) Higher Secondary (+2) 6) Graduate

7) Post-graduate 8) Professional

4. Locality : 1) Urban 2) Rural

5. Religion : 1) Hindu 2) Christian 3) Muslim

6. Income of the family
(Monthly) :

7. Sources of Income :

8. Average income per day :

9. Type of family : Nuclear/Extended/Joint

10. Current Occupational Status

1. Unemployed 2. Employed Specify.....

11. How long you are working in the present job.....years.....months

II. Alcohol Use History

(Note: Add an option of Don't Know/Not Aware wherever the spouses are not aware of the facts enquired in the following questions)

12. Age at onset of regular drinking

13. Why does your husband drink regularly?

1) Craving 2) Peer pressure 3) Wanted to use

4) Withdrawal 5) Negative mood 6) Coping with stress

7) Retaliation 8) Pain 9) Boredom

10) Positive mood

14. Generally, with whom does your husband drink with?

1) Solitary/Alone 2) With Others

15. If with others, Specify

Friends Acquaintances Co-workers Relatives Stranger

III. Extent, trends and patterns of Alcohol Consumption

16. Frequency of Drinking

- 1) Less than once a month 2) Once a month 3) 2-3 days/month
4) 1-2 days /week 5) 3-4 days/week 6) Nearly every day
7) Every day 8) more than once a day 9) More than twice a day

17. What is the usual time of your husband's first drink in a day?

- 1) Early Morning 2) Forenoon 3) Afternoon 4) Evening

18. What is the usual place of drink?

- 1) Home 2) Friend's House 3) Public Places 4) Hotel
5) Bar 6) Car 7) Club
8) Any Other Place (Specify.....)

19. Pattern of use

- 1) Similar quantity every day
2) Varied quantities on different days
3) Continuously for 2-3 days from morning to evening after a gap of several days/months (Binge drinking)

20. Use of Other substances

- 1) Smoking Tobacco 2) Oral Tobacco 3) Ganja/Charas
4) Morphine/heroin/pethidine (IDU) 5) Pan Parag 6) Sniffing
(Correction Fluid/whitener/kerosene) 7) Others Specify.....

21. Estimated daily use of alcoholml

22. Type of Alcohol used

- 1) Arrack 2) Brandy 3) Whisky 4) Rum 5) Vodka 6) Gin
7) Beer 8) Toddy 9) Illicit Liquor 10) Others Specify.....

22.1 From where do your husband buy the liquor

- 1) Beverages shop 2) Toddy Shop 3) Bar 4) Individuals
5) Others Specify-----

23. Average amount spent for alcohol every day-----

24. What do your husband usually mix with alcohol before drinking

- 1) Nothing (dry) 2) Water 3) Soda
4) Carbonated drinks (Coke/Pepsi/Sprite etc) 5) Beer
6) Others Specify.....

IV. Impact of Alcohol Consumption

a) Impact on Physical Health

25. Have your husband been affected with the following health concerns?
- 1) Liver disease/jaundice 2) Stomach disease/blood vomiting
3) Heart Problems 4) Feet tingling/feeling numb
5) Memory problems when not drunk (excluding blackouts)
6) Pancreatitis Anemia 7) Loss of Appetite
8) Weight loss 9) Deterioration of general health
10) Any Other- Specify
26. What was your husbands' response on identification of these health problems?
- 1) Did not bother of the health issue and Continued to drink
2) Was worried of the problem, but failed to stop drinking
3) Sought medical help 4) Discontinued drinking
5) Sought treatment for drinking behavior

b) Impact on Psychological well being

27. What have been the impact of your husband's Drinking/being drunk/hangover negatively affected the
- | | | | |
|-------------------------------|---|------------------------------------|--------------------------------|
| a) Work responsibilities | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| b) Household responsibilities | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| c) Marital relationship | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| d) Suspicions towards spouse | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| e) Parenting responsibilities | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| f) Social Responsibilities | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| g) Personal activities | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| h) Family Finance | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| i) Emotional status | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |
| j) Physical Health | Most of the Time <input type="checkbox"/> | Sometimes <input type="checkbox"/> | Never <input type="checkbox"/> |

c) Impact on productivity

28. Number of days absent/missed days of work due to alcohol consumption in last one month
29. Loss of pay because of being absent from job: Yes No
- 29.1 If yes, how much
30. Number of jobs held in last one year
31. Have your husband ever faced any of the following work related problems?
- | | | |
|-------------------------|---------------------------------|--------------------------------|
| a. Loss of job | 1) Yes <input type="checkbox"/> | 2) No <input type="checkbox"/> |
| b. Disciplinary Actions | 1) Yes <input type="checkbox"/> | 2) No <input type="checkbox"/> |
| c. Demotion | 1) Yes <input type="checkbox"/> | 2) No <input type="checkbox"/> |
| d. Accidents at Work | 1) Yes <input type="checkbox"/> | 2) No <input type="checkbox"/> |
| e. Suspensions | 1) Yes <input type="checkbox"/> | 2) No <input type="checkbox"/> |
| f. Decreased Efficiency | 1) Yes <input type="checkbox"/> | 2) No <input type="checkbox"/> |

32. Did your husband engage in the following activities after drinking?
- a) Physical fights 1) Most of the Times 2) Sometimes 3) Never
 - b) Drove vehicle 1) Most of the Times 2) Sometimes 3) Never
 - c) Got arrested and held at a police station 1) Yes 2) No
 - d) Arrested/paid penalty for drunken driving 1) Yes 2) No
 - e) Accidents (Injured self or others) 1) Yes 2) No
 - f) Alcohol along with potentially dangerous medication 1) Yes 2) No

d) Impact on Family

33. Did your husband make any of the following due to his drinking behavior?
- a) Problem with you 1) No issues 2) Alcohol related 3) Independent
 - b) Problem with children 1) No issues 2) Alcohol related 3) Independent
 - c) Problems with parents 1) No issues 2) Alcohol related 3) Independent
 - d) Problems with siblings 1) No issues 2) Alcohol related 3) Independent
 - e) Abusing you 1) No issues 2) Alcohol related 3) Independent
 - f) Abuse of children 1) No issues 2) Alcohol related 3) Independent

34. How do you rate the following in terms of your husband's family relationship

- a) Relationship with family
 Excellent Good Average Fair Poor
- b) Family finance
 Excellent Good Average Fair Poor
- c) Family interaction
 Excellent Good Average Fair Poor
- d) Interaction with spouse
 Excellent Good Average Fair Poor
- e) Interaction with children
 Excellent Good Average Fair Poor
- f) Interaction with siblings
 Excellent Good Average Fair Poor
- g) We feeling in the family
 Excellent Good Average Fair Poor
- h) Leisure activities in the family
 Excellent Good Average Fair Poor
- i) Communication within the family
 Excellent Good Average Fair Poor
- j) Leadership and disciplinary activities
 Excellent Good Average Fair Poor
- k) Problem solving within family'
 Excellent Good Average Fair Poor

- l) Decision making in your family
 Excellent Good Average Fair Poor
- m) Dealing with stress
 Excellent Good Average Fair Poor
- n) Religious practices in the family
 Excellent Good Average Fair Poor
- o) Family time together
 Excellent Good Average Fair Poor
- p) Family celebrations
 Excellent Good Average Fair Poor
- q) Your acceptance in the family
 Excellent Good Average Fair Poor
- r) Respect for your views in the family
 Excellent Good Average Fair Poor
- s) Communication with family members
 Excellent Good Average Fair Poor
- t) Involvement in parenting
 Excellent Good Average Fair Poor
- u) Sexual life
 Excellent Good Average Fair Poor

e) Social impact

35. Have your husband faced any of the following due to his/her drinking behavior?

- a) Objections from family 1)Most of the Times 2)Sometimes 3) Never
- b) Objections from friends 1)Most of the Times 2)Sometimes 3) Never
- c) Objections from employers 1)Most of the Times 2)Sometimes 3)Never
- d) Arguments with others 1)Most of the Times 2)Sometimes 3)Never
- e) Hit family members 1)Most of the Times 2) Sometimes 3)Never

36. How has been your spouse's social life in the following domains?

- a) Participation in social activities
 1) Good/Satisfactory 2) Not Satisfactory (Poor)
- b) Contribution to social activities
 1) Good/Satisfactory 2) Not Satisfactory (Poor)
- c) Interaction with friends
 1) Good/Satisfactory 2) Not Satisfactory (Poor)

- d) Interaction with colleagues/workmates
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- e) Interaction with employers/authorities
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- f) Interaction with religious organizations(Church/temple/mosque etc.)
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- g) Acceptance in social groups/neighbors
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- h) Acceptance from friends
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- i) Acceptance from relatives
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- j) Value for your opinion in social forums
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)

37. Alcohol addiction is a disease

- 1) Strongly Disagree
- 2) Disagree
- 3) Undecided
- 4) Agree
- 5) Strongly Agree

38. It is essential for a person addicted to alcohol to seek treatment to get rid of the problem

- 1) Strongly Disagree
- 2) Disagree
- 3) Undecided
- 4) Agree
- 5) Strongly Agree

39. Treatment is effective for the stopping alcohol use

- 1) Strongly Disagree
- 2) Disagree
- 3) Undecided
- 4) Agree
- 5) Strongly Agree

40. Are you aware of any treatment facility for treatment of alcohol addiction in your area

- 1) Yes
- 2) No

41. If yes specify the name of the organizations and the services available

f) Withdrawal, Treatment and Allied Aspects

42. Did your husband ever tried to stop/cut down your drinking? 1)Yes 2) No

43. Were your husband been able to abstain, or cut down for a month?

- 1) Yes
- 2) No

44. How have been the abstinence made possible?

- 1) Self-Initiated
- 2) Coerced by Others

45. Have your husband been to a de-addiction center for stopping alcohol use?

- 1) Yes 2) No

46. How many times your husband had been to the de-addiction center

47. What has been your husband's longest period of abstinence? ----- months

48. What made your husband to restart drinking after abstinence

- 1) Craving 2) Peer pressure 3) Wanted to use 4) Withdrawal
 5) Negative mood 6) Coping with stress 7) Retaliation
 8) Pain 9) Boredom 10) Positive mood 11) others (Specify)

49. Did your husband experienced the following problems when you tried to cut down or stopped drinking?

- 1) FITS/Convulsions
 2) Delirium tremens (confusion, disorientation, hallucinations etc.)

General Health Questionnaire

Have you recently:	Not at all	No more than usual	Rather more than usual	Much more than usual
50. Been able to concentrate on what you're doing?				
51. Lost much sleep over worry?				
52. Felt that you are playing a useful part in things?				
53. Felt capable of making decisions about things?				
54. Felt constantly under strain?				
55. Felt you couldn't overcome your difficulties?				
56. Been able to enjoy your normal day to day activities?				
57. Been able to face up to your problems?				
58. Been feeling unhappy or depressed?				
59. Been losing confidence in yourself?				
60. Been thinking of yourself as a worthless person?				
61. Been feeling reasonably happy, all things considered?				

62. What are your suggestions for preventing initiation of alcohol use?

63. What are your suggestions to help persons from addiction after initiation of alcohol use?

64. What are your suggestions for helping addicted persons to quit alcohol use?

A Study on Impact of Alcoholism in Kerala

Interview Schedule for Adolescents

- | | | |
|---------------------------------------|---------------------------------------|--|
| 1. Wayanad, <input type="checkbox"/> | 4. Thrissur <input type="checkbox"/> | 7. Alappuzha <input type="checkbox"/> |
| 2. Kozhikode <input type="checkbox"/> | 5. Ernakulam <input type="checkbox"/> | 8. Kollam <input type="checkbox"/> |
| 3. Kannur <input type="checkbox"/> | 6. Idukki <input type="checkbox"/> | 9. Trivandrum <input type="checkbox"/> |

Name of the Investigator:

Category of the respondent: 1) Male 2) Female

Date of interview:

I. Socio Economic Profile

1. Name and Address of the Respondent:

Mobile:

2. Age :
3. Education (Mention Class):
4. Education of Father :
- | | |
|---|--|
| 1) Cannot Read and Write <input type="checkbox"/> | 2) Literate (No formal education) <input type="checkbox"/> |
| 3) Primary (1-5 years) <input type="checkbox"/> | 4) Secondary 6-10 years) <input type="checkbox"/> |
| 5) Higher Secondary (+2) <input type="checkbox"/> | 6) Graduate <input type="checkbox"/> |
| 7) Post-graduate <input type="checkbox"/> | 8) Professional <input type="checkbox"/> |
5. Education of Mother :
- | | |
|---|--|
| 1) Cannot Read and Write <input type="checkbox"/> | 2) Literate (No formal education) <input type="checkbox"/> |
| 3) Primary (1-5 years) <input type="checkbox"/> | 4) Secondary 6-10 years) <input type="checkbox"/> |
| 5) Higher Secondary (+2) <input type="checkbox"/> | 6) Graduate <input type="checkbox"/> |
| 7) Post-graduate <input type="checkbox"/> | 8) Professional <input type="checkbox"/> |
6. Locality : 1)Urban 2)Rural
7. Religion : 1)Hindu 2) Christian 3)Muslim
8. Income of the family (Monthly) :
9. Where do you get money to buy liquor :
10. Average income per day :
11. Type of family : 1)Nuclear 2)Extended 3) Joint

II. Alcohol Use History

a. First Use

12. With whom did you have the first alcohol use?
- | | | |
|----------------------------------|--|--|
| 1) Self <input type="checkbox"/> | 2) With Peers <input type="checkbox"/> | 3) Relatives <input type="checkbox"/> (Specify.....) |
| 4) Others (Specify.....) | | |
13. Age at first drink

14. What was the Reason for your first alcohol use.....?
- 1) Experimentation
 - 2) Peer Modeling
 - 3) Modeling of significant adults
 - 4) To maintain social status
 - 5) to relieve negative mood states
 - 6) To enhance positive mood states
 - 7) to relieve physical problems
 - 8) To cope with stress
 - 9) others (Specify.....)

b. Regular Drinking

15. Age at onset of regular drinking –
16. Why do you drink regularly?
- 1) Craving
 - 2) Peer pressure
 - 3) Wanted to use
 - 4) Withdrawal
 - 5) Negative mood
 - 6) Coping with stress
 - 7) Retaliation
 - 8) Pain
 - 9) Boredom
 - 9) Positive mood
17. Generally, with whom do you drink with?
- 1) Solitary/Alone
 - 2) With Others
18. If with others, Specify
- 1) Friends
 - 2) Acquaintances
 - 3) Relatives
 - 4) Stranger

III. Extent, trends and patterns of Alcohol Consumption

19. Frequency of Drinking
- 1) Less than once a month
 - 2) Once a month
 - 3) 2-3 days/month
 - 4) 1-2 days /week
 - 5) 3-4 days/week
 - 6) Nearly every day
 - 7) Every day
 - 8) more than once a day
 - 9) More than twice a day
20. What is the usual time of your first drink in a day?
- 1) Early Morning
 - 2) Forenoon
 - 3) Afternoon
 - 4) Evening
21. What is the usual place of drink?
- 1) Home
 - 2) Friend's House
 - 3) Public Places
 - 4) Hotel
 - 5) Bar
 - 6) Car
 - 7) Club
 - 8) Any Other Place (Specify.....)
22. Pattern of use
- 1) Similar quantity every day
 - 2) Varied quantities on different days
 - 3) Continuously for 2-3 days from morning to evening after a gap of several days/months (Binge drinking)
23. Use of Other substances
- 1) Smoking Tobacco
 2. Oral Tobacco
 3. Ganja/Charas
 - 4). Morphine/heroin/pethidine (IDU)
 - 5) Pan Parag
 - 6) Sniffing (Correction Fluid/whitener/kerosene)
 - 7) others Specify.....
24. Estimated daily use of alcoholml
25. Type of Alcohol used
- 1) Arrack
 - 2) Brandy
 - 3) Whisky
 - 4) Rum
 - 5) Vodka
 - 6) Gin
 - 7) Beer
 - 8) Toddy
 - 9) Illicit Liquor
 - 10) Others Specify.....

25.1 From where do you buy the Liquor

- 1) Beverages Shop 2) Toddy Shop 3) Bar 4) Individuals
5) Others Specify -----

26. Average amount spent for alcohol every day-----

27. What do you usually mix with alcohol before drinking

- 1) Nothing (dry) 2) Water 3) Soda 4) carbonated drinks
(Coke/Pepsi/Sprite etc) 5) Beer 6) Others Specify.....

IV. Impact of Alcohol Consumption

a) Impact on Physical Health

28. Have you been affected with the following health concerns?

- 1) Liver disease/jaundice 2) Stomach disease/blood vomiting
3) Heart Problems 4) Feet tingling/feeling numb
5) Memory problems when not drunk (excluding blackouts)
6) Pancreatitis Anemia 7) Loss of Appetite 8) Weight loss
9) Deterioration of general health 10) any other Specify

29. What was your response on identification of these health problems?

- 1) Did not bother of the health issue and Continued to drink
2) Was worried of the problem, but failed to stop drinking
3) Sought medical help 4) Discontinued drinking
5) Sought treatment for drinking behavior

b) Impact on Psychological well being

30. What have been the impact of your Drinking/being drunk/hangover negatively affected the

- a) School responsibilities 1) Most of the Time 2) Sometimes 3) Never
b) Attendance in School 1) Most of the Time 2) Sometimes 3) Never
c) Very Low marks/failure in exams
1) Most of the Time 2) Sometimes 3) Never
d) Bunking of classes 1) Most of the Time 2) Sometimes 3) Never
e) Household responsibilities
1) Most of the Time 2) Sometimes 3) Never
f) Personal activities 1) Most of the Time 2) Sometimes 3) Never
g) Emotional status 1) Most of the Time 2) Sometimes 3) Never
h) Physical Health 1) Most of the Time 2) Sometimes 3) Never

31. Indicate to what extent you have felt this way in the past few weeks:

(0 = not at all; 5 = moderately; 10 = extremely)

- 1) Afraid 2) Angry 3) Guilty 4) Sad
5) Happy 6) Excited 7) Confident 8) Interested

c) Impact on productivity

32. Number of days absent/missed days of school due to alcohol consumption in last one month

33. Have you ever faced any of the following school related problems?

- a. Dismissal from school 1) Yes 2) No

- b. Suspensions 1)Yes 2)No
- c. Decreased Efficiency 1)Yes 2)No

34. Did you engage in the following activities after drinking?

- a) Physical fights 1) Most of the Times 2) Sometimes 3) Never
- b) Drove vehicle 1) Most of the Times 2) Sometimes 3) Never
- c) Got arrested and held at a police station 1)Yes 2)No
- d) Arrested/paid penalty for drunken driving 1)Yes 2)No
- e) Accidents (Injured self or others) 1)Yes 2)No

d) Impact on Family

35. Have you faced any of the following due to your drinking behavior?

- a) Problems with parents 1) No issues 2) Alcohol related 3) Independent
- b) Problems with siblings 1) No issues 2) Alcohol related 3) Independent
- c) Problems with teachers 1) No issues 2) Alcohol related 3) Independent
- d) Abuse of teachers 1) No issues 2) Alcohol related 3) Independent
- e) Abuse of parents 1) No issues 2) Alcohol related 3) Independent

36. How do you rate the following in terms of your family relationship

- a) Relationship with family
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- b) Interaction with siblings
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- c) We feeling in the family
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- d) Leisure activities in the family
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- e) Communication within the family
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- f) Dealing with stress
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- g) Religious practices in the family
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- h) Your acceptance in the family
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- i) Respect for your views in the family
1) Excellent 2) Good 3) Average 4) Fair 5) Poor
- j) Communication with family members
1) Excellent 2) Good 3) Average 4) Fair 5) Poor

e) Social impact

37. Have you faced any of the following due to your drinking behavior?

- a) Objections from family 1)Most of the Times 2) Sometimes 3) Never
- b) Objections from friends 1)Most of the Times 2) Sometimes 3) Never

- c) Objections from teachers 1) Most of the Times 2) Sometimes 3) Never
- d) Arguments with others 1) Most of the Times 2) Sometimes 3) Never
- e) Hit friends 1) Most of the Times 2) Sometimes 3) Never

38. How have been your social life in the following domains?

- a) Interaction with friends
 - 1) Good/Satisfactory 2) Not Satisfactory (Poor)
- b) Interaction with teachers
 - 1) Good/Satisfactory 2) Not Satisfactory (Poor)
- c) Interaction with religious organizations (Church/temple/mosque etc.)
 - 1) Good/Satisfactory 2) Not Satisfactory (Poor)
- d) Acceptance from friends
 - 1) Good/Satisfactory 2) Not Satisfactory (Poor)
- e) Acceptance from relatives
 - 1) Good/Satisfactory 2) Not Satisfactory (Poor)

39. Alcohol addiction is a disease

- 1) Strongly Disagree 2) Disagree 3) Undecided
- 4) Agree 5) Strongly Agree

40. It is essential for a person addicted to alcohol to seek treatment to get rid of the problem

- 1) Strongly Disagree 2) Disagree 3) Undecided
- 4) Agree 5) Strongly Agree

41. Treatment is effective for the stopping alcohol use

- 1) Strongly Disagree 2) Disagree 3) Undecided
- 4) Agree 5) Strongly Agree

42. Are you aware of any treatment facility for treatment of alcohol addiction in your area

- 1) Yes 2) No

43. If yes specify the name of the organizations and the services available

f) Withdrawal, Treatment and Allied Aspects

44. Have you ever tried to stop/cut down your drinking? 1) Yes 2) No

45. Were you been able to abstain, or cut down for a month? 1) Yes 2) No

46. How have been the abstinence made possible?

- 1) Self Initiated 2) Coerced by Others

47. Have you been to a de-addiction center for stopping alcohol use? 1) Yes 2) No

48. How many times you had been to the de-addiction center

49. Did anyone compel you to stop consuming alcohol 1) Yes 2) No

50. If yes, specify _____

51. What has been your longest period of abstinence? ----- months

52. What made you to restart drinking after abstinence

- 1) Craving 2) Peer pressure 3) Wanted to use 4) Withdrawal
- 5) Negative mood 6) Coping with stress 7) Retaliation
- 8) Pain 9) Boredom 10) Positive mood 11) others (Specify)

53. Did you experience the following problems when you tried to cut down or stopped drinking?

- 1) Hands trembling 2) Unable to sleep 3) Feel anxious
 4) Feel depressed 5) Felt irritable 6) Increased heart beat
 7) Sweating 8) Nausea/vomiting 9) Felt physically weak
 10) Headaches 11) Fidgety/restless
 99) Not applicable (Never tried to cut down)

54. Did you experience the following problems when you tried to cut down or stopped drinking?

- 1) FITS/Convulsions
 2) Delirium tremens (confusion, disorientation, hallucinations etc.)

General Health Questionnaire

Have you recently:	Not at all	No more than usual	Rather more than usual	Much more than usual
55. Been able to concentrate on what you're doing?				
56. Lost much sleep over worry?				
57. Felt that you are playing a useful part in things?				
58. Felt capable of making decisions about things?				
59. Felt constantly under strain?				
60. Felt you couldn't overcome your difficulties?				
61. Been able to enjoy your normal day to day activities?				
62. Been able to face up to your problems?				
63. Been feeling unhappy or depressed?				
64. Been losing confidence in yourself?				
65. Been thinking of yourself as a worthless person?				
66. Been feeling reasonably happy, all things considered?				

67. What are your suggestions for preventing initiation of alcohol use?

68. What are your suggestions to help persons from addiction after initiation of alcohol use?

69. What are your suggestions for helping addicted persons to quit alcohol use?

A Study on Impact of Alcoholism in Kerala

Case Study Format

- | | | |
|---------------------------------------|---------------------------------------|--|
| 1. Wayanad, <input type="checkbox"/> | 4. Thrissur <input type="checkbox"/> | 7. Alappuzha <input type="checkbox"/> |
| 2. Kozhikode <input type="checkbox"/> | 5. Ernakulam <input type="checkbox"/> | 8. Kollam <input type="checkbox"/> |
| 3. Kannur <input type="checkbox"/> | 6. Idukki <input type="checkbox"/> | 9. Trivandrum <input type="checkbox"/> |

1. Alcoholic history

- a. age of starting the habit
- b. Stage wise progress in addiction/ alcohol consumption
- c. Precipitating factors if any- social, cultural, economic and emotional
- d. Context- In which they have started if any
- e. Family history of alcoholism
- f. Family environment in which they were grown up
- g. Risk factors of alcoholism from personal history

2. Life situation-

- a. Nature of work
- b. Job satisfaction and boredom
- c. Current job engagement pattern- involvement, valour, absenteeism
etc

d. Economic stress factors operating in the family

e. Emotional stress of the person

3. Personal attributes-

a. type of attachment – secure, insecure and superficial

b. Overall stressors in the person- conflicts, patterns of coping

c. Defenses usually used

4. Drinking habit and patterns

a. Quality of alcohol consumed

b. Alcohol drinking pattern- time of the day, frequency, quantity in each intake and total quantity per day

c. Cognitive distortions and its expressions if any due to alcohol consumption

d. Emotional fluctuations and its expressions if any due to alcohol consumption

e. Behavioral changes and its manifestations including abuse and violence if any due to alcohol consumption

5. Alcohol related problems

- a. Physical Health issues related- hospitalization, money spent, leave taken, disabilities if any

- b. Mental health issues- hospitalization, money spent, disabilities if any

- c. Legal- any legal issues

- d. Relationships – interpersonal- friends, colleagues, neighbors etc

6. Family

- a. Role functioning

- b. Family communications and conflicts

- c. Parenting and child rearing

- d. Relationships with immediate relatives

7. Economic impact-

- a. Debt due to alcoholism

- b. Productivity patterns

- c. Economic stability of the family- assets etc

8. Social Supports and services available

a. Accessed/ not accessed

b. Coping mechanisms of the family

9. Suggestions for

a. Primary prevention

b. Secondary and tertiary

10. Over all personal experience/ impressions of the interviewer

A Study on Impact of Alcoholism in Kerala

Anecdote Guidelines

- | | | |
|---------------------------------------|---------------------------------------|--|
| 1. Wayanad, <input type="checkbox"/> | 4. Thrissur <input type="checkbox"/> | 7. Alappuzha <input type="checkbox"/> |
| 2. Kozhikode <input type="checkbox"/> | 5. Ernakulam <input type="checkbox"/> | 8. Kollam <input type="checkbox"/> |
| 3. Kannur <input type="checkbox"/> | 6. Idukki <input type="checkbox"/> | 9. Trivandrum <input type="checkbox"/> |

1. Why consumption of Alcohol is low in this panchayath?
(Social movements, religious factors, no. of outlets, employment, education, affluence of people etc.)

2. Why consumption of Alcohol is high in this panchayath?
(No. of outlets, religious factors, employment, affluence of people, etc.)

A Study on Impact of Alcoholism in Kerala
Interview Schedule for Key Informants

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|---------------------------------------|---------------------------------------|--|
| 1. Wayanad, <input type="checkbox"/> | 4. Thrissur <input type="checkbox"/> | 7. Alappuzha <input type="checkbox"/> |
| 2. Kozhikode <input type="checkbox"/> | 5. Ernakulam <input type="checkbox"/> | 8. Kollam <input type="checkbox"/> |
| 3. Kannur <input type="checkbox"/> | 6. Idukki <input type="checkbox"/> | 9. Trivandrum <input type="checkbox"/> |

Name of the Investigator:

Date of interview:

1. Name and Address of the Respondent:

Mobile:

2. Age :
3. Gender : 1)Male 2)Female
4. Designation :
5. Years of Experience:
6. According to you how severe is the alcohol use in your region?
1) Low 2) Medium 3) High
7. What are the major factors contributing to increased alcohol use among
A) Adults?
- B) Adolescents?
8. What are the commonly used alcoholic products in your region?
1) Arrack 2) Brandy 3) Whisky 4) Rum 5) Vodka 6) Gin
7) Toddy 8) Beer 9) Illicit Liquor 10) Others Specify-----
9. Where do they consume alcohol
1) Home 2) Friend's House 3) Public 4) Places 5) Hotel
6) Bar 7) Car 8) Club
9) Any Other Place (Specify.....)
10. What are the other commonly used substances?

- 1) Smoking Tobacco 2) Oral Tobacco 3) Ganja/Charas
 4) Morphine/heroin/pethidine IDU) 5) Pan Parag
 6) Sniffing (Correction Fluid/whitener/kerosene) 7) others

11. What are the common physical complications associated with drinking?
 1) Liver disease/jaundice 2) Stomach disease/blood vomiting
 3) Heart Problems 4) Feet tingling/feeling numb
 5) Memory problems when not drunk (excluding blackouts)
 6) Pancreatitis Anemia 6) Loss of Appetite 7) Weight loss
 8) Deterioration of general health 9) Any Other- Specify

Impact on Psychological well being

12. What have been the negative impact of Drinking/being drunk/hangover on the following
- a) Work responsibilities 1)Most of the Time 2)Sometimes 3)Never
 - b) Household responsibilities 1)Most of the Time 2)Sometimes 3)Never
 - c) Marital relationship 1)Most of the Time 2)Sometimes 3)Never
 - d) Suspicions towards spouse 1)Most of the Time 2)Sometimes 3)Never
 - e) Parenting responsibilities 1)Most of the Time 2)Sometimes 3)Never
 - f) Social Responsibilities 1)Most of the Time 2)Sometimes 3)Never
 - g) Personal activities 1)Most of the Time 2)Sometimes 3)Never
 - h) Family Finance 1)Most of the Time 2)Sometimes 3)Never
 - i) Emotional status 1)Most of the Time 2)Sometimes 3)Never
 - j) Physical Health 1)Most of the Time 2)Sometimes 3)Never

Impact on productivity

13. How is alcohol affecting the work and productivity of work force?

14. What are the legal complications due to alcohol use?

15. How is alcohol affecting the family functioning

- a. Family Finance/Economic problems
- b. Marital Relationship
- c. Parenting

16. How is the social life affected?

17. What are the treatment facilities available for alcohol addiction in your regions?

18. What are your suggestions for preventing initiation of alcohol use?

19. What are your suggestions to help persons from addiction after initiation of alcohol use?

20. What are your suggestions for helping addicted persons to quit alcohol use?

A Study on Impact of Alcoholism in Kerala

Interview Schedule for Adults (Non- Drinker)

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|---------------------------------------|---------------------------------------|--|
| 1. Wayanad, <input type="checkbox"/> | 4. Thrissur <input type="checkbox"/> | 7. Alappuzha <input type="checkbox"/> |
| 2. Kozhikode <input type="checkbox"/> | 5. Ernakulam <input type="checkbox"/> | 8. Kollam <input type="checkbox"/> |
| 3. Kannur <input type="checkbox"/> | 6. Idukki <input type="checkbox"/> | 9. Trivandrum <input type="checkbox"/> |

Name of the Investigator:

Category of the respondent: 1) Male 2) Female

Date of interview:

I. Socio Economic & Employment Status Profile

1. Name and Address of the Respondent:

Mobile:

2. Age :
3. Marital status: 1) Single 2) Married 3) Separated
4) Divorced 5) Widowed/Cohabiting
4. Education:
- 1) Cannot Read and Write 2) Literate (No formal education)
3) Primary (1-5 years) 4) Secondary 6-10 years)
5) Higher Secondary (+2) 6) Graduate
7) Post-graduate 8) Professional
5. Education of the Spouse :
- 1) Cannot Read and Write 2) Literate (No formal education)
3) Primary (1-5 years) 4) Secondary 6-10 years)
5) Higher Secondary (+2) 6) Graduate
7) Post-graduate 8) Professional 9) Not Applicable
6. Education of Father :
- 1) Cannot Read and Write 2) Literate (No formal education)
3) Primary (1-5 years) 4) Secondary 6-10 years)
5) Higher Secondary (+2) 6) Graduate
7) Post-graduate 8) Professional
7. Education of Mother :
- 1) Cannot Read and Write 2) Literate (No formal education)
3) Primary (1-5 years) 4) Secondary 6-10 years)
5) Higher Secondary (+2) 6) Graduate
7) Post-graduate 8) Professional
8. Locality: 1) Urban 2) Rural
9. Religion: 1) Hindu 2) Christian 3) Muslim

10. Income of the family (Monthly) :
11. Sources of Income:
12. Average income per day :
13. Type of family: 1)Nuclear 2)Extended 3)Joint
14. Current Occupational Status
 1. Unemployed 2. Employed Specify.....
15. How long you are working in the present job.....years.....months
16. Use of substances other than alcohol?
 1) Smoking Tobacco 2) Oral Tobacco 3) Ganja/Charas
 4) Morphine/heroin/pethidine (IDU) 5) Pan Parag
 6) Sniffing (Correction Fluid/whitener/kerosene) 7) Others Specify

II. Problems Faced in Relation to;

a) Physical Health

17. Have you been affected with the following health concerns?
 1) Liver disease/jaundice 2) Stomach disease/blood vomiting
 3) Heart Problems 4) Feet tingling/feeling numb
 5) Memory problems (excluding blackouts)
 6)Pancreatitis Anemia 7) Loss of Appetite 8) Weight loss
 9) Deterioration of general health 10) any other- Specify

b) Psychological well being

18. Have you been negatively affected with the following
 a) Work responsibilities 1)Most of the Time 2)Sometimes 3)Never
 b) Household responsibilities 1)Most of the Time2)Sometimes 3)Never
 c) Marital relationship 1)Most of the Time 2)Sometimes 3)Never
 d) Suspicions towards spouse1)Most of the Time2)Sometimes 3)Never
 e) Parenting responsibilities1)Most of the Time 2)Sometimes 3)Never
 f) Social Responsibilities 1)Most of the Time 2)Sometimes 3)Never
 g) Personal activities 1)Most of the Time 2)Sometimes 3)Never
 h) Family Finance 1)Most of the Time 2)Sometimes 3)Never
 i) Emotional status 1)Most of the Time 2)Sometimes 3)Never
 j) Physical Health 1)Most of the Time 2)Sometimes 3)Never

19. Indicate to what extent you have felt this way in the past few weeks:

(0 = not at all; 5 = *moderately*; 10 = *extremely*)

- 1) Afraid 2) Angry 3) Guilty 4) Sad
 5) Excited

c) Productivity

20. Number of days absent/missed in the last one month
21. Number of jobs held in the last one year
22. Have you ever faced any of the following work related problems?
 a. Loss of Pay 1)Yes 2)No
 b. Loss of job 1)Yes 2)No

- c. Disciplinary Actions 1)Yes 2)No
- d. Demotion 1)Yes 2)No
- e. Accidents at Work 1)Yes 2)No
- f. Suspensions 1)Yes 2)No
- g. Decreased Efficiency 1)Yes 2)No

23. Did you engage in the following activities?

- a) Physical fights 1) Most of the Times 2) Sometimes 3) Never
- b) Do you drive vehicles 1) Most of the Times 2) Sometimes 3) Never
- c) Got arrested and held at police station (related to driving) 1)Yes 2) No
- d) Arrested / paid penalty(related to driving) 1)Yes 2) No
- e) Accidents while driving (Injured self or others) 1)Yes 2) No
- f) Use of potentially dangerous medication 1)Yes 2) No

d) Family

24. Have you faced any of the following?

- a) Problem with spouse 1) No 2) Some times
- b) Problem with children 1) No 2) Some times
- c) Problems with parents 1) No 2) Some times
- d) Problems with siblings 1) No 2) Some times
- e) Abuse of spouse 1) No 2) Some times
- f) Abuse of children 1) No 2) Some times

25. How do you rate the following in terms of your family relationship

- a) Relationship with family
Excellent Good Average Fair Poor
- b) Family finance
Excellent Good Average Fair Poor
- c) Family interaction
Excellent Good Average Fair Poor
- d) Interaction with spouse
Excellent Good Average Fair Poor
- e) Interaction with children
Excellent Good Average Fair Poor
- f) Interaction with siblings
Excellent Good Average Fair Poor
- g) We feeling in the family
Excellent Good Average Fair Poor
- h) Leisure activities in the family
Excellent Good Average Fair Poor

- i) Communication within the family
 Excellent Good Average Fair Poor
- j) Leadership and disciplinary activities
 Excellent Good Average Fair Poor
- k) Problem solving within family'
 Excellent Good Average Fair Poor
- l) Decision making in your family
 Excellent Good Average Fair Poor
- m) Dealing with stress
 Excellent Good Average Fair Poor
- n) Religious practices in the family
 Excellent Good Average Fair Poor
- o) Family time together
 Excellent Good Average Fair Poor
- p) Family celebrations
 Excellent Good Average Fair Poor
- q) Your acceptance in the family
 Excellent Good Average Fair Poor
- r) Respect for your views in the family
 Excellent Good Average Fair Poor
- s) Communication with family members
 Excellent Good Average Fair Poor
- t) Involvement in parenting
 Excellent Good Average Fair Poor
- u) Sexual life
 Excellent Good Average Fair Poor

e) Society

26. Have you faced any of the following?

- a) Objections from family 1)Most of the Times 2)Sometimes 3) Never
- b) Objections from friends 1)Most of the Times 2)Sometimes 3) Never
- c) Objections from employers1)Most of the Times 2)Sometimes 3) Never
- d) Arguments with others 1)Most of the Times 2) Sometimes 3) Never
- e) Hit family members 1)Most of the Times 2) Sometimes 3)Never

27. How has been your social life in the following domains?

- a) Participation in social activities
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- b) Contribution to social activities
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- c) Interaction with friends
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- d) Interaction with colleagues/workmates
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- e) Interaction with employers/authorities
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- f) Interaction with religious organizations (Church/temple/mosque etc.)
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- g) Acceptance in social groups/neighbors
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- h) Acceptance from friends
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- i) Acceptance from relatives
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)
- j) Value for your opinion in social forums
 - 1) Good/Satisfactory
 - 2) Not Satisfactory(Poor)

General Health Questionnaire (GHQ)

Have you recently:	Not at all	No more than usual	Rather more than usual	Much more than usual
28. Been able to concentrate on what you're doing?				
29. Lost much sleep over worry?				
30. Felt that you are playing a useful part in things?				
31. Felt capable of making decisions about things?				
32. Felt constantly under strain?				
33. Felt you couldn't overcome your difficulties?				
34. Been able to enjoy your normal day to day activities?				
35. Been able to face up to your problems?				
36. Been feeling unhappy or depressed?				
37. Been losing confidence in yourself?				
38. Been thinking of yourself as a worthless person?				
39. Been feeling reasonably happy, all things considered?				

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ABBREVIATIONS

AA	-	Alcoholics Anonymous
AW	-	Alcohol Withdrawal
BAC	-	Blood Alcohol Concentration
BCC	-	Behaviour Change Communication
BEVCO/Bevco	-	Beverages Corporation
BPL	-	Below Poverty Line
CDS	-	Community Development Society
Dept.	-	Department
GP	-	Grama Panchayath
GHQ	-	General Health Questionnaire
HM	-	Headmaster / Headmistress
ICDS	-	Integrated Child Development Services
IMFL/IMF Liquor	-	Indian Manufactured Foreign Liquor
IEC materials	-	Information Education and Communication materials
KSBC	-	Kerala State Beverages Corporation
KSRTC	-	Kerala State Road Transport Corporation
LSG	-	Local Self Government
MNREGS/NREG-	-	Mahatma Gandhi National Rural Employment Guarantee - Scheme
MHP	-	Mental Health Problem
NGO	-	Non Government Organization
OBC	-	Other Backward Class
PDS	-	Public Distribution System
PHC	-	Primary Health Centre
PTA	-	Parent Teacher Association
SC	-	Scheduled Caste
SPSS	-	Statistical Package for the Social Sciences
WHO	-	World Health Organization
