INTRODUCTION

Alcoholism is a social evil, and alcohol related morbidities and incidents even though significantly alarming are almost neglected by primary care physicians and policy makers. According to world health organization (WHO) - global burden of disease update, around 125 million people were affected worldwide by alcohol use disorders, 40.5 million peoples were moderately and severely disabled due to alcohol dependence and problem use and 19.9 million years lost due to disability due to alcohol use disorders. The 2015 WHO fact sheet shows that 3.3 million deaths i.e. 5.9% of all deaths were due to harmful use of alcohol. Alcohol consumption is the world’s third largest risk factor for disease and disability; in middle- income countries, it is the greatest risk. Alcohol is attributed to nearly 3.2% of all deaths and results in a loss of 4% of total DALYs. The aim & objective is to study the adverse consequences faced by the alcoholics; To compare the adverse consequences between the alcoholics and non-alcoholics. Materials and Methods: This study was conducted in the Milaganoor village in south Tamilnadu with alcohol habit; all male with alcohol consuming habit above 13 years of age were included in the study and none were excluded from the study. The data was using a semi structured questionnaire. The data collected were consolidated and analyzed using SPSS software; Descriptive and Analytical statistics were used in the study. Result: In my study 37.7% of the alcoholics had health issues; 44.4% of the alcoholics had debts; 50% of the alcoholics were alcoholic dependent; while seeing the history of hospital admission 27.7% of the alcoholics were admitted in hospital at least once; 33.3% of the alcoholics had psychiatric problems. When comparing the adverse consequences between alcoholics and non-alcoholics in which health issues among alcoholics accounted for 37.7% and among non-alcoholic it was only 16.6% and is statistically significant p value <0.05; on seeing the debts between two groups it was also statistically significant i.e. p value <0.05 ; dependency is found only with the alcoholics amounting for 50% of the alcoholics and it was found that none of the non-alcoholics had the dependency problems due to any other reasons also which is statistically significant p value of 0.001; Psychiatric problems were more among the alcoholics accounting for 33.3% whereas only 3.3% of the non-alcoholics had psychiatry problems; Domestic violence was seen in 38.8% of the families of alcoholics and only 5% of the non-alcoholics' family has experienced domestic violence which is statistical significant p value <0.05. Conclusion: It can be concluded that alcoholics face serious adverse consequences in various forms because of alcohol habit than the non-alcoholics without alcohol habit. Health education is the most required intervention to reduce the burden of alcohol use.
with 17.4% of them being dependent users and 20-
30% of hospital admissions are due to alcohol-
related problems.[3] Although there are many studies
on alcohol use in India very few community-
based studies have been conducted on the pattern of
alcohol consumption and the factors influencing the
habit of alcohol intake among the rural community
of south India especially in rural part of Tamilnadu.
This type of study will be useful for understanding
the problem of alcohol use and also help in taking
specific interventional measures at the community
level. So I conducted a cross sectional study to study
the pattern of alcohol use and to assess the factors
influencing it rural Tamilnadu, southern India.

MATERIALS AND METHODS

Study Area and Design
This cross-sectional study was conducted in the
Milaganoor panchayat of Manamadurai taluk which
is located in the Sivagangai district of Tamilnadu
catering 2700 population from 5 villages of
Corresponding to this panchayat.

Sampling Unit
The primary sampling unit was an individual
household.

Sample Size Estimation
Minimum sample size required was 1000 subjects,
based on 10% prevalence rate4, a precision of 20% and
a non response rate of 10%. We decided to
include residents who were aged 13 years and
above, from the selected area, as study subjects.

Inclusion Criteria
All male with alcohol consuming habit above 13
years of age were included in the study and
Study subjects were divided into two groups

Group 1: alcoholic males
Group 2: alcoholic females

Exclusion Criteria
None were excluded from the study as all gave their
willingness to participate in the study.

Study Tool
After obtaining their informed consent, the
respondents were interviewed using a semi
structured questionnaire. Data on socio-
demographic details and presence of any morbid
conditions were collected. Data on consumption of
alcohol use and other forms of substance abuse was
also collected. Socio-economic status was assessed,
based on the regular scale. A History of alcohol
intake, smoking or chewing tobacco was recorded.
All the details pertaining to the source of alcohol,
quantity of alcohol intake per day, type of alcohol
taken by them, foods taken immediately after
consuming alcohol, and habits pertaining to
substance abuse, type of alcohol and the amount
spent for the purchase of alcohol per day were
recorded. This questionnaire was translated to the
local language (Tamil) and it was translated back
into English to ensure its reliability and validity. A
pilot study was conducted before initiation of the
study, to look for the feasibility of administration of
questionnaire.

Ethical Committee Approval
This study was conducted after getting proper
approval from the Institutional Ethics Committee
IEC No: VMCIEC/112/2022 on 02.12.2022. A
written informed consent was obtained from all
participants before collecting data. For this purpose,
a participant information sheet (in Tamil) indicating
the purpose of the study, procedure of maintaining
confidentiality, and right not to participate in the
study was provided to the participants. Health
education regarding the ill effects of alcohol
consumption was given to all alcohol consumers
who had participated in the study.

Method of Data Collection
Prior permission was obtained from the village
president and local leaders for conduction the study.
A village leaders meeting was conducted, during
which the purpose of the study methods which had
to be adopted and the possible implications of the
results were discussed. Following the village leaders
meeting, village mapping and social mapping of the
area was done, in order to know the study area and
to plan for data collection. Data was collected by
making house to house visits and interviewing the
subjects by using the questionnaire. Informed
consent was obtained from the study subjects. If the
designated house was locked during the visit, the
house was noted and revisit was conducted on the
left out houses on another day. The study was done
as a part of a people welfare project for the
community health workers of the particular village
who were given training on administration of
questionnaire and data collection process, under the
supervision of the investigators.

Data Analysis
Data was entered and analysis by using SPSS
version 16.0 for windows. The findings were
expressed in terms of proportions and other
descriptive statistics.

RESULTS

In my study while going for house-to-house visit in
the study village there were 1200 male and 1500
female. In which alcohol consuming habit was seen
in 900 males only. Remaining 300 male didn’t have
the habit of consuming alcohol. No female in the
village had the habit of consuming alcohol. While
seeing the age of the alcoholics 3.33% of the
alcoholics were <15 years of age. 25.56% of the
alcoholics were in the age group of 15 to 30 years.
46.67% of the males were in the age group of 31-45
years. 46 to 60 years of age group constituted for
15.56%. Remaining 6.11% and 2.78% were in the
age group of 61-75 and >75 years of age
respectively. While seeing the education of the
alcoholics 62.2% of the male alcoholics were
illiterate; 25.6% of the alcoholic were with primary
level of education; 8.9% of the alcoholics were with
secondary level of education; only 2.2% of the alcoholics were with higher secondary level of education; remaining 1.1% of the alcoholic were graduates.

[Table 1] shows the socio demographic profile of the alcoholics in which 50.0% of the alcoholics were unskilled workers and 36.1% of the alcoholics were semiskilled workers. 11.1% of the alcoholics were unemployed. 1.7% of the alcoholics were doing some form of clerical work and 1.1% of the alcoholics were semi-professional. Socioeconomic status of the alcoholic was categorized into five categories in which 80% of the alcoholic were in the lower-class category; 13.3% of the alcoholics belong to lower middle class; 5.6% belongs to middle class and 1.1% belongs to upper middle class and none belonged to upper class. While seeing the marital status of the study subjects 78.2% of the alcoholics were married; 20.1% of the alcoholics were unmarried and 1.7% of the alcoholics were divorced. All the study populations were Hindu. While observing the family type of the alcoholics 98.9% of the alcoholic were living as nuclear family and only 1.1% of the alcoholics belong to joint type of family. Among the alcoholics 98.9% were living in own house and 1.1% of the alcoholics were living in the rented house.

[Table 2] shows the age distribution of the subjects without drinking habit 16.6% of them were less than 15 years of age; 20% of the subjects were between the age group of 15 to 30 years; 26.6% of the subjects were in the age group of 31 to 45 years; subjects belonging to the age group of 45 to 60 accounts for 13.3%; 5% of the study subjects were in the age group of 61 to 75 years of age; 18.3% of the subjects were more than 75 years of age. When seeing the educational status of the non-alcoholics 33.3% of the subjects had secondary level of education followed by 26.6% had primary level of education; Only 8.3% were with postgraduate level of education and 15% of the study subjects were illiterate; while observing the socio economic status of the subjects most of them were unskilled workers comprising of 32.3%; 20% of the subjects were unemployed and 26.6% belonged to skilled and semiskilled workers category. In the same group only 1% were professionals and 13.3% were semipros.

**Table 1: Socio-Demographic Profile of Alcoholics**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total male</td>
<td>1200</td>
<td>44.4%</td>
</tr>
<tr>
<td>Total female</td>
<td>1500</td>
<td>55.5%</td>
</tr>
<tr>
<td>Total</td>
<td>2700</td>
<td>100%</td>
</tr>
<tr>
<td>Alcohol drinking habit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>900</td>
<td>75%</td>
</tr>
<tr>
<td>No</td>
<td>300</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>1200</td>
<td>100%</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>no</td>
<td>1500</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>1500</td>
<td>100%</td>
</tr>
<tr>
<td>Subjects with Alcohol drinking habit (age wise) – male</td>
<td>30</td>
<td>3.33%</td>
</tr>
</tbody>
</table>

![Figure 1: Bar chart showing the adverse consequences among alcoholics](image)

[Table 3] shows the adverse consequences of alcohol habit among the alcoholics in which 37.7% of the alcoholics had health issues; 44.4% of the alcoholics had debts; It was found that 50% of the alcoholics had become dependent on alcohol; while seeing the history of hospital admission 27.7% of the alcoholics were admitted in hospital at least once; 33.3% of the alcoholics had psychiatric problems; when seeing the history of road traffic accidents among the alcoholics it was found to 24.4%; domestic violence was prevailing in 38.8% of the alcoholics family; 53.3% showed violent behavior after consuming alcohol; children of alcoholics had started to drink alcohol after seeing their parents’ alcohol habit.

![Figure 2: Bar chart showing the comparison of adverse consequences between alcoholics and non-alcoholics.](image)
### Table 2: Socio-Demographic Profile of Non Alcoholics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total male</td>
<td>1200</td>
<td>44.4%</td>
</tr>
<tr>
<td>Total female</td>
<td>1500</td>
<td>55.5%</td>
</tr>
<tr>
<td>Total</td>
<td>2700</td>
<td>100%</td>
</tr>
<tr>
<td>Alcohol drinking habit</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>900</td>
<td>75%</td>
</tr>
<tr>
<td>No</td>
<td>300</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>1200</td>
<td>100%</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
</tr>
<tr>
<td>yes</td>
<td>0</td>
<td>0%</td>
</tr>
<tr>
<td>no</td>
<td>1500</td>
<td>100%</td>
</tr>
<tr>
<td>Total</td>
<td>1500</td>
<td>100%</td>
</tr>
<tr>
<td>Subjects without Alcohol drinking habit (age wise) – male</td>
<td>n=300</td>
<td></td>
</tr>
<tr>
<td>&gt;15 years</td>
<td>50</td>
<td>16.6%</td>
</tr>
<tr>
<td>15 - 30</td>
<td>60</td>
<td>20%</td>
</tr>
<tr>
<td>31 - 45</td>
<td>80</td>
<td>26.6%</td>
</tr>
<tr>
<td>46 - 60</td>
<td>40</td>
<td>13.3%</td>
</tr>
<tr>
<td>61 – 75</td>
<td>15</td>
<td>5%</td>
</tr>
<tr>
<td>&gt;75</td>
<td>55</td>
<td>18.3%</td>
</tr>
<tr>
<td>Total</td>
<td>300</td>
<td>100%</td>
</tr>
<tr>
<td>Education</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Illiterate</td>
<td>45</td>
<td>15%</td>
</tr>
<tr>
<td>Primary</td>
<td>80</td>
<td>26.6%</td>
</tr>
</tbody>
</table>

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### Table 3: Adverse Consequences of Alcohol Habit Among Alcoholics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alcoholic (n=900)</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health issues</td>
<td>340</td>
<td>37.7%</td>
</tr>
<tr>
<td>Debts</td>
<td>400</td>
<td>44.4%</td>
</tr>
<tr>
<td>Dependency</td>
<td>450</td>
<td>50%</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>250</td>
<td>27.7%</td>
</tr>
<tr>
<td>Psychiatric disorders</td>
<td>300</td>
<td>33.3%</td>
</tr>
<tr>
<td>Road traffic accidents (RTA)</td>
<td>220</td>
<td>24.4%</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>350</td>
<td>38.8%</td>
</tr>
<tr>
<td>Violent behavior</td>
<td>480</td>
<td>53.3%</td>
</tr>
<tr>
<td>Children drinking after elders</td>
<td>30</td>
<td>3.3%</td>
</tr>
</tbody>
</table>

### Table 4: comparison of adverse consequences between alcoholics and non-alcoholics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Alcoholic (n=900)</th>
<th>Non alcoholic (n=300)</th>
<th>Chi square</th>
<th>P value</th>
<th>Odds ratio(OR)</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health issues</td>
<td>340 (37.78%)</td>
<td>50 (16.67%)</td>
<td>45.7107</td>
<td>0.0001</td>
<td>3.0357</td>
<td>2.1776, 4.2319</td>
</tr>
<tr>
<td>Debts</td>
<td>400 (44.44%)</td>
<td>40 (13.33%)</td>
<td>93.7799</td>
<td>0.0001</td>
<td>5.200</td>
<td>3.6355, 7.4378</td>
</tr>
<tr>
<td>Dependency</td>
<td>450 (50%)</td>
<td>0 (0%)</td>
<td>240.00</td>
<td>0.0001</td>
<td>601.00</td>
<td>37.39, 9660.79</td>
</tr>
<tr>
<td>Hospital admissions</td>
<td>250 (27.78%)</td>
<td>50 (16.67%)</td>
<td>14.8148</td>
<td>0.0001</td>
<td>1.9231</td>
<td>1.373, 2.693</td>
</tr>
<tr>
<td>Psychiatric disorders</td>
<td>300 (33.33%)</td>
<td>10 (3.33%)</td>
<td>105.6905</td>
<td>0.0001</td>
<td>14.50</td>
<td>7.604, 27.649</td>
</tr>
<tr>
<td>Road traffic accidents (RTA)</td>
<td>220 (24.44%)</td>
<td>15 (5%)</td>
<td>54.0183</td>
<td>0.0001</td>
<td>6.147</td>
<td>3.579, 10.559</td>
</tr>
<tr>
<td>Domestic violence</td>
<td>350 (38.89%)</td>
<td>15 (5%)</td>
<td>122.09</td>
<td>0.0001</td>
<td>12.09</td>
<td>7.072, 20.67</td>
</tr>
<tr>
<td>Violent behavior</td>
<td>480 (53.33%)</td>
<td>10 (3.33%)</td>
<td>232.825</td>
<td>0.0001</td>
<td>12.09</td>
<td>7.072, 20.67</td>
</tr>
<tr>
<td>Children drinking after elders</td>
<td>30 (3.33%)</td>
<td>2 (0.67%)</td>
<td>6.1644</td>
<td>0.0131</td>
<td>5.1379</td>
<td>1.2205, 21.629</td>
</tr>
</tbody>
</table>
[Table 4] shows the comparison of adverse consequences between alcoholics and non-alcoholics in which health issues are more among the alcoholics accounting for 37.7% than the non-alcoholics where the health issues are seen only in 16.6% and it is statistically significant which is p value <0.05; on seeing the debts among the alcoholics and non-alcoholics it was also high among the alcoholics i.e. 44.4% whereas debts were there only with 13.3% of the non-alcoholics which is statistically significant i.e. p value <0.05 ; dependency is found only with the alcoholics amounting for 50% of the alcoholics and it was found that none of the non-alcoholics had the dependency problems due to any other reasons also which is statistically significant p value of 0.001; while seeing the hospital admission history of the study subjects 27.7% of the alcoholics had the history whereas only 16.6% of the non-alcoholics had history of hospital admission for any reasons which is also statistically significant p value <0.05; Psychiatric problems were more among the alcoholics accounting for 33.3% whereas only 3.3% of the non-alcoholics had psychiatry problems; while seeing the history of road traffic accidents 24.4% of the alcoholics had the history of RTA and only 5% of the non-alcoholics had history of RTA; Domestic violence was seen in 38.8% of the families of alcoholics and only 5% of the non-alcoholics family has experienced domestic violence which is statistical significant p value <0.05; Violent behavior was seen among 53.3% of the alcoholics whereas only 3.3% of the non-alcoholics showed violent behavior; When seeing the emergence of alcohol habit among children after seeing their parents drinking habit was seen in 3.3% whereas it was only found in 0.6% children of non-alcoholics which is also statistically significant p value 0.013.

**DISCUSSION**

In a study done by Ravneeth Kaur et al majority of alcoholics were in the age group of 31-40 years comprising to 46% and only 4 i.e., 1.2% were under the age group of less than 20 years of age which is similar to my study in which 46.67% were in the age group of 31 to 45 years of age and 3.3% subjects were in the age group of less than 15 years of age which is almost similar to the above study. When seeing the educational part of the study subjects 86% were educated whereas majority of the study subjects were illiterate comprising to 62.22%. In the above study 37.5% had mood disorders; 35.7% had schizophrenia and other psychotic disorders and only 7.1% had anxiety disorders; other psychotic disorders like sleep disorder and sexual disorders were seen among 20% of the study individuals whereas in my study psychiatric disorders were seen in 33.3% of the alcoholic males and only 3.3% of the non-alcoholic males had psychiatric disorders and it is also statistically significant.[5]

In a study done by Subir Kumar Das et al on-alcohol consumption its health and social impact in India 19% of the study subjects developed mouth and oropharynx neoplasm; 29% developed with esophageal neoplasm; 25% developed liver neoplasm and only 7% developed breast carcinoma. Among the study subjects 2% of them developed unipolar depressive disorder and 18% developed epilepsy in the form of alcohol withdrawal seizures. In the same study 100% of the study subjects developed dependence and harmful use of alcohol was seen in the same group; likewise cardiovascular disorders like hemorrhagic stroke seen among 10% of the study participants and ischemic heart diseases were seen in 2% of the study subjects. Adding to the above health issues cirrhosis of the liver was found in 32% of their study population. In the same way motor vehicle accidents were seen in 20% of the study population and 11% of the study subjects had self-inflicted injuries and 24% of them had history of homicide whereas in my study 37.7% had health issues; and only 50% of my study subjects had alcohol dependency problems whereas in the above study all the study participants were dependent to alcohol and had harmful alcohol using habit; Likewise in my study 27.7% of the alcoholics had history of several hospital admissions for alcohol related health issues; when compared to the above study road traffic accidents were seen in 24.4% of the study subjects which is similar to the study by Subir Kumar das et al study. In the same way psychiatric disorders were seen among 33.3% of the study participants in my study were as only 20% had psychiatric disorders in the above study; Violent behavior was noticed in 53.3% of the alcoholics in my study but only 35% of the alcoholics developed violent behavior because of alcohol.[6]

In a study by Srinath et al 35.9% went to healthcare for liver disease or cirrhosis and 4.8% of the study participants sought out healthcare for withdrawal symptoms whereas in my study health issues were seen in 37.7% among the alcoholics and 27.7% of the alcoholics got admitted in the hospital for various health issues including liver cirrhosis; in the same study 23.3% sought out hospital for road traffic accidents which is similar to my study contributing to 24.4%; In the above study physical fights or violent behavior was seen in 20.4% of the alcoholics whereas in my study it is seen in 53.3% of the alcoholics which two times more than my study; similarly in the same study 4.8% of the study participants had withdrawal symptoms which very low when compared to my study in which dependency with withdrawal symptoms which were seen in 50% of the study participants; other symptoms like headache and gastritis were found in 15.6% of the alcoholics in the above study.[7]

In a study by Mukhopadhyay more number of alcoholics i.e. 46.6% were found in the age group of 31 to 40 years which is exactly similar to my study;
In the same study 36.6% of the alcoholics were educated up to 8th standard and 33.3% of the alcoholics had education level up to 6th standard; whereas in my study most of the alcoholics were illiterate accounting for 62.2%; when seeing the employment of the alcoholics in the above study drinking habit was modeled by father which is accounting for 51.67% whereas in my study children drinking after father or elders were seen in 3.3% which is much lower than the above study. When seeing the dependency nature of the alcoholics 12% had withdrawal symptoms; Road traffic accidents were seen in 8.3% of the alcoholics which are much lower than my study.[8]

In a study by Aruna Dandu et al verbal violence was seen in 24.8% of the alcohol dependence subjects with psychiatry morbidity and it was found lesser among the alcoholic spouses constituting to 17.8% whereas both verbal and physical form of domestic violence was observed in 33.7% of the spouses living with psychiatric morbid partners and it was found only in 8.9% of the spouses living without any psychiatric morbidity. While comparing to my study 38.8% of the women experienced domestic violence which is almost similar to the above study.[9]

**Limitations of the Study**

In my study adverse consequences data were all self-reported by the participants, so there could be a chance for recall and response biases.

**CONCLUSION**

Problems of alcohol use in India have attracted the attention of public health policy makers and research workers. Most common reason for the starting and continuation of drinking was peer pressure. Thus, emphasis should be made on the factors which are related to the early initiation of alcohol use and steps should be taken to prevent the youths from being influenced by their peers. IEC activities have to conducted regularly by the stakeholders among these kind of groups by enlightening them on the adverse consequences of alcohol habit. The role of primary care physician is very important in organizing effective health education measures with the help of his team. The behavior change can be initiated and maintained with persistent motivation and support from primary care team.

**REFERENCES**