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RIGHT TREATMENT AND NEW BEGINNING OF ALCOHOL REHABILITATION

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ABSTRACT
The main purpose of alcohol rehabilitation is to ensure that the addict person start to cease substance abuse, in a way to dodge the psychological, legal, financial, social, and physical concerns; that can be triggered, especially by extreme abuse. Cronbach's alpha is arguably the most commonly used metric to evaluate the internal consistency reliability associated with scores derived from a scale. In our study, 28 clustered as a robust single factor with excellent internal consistency (cronbach's alpha: 0.94). Out of 200 patients, the process of rehabilitation resulted in the decrease of AWARE score with which the therapy was maintained for 48 weeks study the changes in psychological parameters (mean ±SD) from base line (422.73333±86.13732) (pvalue=0.0002);social parameters (mean±SD) from base line (170.20000±160.60262) (pvalue 0.4958)and personal parameters (mean ±SD)from base line (433.57143±133.49015) (pvalue<0.0001)where statistical analysis showed the mean and standard deviation, were found to be statistically significant. The p value for psychological and personal parameters were shown significant and social parameters for the patients were not so significant which can result in relapse of alcoholism.

KEYWORDS: Alcoholism, Rehabilitation, Psychological.

INTRODUCTION
Alcohol Addiction is a state characterized by obsessive engagement in satisfying stimuli,despite adverse consequences.[1] It can be thought of as a disease or biological process leading to such behaviors. Alcohol dependence is a previous psychiatric diagnosis in which an individual is physically or psychologically dependent upon drinking alcohol. In 2013 it was reclassified as alcohol use disorder (alcoholism) along with alcohol abuse in DSM-5. Alcohol's rewarding and reinforcing (i.e., addictive) properties are mediated through its effects on dopamine neurons in the meso limbic reward pathway, which connects the ventral segmental area to the NAcc. One of alcohol's primary effects is the allosteric inhibition of NMDA receptors and facilitation of GABAA receptors (e.g., enhanced GABAA receptor-mediated chloride flux through allosteric regulation of the receptor). At high doses, ethanol inhibits most ligand gated ion channels and voltage gated ion channels in neurons as well.[2]

With acute alcohol consumption, dopamine is released in the synapses of the mesolimbic pathway, in turn heightening activation of postsynaptic D1 receptors. The activation of these receptors triggers postsynaptic internal signaling events through protein kinase. A which ultimately phosphorylate CREB, inducing CREB-mediated changes in gene expression With chronic alcohol intake, consumption of ethanol similarly induces CREB phosphorylation through the D1 receptor pathway, but it also alters NMDA receptor function through phosphorylation mechanisms; an adaptive down regulation of the D1 receptor pathway and CREB function occurs as well. Chronic consumption is alsoassociated with an effect on CREB phosphorylation and function via postsynaptic NMDA receptor signaling cascades through a MAPK/ERK pathway and CAMK-mediated pathway. These modifications to CREB function in the meso limbic pathway induce expression (i.e., increase gene expression) of ΔFosB in the NAcc, where ΔFosB is the "master control protein" that, when over expressed in the NAcc, is necessary and sufficient for the development and maintenance of an addictive state (i.e., its over expression in the nucleus accumbens produces and then directly modulates compulsive alcohol consumption).[3-6]

Alcohol consumption increases the risk of various cancers, hypertension, liver disease, unintentional injuries, and violence. Definitions of light and moderate alco-hol consumption vary, but these levels of consumption are generally found to decrease the risk of ischaemic heart disease. [7-9]

For all-cause mortality the relation is typically U shaped, with non-drinkers and heavier drinkers having higher risks than light and moderate drinkers. The royal colleges of physicians, psychia-trists, and general practitioners have therefore advised men and women to drink less than 21 and 14 units a week, respectively, whereas the UK government has recommended no more than 4 and 3 units a day, respectively; 1 unit is 8-10 g of alcohol.[19,20] However, the levels giving the lowest or a low risk are likely to vary with age as well as sex and have not been system-atically quantified. Methods to compute risks of all-cause mortality we required data on cause specific relative risks, distribution of alcohol consumption, and distribution of causes of death.[10-12]

Substantially increased risks of all-cause mortality can occur even in people drinking lower than recommended limits, and especially among younger people.[13]

The aim of study is to assess the effectiveness and outcomes of alcohol rehabilitation. The study was carried out by considering the following objectives. To analyze the effectiveness and outcomes of alcohol rehabilitation, to collect demographic data of patients such as age, sex, occupation, education etc, to obtain information on history of addiction, to assess the type of treatment given to patient, to conclude the effectiveness of treatment.

METHODOLOGY

Source of data: Data will be collected from the patient though the questionnaire from the NEEL JEER hospital, Thadithota, **R**ajamahendravaram.

Materials

- Case sheets of patients
- Questionnaire

Method of collection of data

Study site: Study will be conducted at department of medicine at NEEL JEER hospital, Thadithota, Rajamahendravaram.

Study duration: The study will be conducted for a period of 6 months.
Study of design: A prospective study.
Study criteria: The study will be carried out by considering following criteria.

Inclusion criteria

- Includes all people who are undergoing treatment at alcohol rehabilitation centre.
- Patients willing to participate in the study.

Exclusion criteria

- Alcoholics who are not undergoing treatment.
- Alcoholics in general public.
- Non alcoholics.

Analysis of data: A prospective study will be analysed for statistical significance by student spss-20

Study procedure: A prospective study will be carried out at medicine department of NEEL JEER hospital, Thadithota, Rajamahendravaram , after getting ethical clearance from institutional ethics committee and with the prior permission from department of medicine. The patient admitted to the department of medicine will be enrolled into the study considering the study criteria after taking their consent to participate into the study. From the enrolled patients the data will be collected from the case sheets, questionnaire and other relevant resources in a suitably designed data collection form.

RESULTS

Age group analysis

A total of 200 alcoholics were enrolled into the study out of which 37(18%) patients were in the age range between 15-25 years,104(52%) patients were in the age range between 25-35 years,50(25%) patients were in the age range between 35-45years,5(2%) patients were in the age range between 45-55 years,3(2%) patients were in the age range between 55-65years and 1(1%) in the age range between 65-75years.

Table no. 1

Age range	Number of patients (n=200)	Percentage (%)
15-25	37	18
25-35	104	52
35-45	50	25
45-55	5	2
55-65	3	2
65-75	1	1

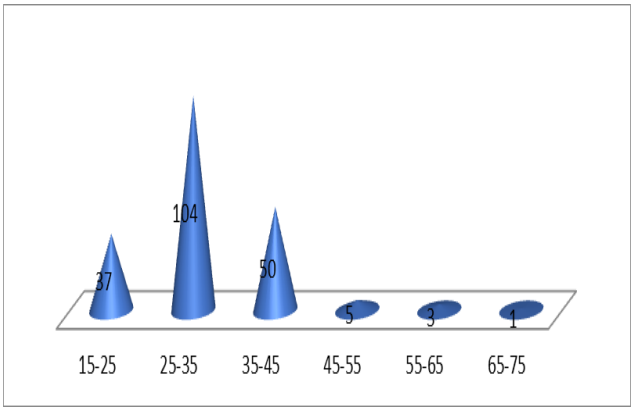

Figure no. 1: Based on the analysis of age distribution.

Occupational status

Among 200 patients, 25(13%) patients were students,43(22%) patients were daily wage workers,13(7%) patients were labor,10(5%) patients were cement workers,14(7%) patients were electricians,24(12%) patients were farmers,22(11%) patients were drivers,5(3%) patients were business men,16(8%) patients were mechanics,4(2%) patients were gate keepers,2(1%) assistant contractors,9(5%) patients were shopkeepers, 2(1%) patients were unemployed,5(3%) patients were salesmen, 3(2%) patients were teachers,3(2%)patients were paper mill agents.

Table no. 2

Occupation of the patient	Number of patients N=200	Percentage (%)
Students	25	13
Daily wage workers	43	22
Labor	13	7
Cement workers	10	5
Electrician	14	7
Farmer	24	12
Driver	22	11
Business man	5	3
Mechanic	16	8
Gate keeper	4	2
Assistant contractor	2	1
Shopkeeper	9	5
Unemployed	2	1
Sales man	5	3
Teacher	3	2
Paper mill agent	3	2

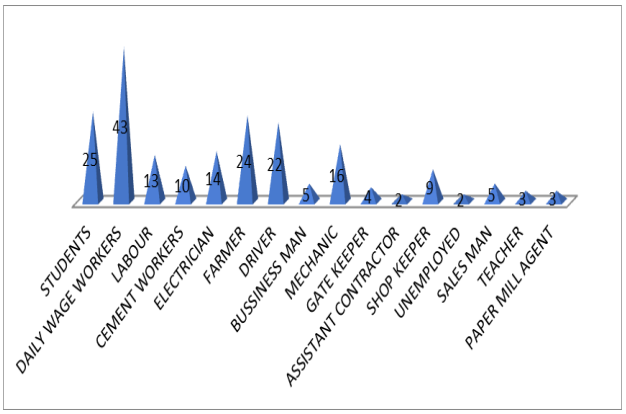

Figure no. 2: Based on the analysis of occupatinal status of patients.

Marital status
Among 200 patients, 150(75%) patients were married and 50(25%) patients were unmarried.

Table no. 3

Category	Number of patients N =200	Percentage
Married	150	75
Unmarried	50	25

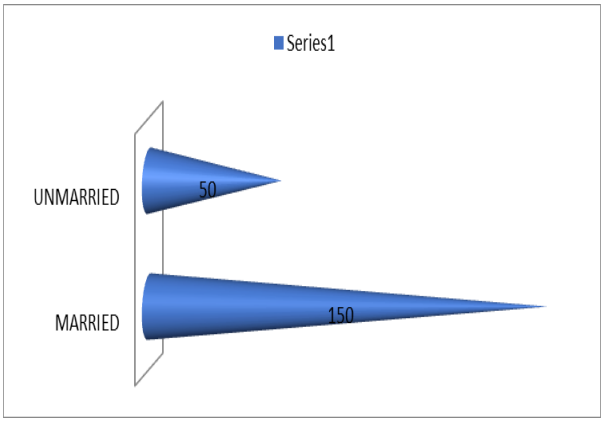

Figure no. 3: Based on the analysis ofmarital status of the patients.

Years of consuming
Among 200 patients, 163(81%) patients were consuming from 1-10 years,31(16%) patients were consuming from 10-20 years and 6(3%) patients were consuming from 20-30 years.

Table no. 4

Years of consuming	Number of patients N= 200	Percentage (%)
1-10	163	81
10-20	31	16
20-30	6	3

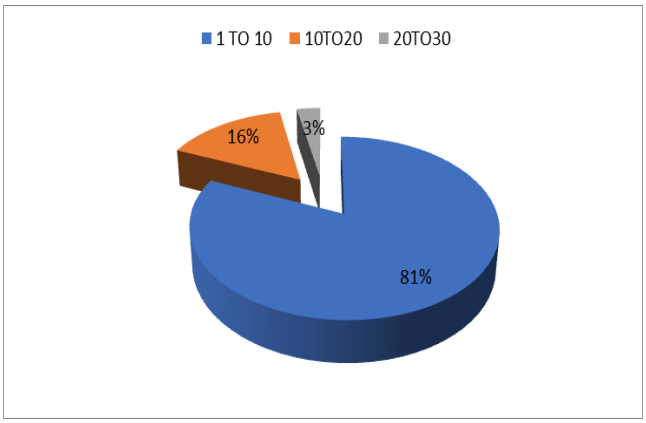

Figure no. 4: Based on the analysis of years of consuming.

Amount of alcohol consuming every day
Out of 200 alcoholics,168(84%) patients were consuming quarter,27(13%) patients were consuming half,3(2%) patients were consuming full and 2(1%) patients were consuming unlimited.

Table no. 5

Quantity of alcohol	Number of patients N= 200	Percentage (%)
≤180 ml	168	84
≤375 ml	27	13

≤750 ml	3	2
Unlimited	2	1

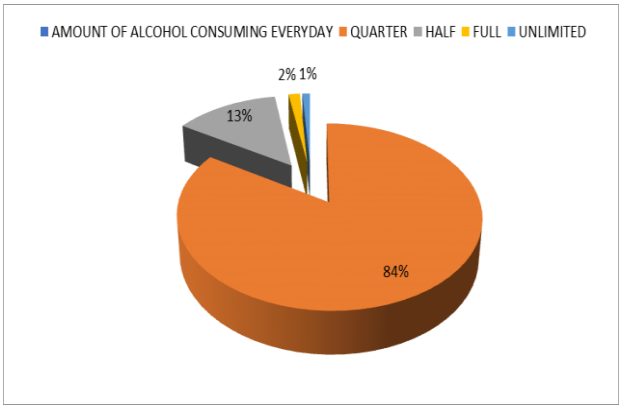

Figure no. 5: Base on the analysis of amount of alcohol consuming every day.

Number of Times/Day

Among 200 patients, 43(21%) patients were taking once a day,70(35%) patients were taking twice a day,54(27%) patients were taking thrice a day and 33(17%) patients were taking quarterly.

Table no. 6

Number of times /day	Number of patients N= 200	Percentage (%)
1	43	21
2	70	35
3	54	27
4	33	17

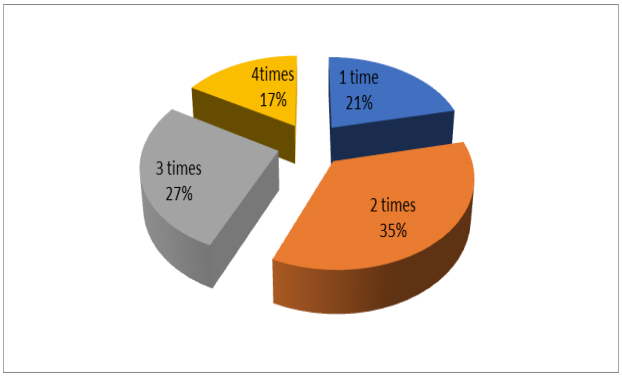

Figure no. 6: Based on the analysis of amount of alcohol consuming every day.

Quality of alcohol

Out of 200 alcoholics, 87(43%) patients were consuming branded,68(34%) patients were consuming cheap and 45(23%) patients were consuming both branded and cheap.

Table no. 7

Quality of alcohol	Number of patients N=200	Percentage (%)
Branded	87	43
Cheap	68	34
Both	45	23

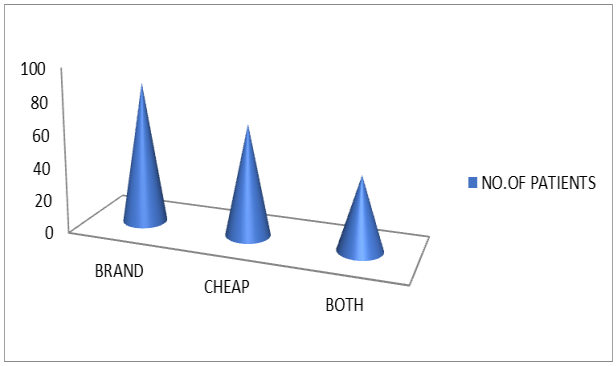

Figure no. 7: Based on the analysis of quality of alcohol.

Health complications

Among 200 alcoholics, 23(11%) patients were with health complications and other 177(89%) patients were without health complications.

Table no. 8

Health complications	Number of patients N=200	Percentage (%)
Yes	23	11
No	177	89

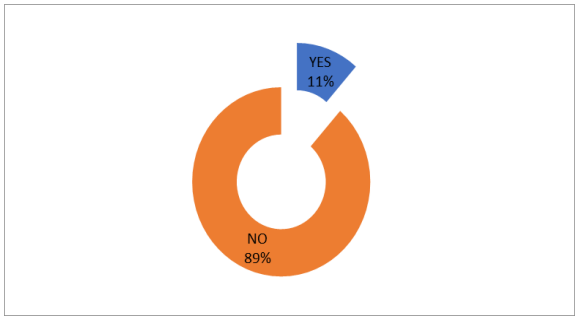

Figure no. 8: Based on the analysis of health complications.

Past medical history

Among 200 alcoholics, 200(100%) patients were without any past medical history.

Table no. 9

Past medical history	Number of patients N =200	Percentage (%)
Yes	0	0
No	200	100

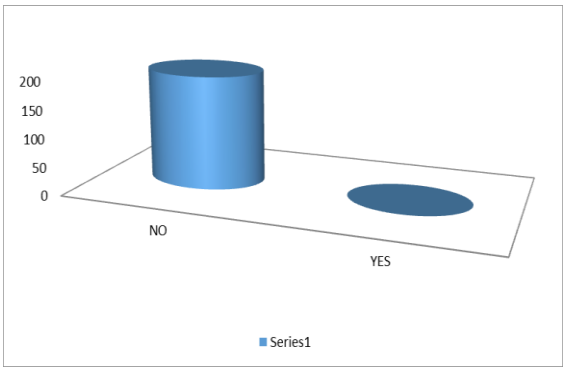

Figure no. 9: Based on the analysis of past medical history.

Past medication history

Out of 200 alcoholics, 199(99%) patients were without past medication history and 1(1%) patient was with past medication history.

Table no. 10.

Past medication history	Number of patients N=200	Percentage (%)
Yes	1	-1
No	199	100

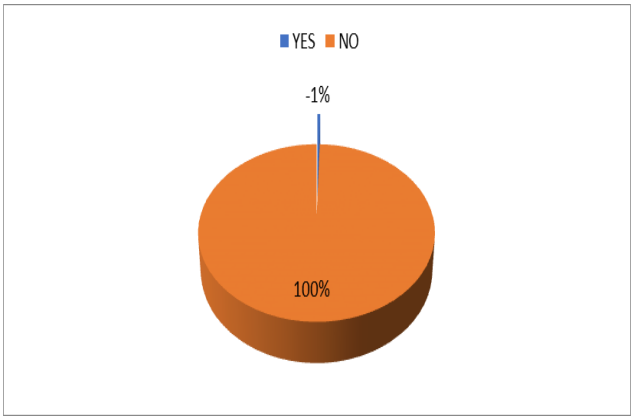

Figure no. 10: Based on the analysis of past medication history.

Home life

Among 200 alcoholics, 140(70%) patients were unhappy with their home life.

Table no. 11

Home life	Number of patients N=200	Percentage (%)
Happy	60	30
Unhappy	140	70

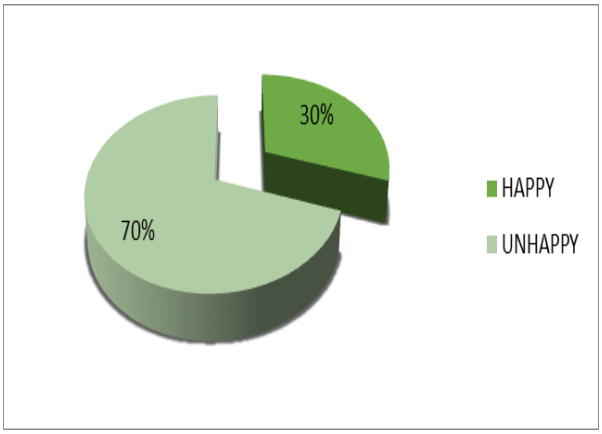

Figure no. 11 Based on the analysis of home life.

Shy with people

Out of 200 alcoholics, 30(15%) patients were with shy and 170(85%) patients were without shy.

Table no. 12

Shy with people	Number of patients N=200	Percentage (%)
Yes	30	15
No	170	85

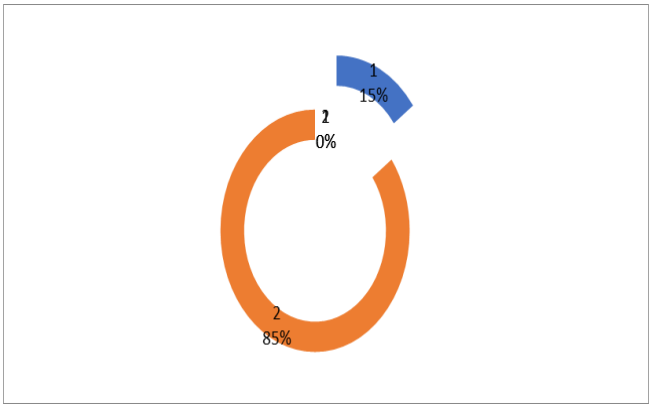

Figure no. 12: Based on the analysis of shy with people.

Affecting reputation

Among 200 alcoholics, 116(58%) patients were with reputation effected and others 84(42%) patients were without reputation effected.

Table no. 13

Affecting reputation	Number of patients N=200	Percentage (%)
Yes	116	58
No	84	42

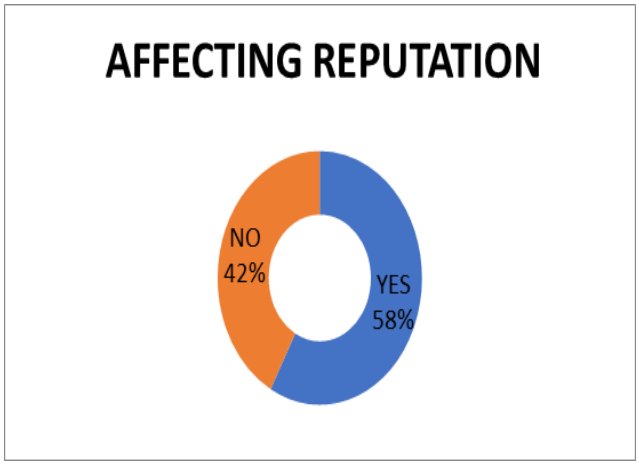

Figure no. 13: Based on the analysis of affecting reputation.

Financial difficulties

Out of 200 alcoholics, 108(54%) patients were with financial difficulties and 92(46%) patients were without financial difficulties.

Table no. 14

Financial difficulties	Number of patients N=200	Percentage (%)
Yes	108	54
No	92	46

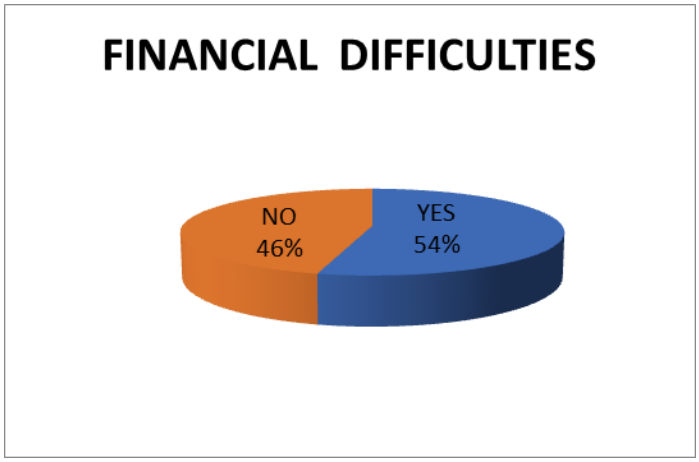

Figure no. 14 Based on the analysis of financial difficulties.

Crave at a definite time

Among 200 alcoholics, 99(50%) patients crave at a definite time and 101(50%) patients doesn't crave at a definite time.

Table no. 15

Crave at a definite time	Number of patients N=200	Percentage (%)
Yes	156	78
No	44	22

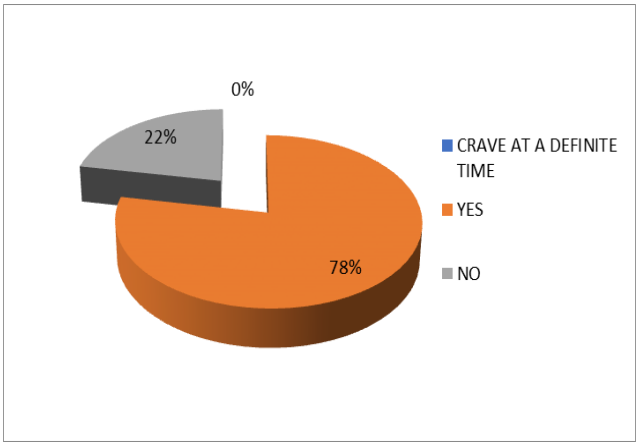

Figure no. 15: Based on the analysis of crave at a definite time.

Need to drink at next morning

Out of 200 alcoholics, 105(52%) patients need to drink at next morning and 95(48%) patients doesn't need to drink at next morning.

Table no. 16

Need to drink at next morning	Number of patients N=200	Percentage (%)
Yes	105	67
No	95	33

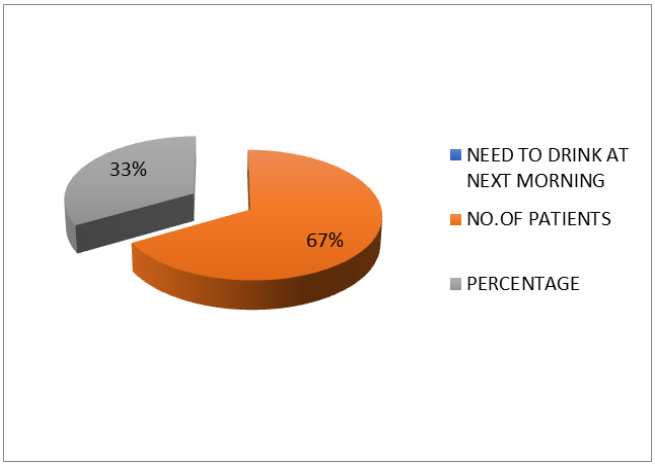

Figure no. 16: Based on the analysis of need to drink at next morning.

Difficulties in sleeping

Among 200 alcoholics, 32(16%) patients were having difficulties in sleep and 168(84%) patients were not having difficulties in their sleep.

Table no. 17

Difficulties in sleep	Number of patients N=200	Percentage (%)
Yes	32	16
No	168	84

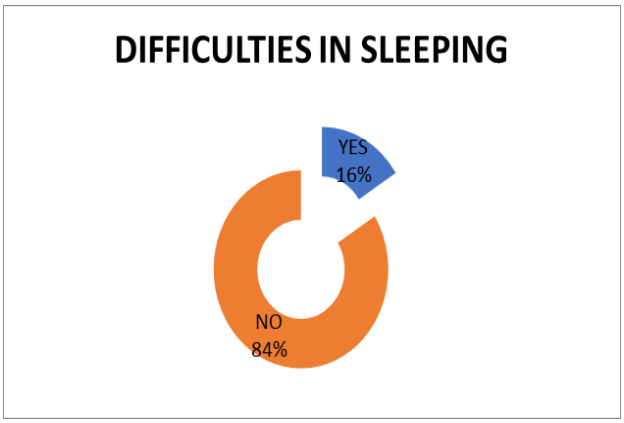

Figure no. 17: Based on the analysis of difficulties in sleeping.

Escape from worries

Out of 200 alcoholics, 28(14%) drink to escape from worries and 172(86%) drink casually.

Table no. 18

Escape from worries	Number of patients N=200	Percentage (%)
Yes	28	14
No	172	86

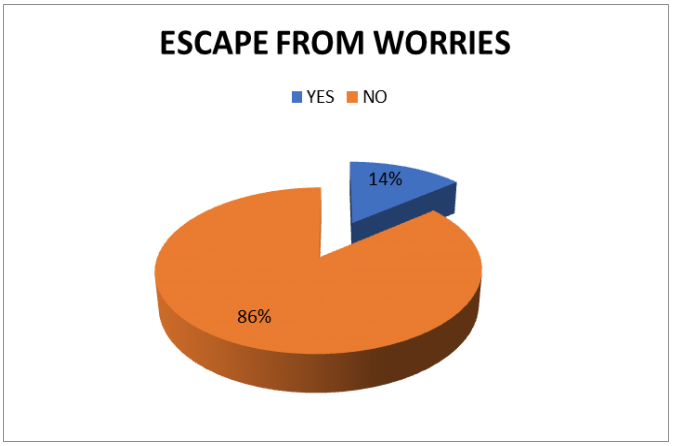

Figure no. 18: Based on the analysis of escape from worries.

Drink alone or with company

Among 200 alcoholics, 45(22%) patients drink alone, 147(74%) patients drink with company and 8(4%) patients drink both alone and with company.

Table no. 19

Drink alone /Company	Number of patients N=200	Percentage (%)
Alone	45	22
Company	147	74
Both	8	4

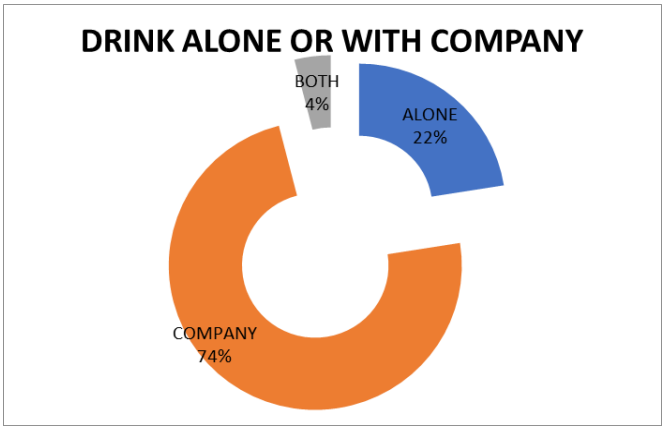

Figure no. 19: Based on the analysis of drink alone or with company.

Complete loss of memory

Out of 200 alcoholics, 39(19%) patients were with complete loss of memory and 161(81%) patients were without loss of memory.

Table no. 20

Complete loss of memory	Number of patients N=200	Percentage (%)
Yes	39	19
No	161	81

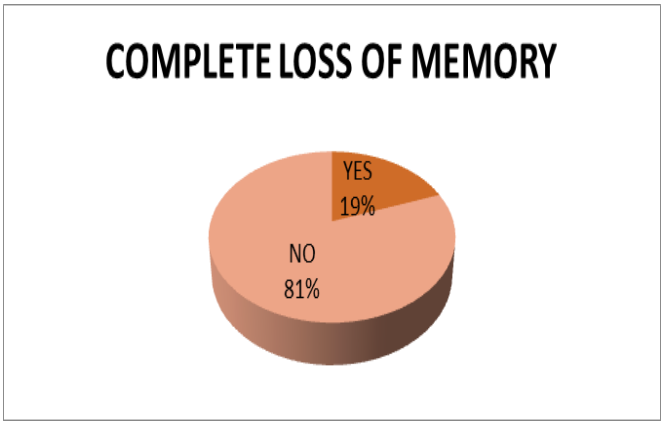

Figure no. 20: Based on the analysis of complete loss of memory.

Feeling sweaty

Among 200 alcoholics, 75(37%) patients were feeling sweaty and 125(63%) patients were not feeling sweaty.

Table no. 21

Feeling sweaty	Number of patients N=200	Percentage (%)
Yes	75	37
No	125	63

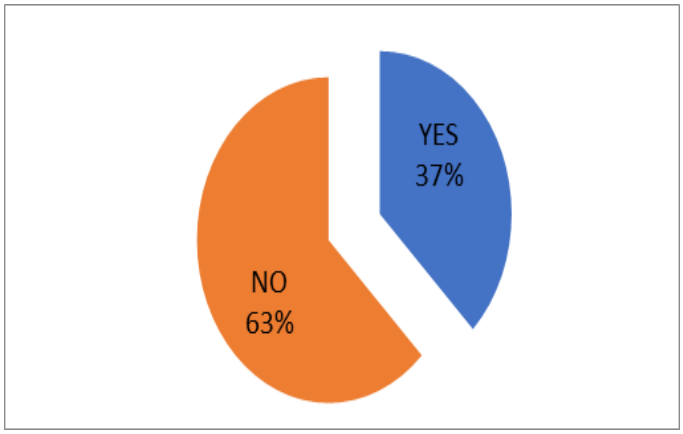

Figure no. 21: Based on the analysis of feeling sweaty.

Shaking hands

Out of 200 alcoholics, 75(37%) patients having shaking hands and 125(63%) patients were without this symptom.

Table no. 22

Shaking hands	Number of patients N=200	Percentage (%)
Yes	75	37
No	125	63

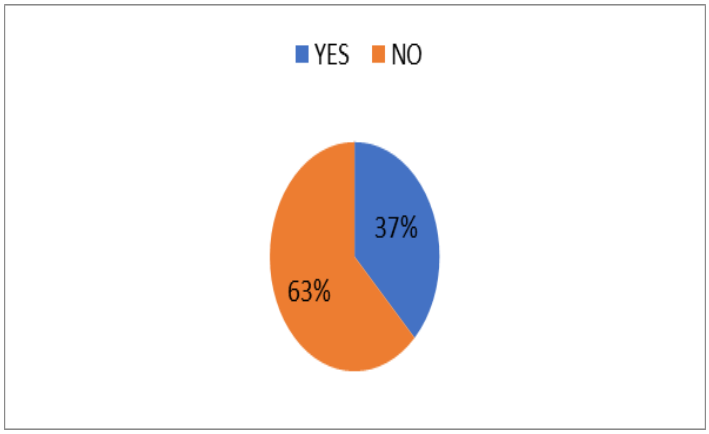

Figure no. 22 Based on the analysis of shaking hands.

Physician ever treated

Among 200 alcoholics, 5(2%) patients were already treated by other physicians and 195(98%) patients were for the first time.

Table no. 23

Physicians ever treated	Number of patients N=200	Percentage (%)
Yes	5	2
No	195	98

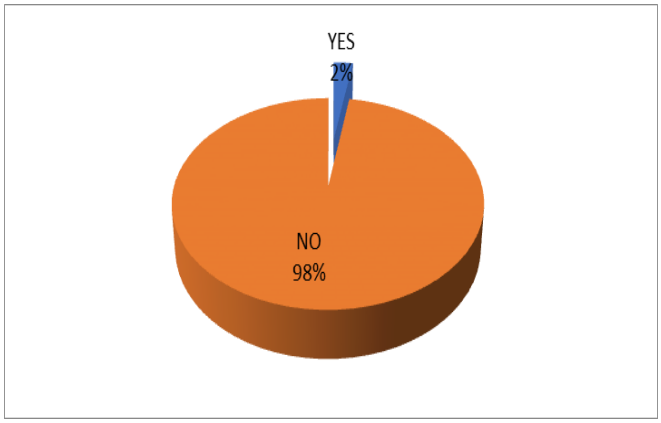

Figure no. 23: Based on the analysis of physician ever treated.

Condition of the patient

Out of 200 alcoholics, 8(4%) patients were Out patients and 192(96%) patients were In patients.

Table no. 24

Ip/op	Number of patients N=200	Percentage (%)
Op	8	4
Ip	192	96

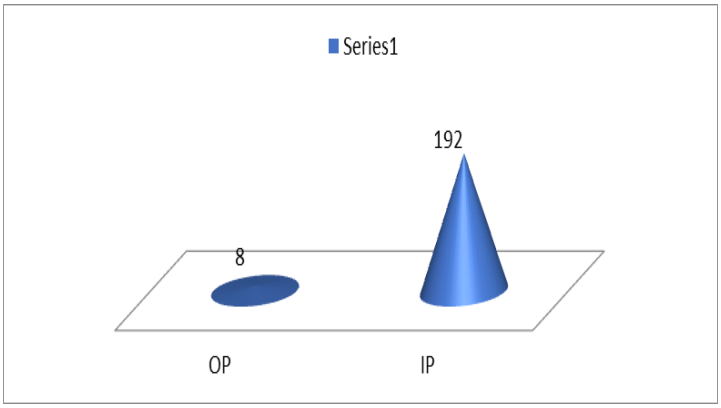

Figure no. 24: Based on the analysis of condition of the patient.

Statistical evaluation

Table no. 25

S. No.	Parameter	Mean ± standard deviation	P value
1.	Psychology01 - Psychology02	422.73 ± 86.13	P = 0.0002
2.	Social01 - Social02	170.20±160.60	P = 0.4958
3.	Personal01 - Personal02	433.57±133.49	P < 0.0001

Out of 200 patients, the process of rehabilitation resulted in the decrease of AWARE score with which the therapy was maintained for 48 weeks study the changes in psychological parameters (mean±SD) from base line (422.73±86.13) (Pvalue=0.0002); Social parameters (mean±SD) from base line(170.20±160.60) (Pvalue=0.4958) and personal parameters (mean±SD) from base line(433.57±133.49) (Pvalue<0.0001) where statistical analysis showed the mean and standard deviation (mean±standard deviation), were found to be statistically significant. The Pvalue for psychological and personal parameters were shown significant and social parameters for the patients were not so significant which can result in relapse of alcoholism.

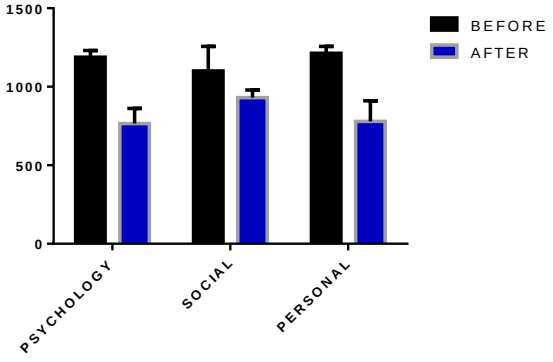

Figure no. 25: Based on the analysis of Before and After treatment in Psychological, Social and Personal aspects in sub division of the AWARE Questionnaire.

Table no. 26

Reliability Statistics		
Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.94	.305	28

Cronbach's alpha is arguably the most commonly used metric to evaluate the internal consistency reliability associated with scores derived from a scale.In cases where important decisions are being made based on scores from a scale,a reliability in excess of .90 should be expected.Cronbach's alpha coefficient for internal consistency reliability fo any scales or subscales one may be using.Cronbach's apha does not provide reliability estimates for single items.In our study, 28 clustered as a

robust single factor with excelent internal consistency(Cronbach's alpha:0.94)

DISCUSSION

Cronbach's alpha is arguably the most commonly used metric to evaluate the internal consistency reliability associated with scores derived from a scale. In our study, 28 clustered as a robust single factor with excellent internal consistency (Cronbach's alpha: 0.94). Comparing our results with the study conducted by WR Miller & RJ Harris in USA especially in New Mexico, we found that pattern of 28 clustered as a robust single factor with excellent internal consistency. (Cronbachs alpha: 0.92-0.93). We didn't find any difference in our study when compared with these two studies. In our study Age group of 25-35years(104) are more prone to Alcoholism. Age group of 65-75 years(1) are less prone to Alcoholism. In our study Daily wage workers(43) are more alcoholic and Assistant contractors(2) and unemployed(2) are less alcoholic.

Among 200 patients, 150(75%) patients were married and 50(25%) patients were unmarried where married are more alcoholic.

In our study patients consuming alcohol for a span of 1-10years (163) are more and 20-30years(6) are less.

According to our study the patients consuming quarter (168) are high and unlimited(2) are least.

In our study patients consuming 2 times per day are more(70) and 4 times per day are least(33).

According to our study patients consuming branded alcohol are high(87) and patients consuming both branded and cheap are low(45).

In our study patients without health complications are more(177) and patients with health complications are less(23).

Among 200 alcoholics, 200(100%) patients were without any past medical history.

Out of 200 alcoholics, 199(99%) patients were without past medication history and 1(1%) patient was with past medication history.

Among 200 alcoholics, 200(100%) patients were unhappy with their home life.

Out of 200 alcoholics, 30(15%) patients were with shy and 170(85%) patients were without shy.

In our study patients effected reputation are more(116). \

In our study patients with financial difficulties are consuming more alcohol(108) and without financial difficulties are less(92).

In our study more number of patients (156) crave at a definite time and less number of patients(44) do not crave at a definite time.

In our study patients need to drink at next morning are more(163) and patients doesn't need to drink at next morning are less(37).

Among the study group 168 patients are not having difficulties in their sleep and 32 patients are having difficulties in their sleep.

In our study 172 patients drink casually and 28 patients drink to escape from worries.

Among the study group 147 patients drink with company and 8 patients drink both alone and company.

Among the study group 161 patients are without loss of memory and 39 patients are with loss of memory.

In our study 125 patients are not feeling sweaty and 75 patients were feeling sweaty.

In our study patients(75) experiencing shaking hands are more and (125)patients are not experiencing shaking hands.

Among the study group patients treated for the first time are (195) more and patients already treated by other physicians are (5) less.

Among the study group 192 patients were treated as inpatients and 8 patients were treated as outpatients.

CONCLUSION

The study accounts to the conclusion that the alcohol rehabilitation with enrolled patients was found to be effective.The income or profit which is procured by the government by selling of liquor is a direct loss to third part of the population, this comes under first category. Many head of the families are addicted to it. The money they need to spend for medical expenses, the problems they face by the death of the head of the family, the debt they make for that person, all these will come under second category.The p value for psychological and personal parameters were shown significant and social parameters for the patients were not so significant which can result in relapse of alcoholism. Hence, it is the prime responsibility of the people to avoid taking of liquor voluntarily. People should be educated about the effects of alcoholism which can help the individual to voluntarily reduce the consumption of alcohol this is possible only through Alcohol rehabilitation.

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