Nature of Alcohol Problems in Persons with Alcohol Dependence Syndrome and It's Psycho Social Correlates among Care Givers

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Abstract:
Background: Alcohol dependency is a disorder which affects not merely the Persons with Alcohol Dependence Syndrome (PWADS) but the members of the family / care givers as well.
Design: This study was conducted on 20 PWADSs and their Care Givers (CGs). This paper focuses on the issues like problems in alcohol consumption and assesses the confidence of PWADS to abstain from alcohol.
The study also confines its analysis in the area of family interaction pattern, quality of life, family burden, family coping pattern and co- dependency pattern in the CGs. Further an attempt is made to analyze the correlation between the problem in alcohol abuse and family interaction pattern, burden, quality of life, coping skill, co-dependency outcome variables.
Results: All PWADS are males, mean age being 35.40 years. Majority of them are married and hails from Nuclear Family. Their occupation being agriculturists and drivers (20% each). Mean score on usage of alcohol is 7.4 years. Mean score on alcohol problem questionnaire (APQ) is 21.30 shows moderate level of alcohol related problems in them. Mean score on Alcohol Abstinence Self Efficacy (AASE) 64.25 shows moderate level of self efficacy in being abstinence from alcohol.
Mean age of care givers is 36.65 years, majority of them are wives (50%) of PWADS, 55% are homemakers, total mean score Family Interaction Pattern Scale (FIPS) 236.64 shows lower level of interaction in the family. Mean value of 59.40 shows moderate level of co – dependency among CGs. Mean score of Family Crises Oriented Personal Scale (F-COPES) 112.30 shows lower level of coping pattern in the family. Family Burden Interview Schedule (FB) and Quality of Life Scale (QOL) indicate higher level of family burden and lower level of quality of life.
Conclusion: The current study shows that there is significant correlation between drinking behaviour and psychosocial variables among CGs such as family interaction pattern, burden, quality of life, coping skill, co-dependency.
Keywords: Interaction Pattern, Quality of life, Burden, Coping, Co-dependency

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I. INTRODUCTION

Alcoholism is a disease affecting not merely the Persons with Alcohol Dependence Syndrome (PWADS) but the members of the dependent's family as well. The primary Care Givers (CG) suffers from co-dependency, a pattern of living and coping based on dysfunctional rules inside the family due to preoccupations and extreme emotional dependence of PWADS. Traditional roles are changed and the family is damaged socially, financially, emotionally and becomes dysfunctional. (Sekar et al,2007). Alcoholism thus has been considered a family disease. An individual's alcohol indulgence makes the family go through intense psychological sufferings. (Gururaj et al, 2011). Alcohol dependency is a severe public health problem, due to the high prevalence rates and larger indulgence by the adult group. Usage of alcohol is high among males. Psycho education and proper medical care may help in reducing the burden of alcohol use in this area. (Siegal,1998)

Working with PWADS is a challenging task. Frequent lapse and relapse contributes to therapeutic nihilism. One often faces the problem of dealing with any stigmatizing and self limiting illness. Expectations of the therapist and PWADS should be from total abstinence to prolonged period of abstinence combined with enhanced quality of life and physical, psychological, social, financial, spiritual functioning.

The aim of the current study is to assess the alcohol consumption pattern, abstinent rate of PWADS and its association with the family Interaction Pattern, Quality of Life, burden, coping pattern and co-dependency among CGs.

II. METHODOLOGY

Method:-
i. **Sample Size:** A sample of 20 PWADS and their Care Givers (CG) seeking de-addiction treatment at the department of De- addiction, Dr. A. V. Baliga Memorial hospital-Udupi were selected from the pre-identified population of alcohol dependents.
ii. **Tools Used:**

Tools for ADS persons
1. Alcohol Problem Questionnaire (Willioms BT and Drumond DC, 1994): The Alcohol Problems Questionnaire (APQ) was designed as a clinical instrument for measuring alcohol-related problems. The APQ was found to be highly reliable. Further, the APQ is reliable, simple to administer and is likely to be useful in the assessment and study of problem drinkers in the clinical and research settings.
2. Abstinence Self Efficacy Scale (AASE, 1977) developed by Bandurs construct. There are 20 questions related to number of situations that lead some people to drink. It is used to assess confidence of a person to abstain from alcohol in each situation.

Tools for Care Givers
3. Family Interaction Pattern scale (Bhatti et al 1986): A Family Interaction Patterns Scale (FIPS) consisting of 106 items pertaining to six areas of family functioning. All six sub scales of FIPS were compared between the groups. The scale had the capacity to discriminate between neurotics and normal's and alcoholics. FIPS is a valid tool to measure the quality of family functioning.
4. Quality Life Scale (QLS) (WHOQOL, 1996): The WHOQOL-100 allows detailed assessment of each individual facet relating to quality of life. The WHOQOL-BREF contains a total of 26 questions. To provide a broad and comprehensive assessment, one item from each of the 24 facets contained in the WHOQOL-100 has been included. In addition, two items from the Overall quality of Life and General Health facet have been included.
5. Family Burden Interview Schedule (FBIS) (Pai and Kapur, 1981): In order to assess the burden placed by the patients on their family members, the semi structured interview schedule developed by Pai and Kapur (1981) would be used.
6. Family Crisis Oriented Personal Evaluation Scale (F-COPES, 1981): It will be utilized in Order to understand the family's behavior to cope up with their stressful hardship. This instrument is developed by M.C. Cubbin, Olson and Larsen (1981).
7. Spann Fischer Codependency Scale (SFCS) (Fischer, J. 2009): The Spann-Fischer Codependency Scale is a 16-item self-report instrument used to define and measure co-dependency in order to operationalize it as a personality disorder. Individual items are rated on a 6-point Likert scale, and then summed with two reversed items to describe co-dependency on a scale from a high of 96 to a low of 16.

iii. **Criteria for Inclusion:** Hospitalized males PWADS aged between 20-60 years who meet criteria for ADS of ICD- 10, without any treatment for alcohol dependence syndrome in previous three months (90 days), with primary care givers from family of origin/ procreation with no other substance abuse (except nicotine) and other major psychiatric co morbidities.

Statistical analysis: Descriptive analysis such as central tendency, dispersions are used to describe the data. Inferential statistics such as correlation analysis to understand the relationship between the PWADS and CGs variables are applied.

III. RESULTS

Among the PWADS, majority of them are married (50%) and live in nuclear family (55%). Majority of them are agriculturists and drivers (20% each) and are from Hindu religion (85%).
Among the CGs all are females. Majority are wives of patients (50%) and only 5% are daughters. Majority of CG are married (90%) and 55% are House wives.

Table 1. Socio demographic and other details of patterns of use among PWADS

Descriptive statistics				
Variables	**N**	**Minimum**	**Maximum**	**Mean**
Age	20	24.00	60.00	35.40
Income (in Rupees)	20	0.00	30.00	10205.0
Duration of Alcohol use (in years)	20	1.00	15.00	7.40
*APQ Total score	20	2.00	38.00	21.30
**AASE Score	20	33.00	100.00	64.25
AASE - Negative affect dimension	20	10.00	30.00	19.15
AASE -Social/ Positive dimension	20	10.00	30.00	19.95
AASE -Habitual/Craving/dimension	20	8.00	25.00	16.15

*APQ - Alcohol Problem Questionnaire,   ****AASE** - Alcohol Abstinence Self Efficacy

Table 1 shows that the mean age of PWADS is 35.40 years and the mean income is Rs.10205 per month. The mean score on duration of alcohol use is 7.4 years, ranging from 1 – 15 years. The mean score on APQ is 21.30 showing moderate level of problems related to alcohol .The total mean score on abstinence self-efficacy of alcohol is 64.25, ranging between 33-100, showing moderate level of self efficacy in being abstinent . The mean score on negative effect dimension in AASE is 19.15, while the social/ positive affect dimension 19.95, which shows moderate level of efficiency. The mean score on habitual/ craving affect is 16.15, ranging between 8- 25 which also indicates moderate level of efficiency in habitual or craving affect.

Table 2: Age and income distribution of CG

Variables	N	Minimum	Maximum	Mean
Age	20	20.00	55.00.	36.65
Income	20	0.00	15000.00	2850.00

Table 2 shows that mean age of care giver is 36.65, with the range of 20- 50 years. The mean income is Rs. 2,850 per month.

Table 3: Details of Family Variables among CG

Variables	N	Minimum	Maximum	Mean
Reinforcement (FIPS)	14	14	25	19.78
Social support (FIPS)	14	18	36	27.64
Role (FIPS)	14	44	67	55.57
Communication (FIPS)	14	54	73	63.86
Cohesiveness (FIPS)	14	26	38	31.86
Leadership (FIPS)	14	24	53	37.93
Total (FIPS)	14	195	272	236.64
Co-dependency total	20	38	80	59.40
F- COPES Total	20	90	144	112.30
Financial burden (FB)	20	0	11	6.30
Routine burden (FB)	20	2	10	6.00
Leisure burden (FB)	20	1	8	4.55
Interaction burden (FB)	20	0	10	5.15
Physical health burden (FB)	20	0	4	1.90
Mental health burden (FB)	20	0	4	1.65
Subjective Burden (FB)	20	0	2	1.40
Burden total (FB)	20	5	45	26.95
Physical health (QOL)	20	42.86	87.71	66.07
Psychological health (QOL)	20	12.50	83.33	52.92
Social Relationships (QOL)	20	25	83.33	56.67
Environment (QOL)	20	31.25	81.25	60.31
QOL Total	20	111.61	335.62	236.03

[1.]   **FIPS** - Family Interaction Pattern;   [2]**F-COPES** - Family Crisis Oriented Personal Evaluation   Scale;
[3]**FB** - Family Burden Interview schedule;   [4]**QOL** - Quality Of Life Scale

Table 3 shows that the mean value on Reinforcement dimension of FIPS is 19.78, indicating moderate level of reinforcement in the family. The mean value of 27.64 in social support dimension shows social support level is moderate. The value of mean is 55.57 in role functioning dimension indicates lower level of role functioning, while the mean value of 31.86 on cohesiveness dimension also depicts lower level of cohesiveness. The mean value of 37.93 on leadership dimension indicates moderate level of leadership. A moderate to lower level of interaction in all dimensions is reflected in the total mean value of 236.64 with the range of 195- 272, in FIPS.

With respect to level of co-dependency and coping, the mean value 59.40 shows a moderate level and the mean value 112.30 indicates lower level of coping in the family.

The mean value on financial burden is 6.30 indicating is burden higher level, while the mean value on disruption of routine family activities is 6.00, which also indicates higher level of disruption in routine work. With respect to the disruption in family leisure, the mean of 4.55, shows leisure time is in lower level of, while the mean value of 5.15 shows higher level of family interaction problem. The burden scale of physical health indicate mean of 1.90, showing an average level burden in the family. The mean value of 1.65 shows the effect on affect on mental health burden, shows an average level of mental health burden in the family. The mean value on subjective burden is 1.40; indicating burden is higher level in the family. The overall mean score on family burden is 26.95, indicates burden is higher level of in the family.

The mean value on physical quality of life is 66.07 which indicates a physical quality of life is higher level, while the mean value of 52.92 on quality of life in the area of psychological, shows a lower level of psychological health. With respect to social quality of life & environmental health mean value are relatively high i.e. 56.67 & 60.31 respectively indicates higher social & environmental quality of life.

Table 4 : Correlation among socio demographic details, patterns of alcohol use and family variables:

	PAGE	PINC	DOA	CAGE	C INC	APQ	AASE	FIPS	COD	COP	FB	PhyQ	PsyQ	SocQ	Env Q
PAGE	1														
PINC	-.156	1													
DOA	.506*	-.166	1												
CAGE	-.329	-.053	-.041	1											
CINC	.004	.264	.108	-.024	1										
APQ	.090	.321	.058	-.334	.119	1									
AASE	.143	-.255	.022	-.069	-.246	-.490*	1								
FIPS	-.090	.114	-.354	.313	.059	.218	-.189	1							
COD	-.020	.286	-.369	.045	-.225	.140	-.076	.053	1						
COP	-.293	.164	-.023	.161	.323	-.155	-.267	-.583*	-.368	1					
FB	-.018	-.169	.029	-.224	-.417	-.058	.060	-.258	.221	-.171	1				
PhyQ	.020	-.086	.354	-.122	.292	-.020	.095	-.738**	-.587**	.409	-.142	1			
Psy Q	-.020	.055	.338	-.166	.144	-.015	.046	-.477	-.454*	.432	.052	.723**	1		
SocQ	-.004	-.152	.083	.168	.322	-.183	-.146	-.134	-.431	.461*	-.548*	.422	.491*	1	
EnvQ	.185	.011	.347	-.447*	.338	.411	-.295	-.433	-.466*	.334	.002	.642**	.771**	.456*	1
*. Correlation is significant at the 0.05 level (2-tailed).															
**. Correlation is significant at the 0.01 level (2-tailed).															

P AGE – Patient's Age; P INC- Patients Income; DOA – Duration of alcohol addiction; C AGE- Caregiver actual age; C INC- Caregiver income; APQ - Alcohol Problem Questionnaire total; AASE - Alcohol Abstinence Self Efficacy; FIPS - Family Interaction Pattern; COD- Codependency Score; COP- Coping total score – F-Copes; FB - Family Burden;PhyQ – Physical health quality of life; PsyQ - Psychological health quality of life; SocQ- Social relationships quality life and EnvQ – Environmental quality of life. As table 4 shows there is a positive correlation (r = 0.506, p<0.05) between the age of the patient and the span of alcohol use and a negative correlation (r= - 0.447, p<0.05) between care giver's age and their environmental quality of life. A negative correlation (r= - 0.490, p<0.01) between the alcohol use and abstinence rate among patients is also observed.

There is negative correlation (r= - 0.583, p<0.05) between family interaction pattern and the coping and (r= - 0.738, p<0.01) between family interaction pattern & physical quality of life of care givers.

Negative correlation (r= -0.587, p<0.01) between co dependency and physical, (r = -0.454, p<0.05), psychological (r= -0.466, p< 0.05) and environmental quality of life among caregivers is observed.

A positive correlation is observed (r= 0.461, p<0.05) between coping pattern and social relationship and a negative correlation (r= -0.548, p<0.05) between burden and social relationship of caregivers.

The results show a significant relationship between the patient's drinking behaviour and the family's burden, interaction, co-dependency and quality of life.

IV. DISCUSSION

Alcoholism is an extensive public health problem around the world (WHO, 2010). There is prevailing agreement that the ill effects of alcohol dependency on the life partners and family members of PWADS are enormous (Kathleen M. Rospenda et al 2010).The vastness of the problem in India significantly shows, that India is the second largest populated in the world, out of which 33% of its population is consuming alcohol (Rehm J, 2003).

In the current study all PWADS are males, their profile shows most of them are married, usually occupied as agriculturist and drivers and hailing from Nuclear Family and Lower Social Economic Status.

Mean age of PWADSs is shows they are in their third decade of life; shows quite similar to earlier study (Hans Joachim Salize, 2013).

Mean score of APQ shows moderate level of alcohol related problem to PWADS. This also indicates the long duration (7.4 years) alcohol use has direct ill effect on their physical emotional and financial areas of life. This also shows similarity with other study (Alex G and et al 2006, Shanti Ranganatan 2000).

Score of AASE shows moderate level of self efficacy in being abstinent which is directly related to moderate level of alcohol related problems in the family. This clearly shows when there is moderate level of abstaining from alcohol leads to moderate level of alcohol related problems to PWADS and CGs. In the current study the typical profile of CGs are most of them are female, usually wives with the mean age of 35.65 years usually home makers hailing from lower socio economic status. This is consistent with the strong presence of women looking after their family members were had wives, mothers, sisters and daughters (Samira Reschetti Marcon et al 2012; Lopez AD et al. 2006) found in the literature.

As the PWADS becomes less predictable, less reliable, care givers loose self-confidence and isolate from external contact to protect themselves from further embarrassment. They suffer from financial problems as well as emotional problems like embarrassment, guilt, hurt, anger, frustration, loneliness, fear, hopelessness and grief (Senthil et al 2015). The primary care giver of the PWADS suffers from co-dependency, a pattern of living and coping based on set of dysfunctional rules within the family system due to preoccupations and an extreme emotional dependence of PWADS.(Uzma Zaidi,2015)

The total mean score of FIPS shows lower level of family interaction pattern in the area of reinforcement, social support, role in the family, communication, cohesiveness taking leadership qualities. As the PWADS become less predictable and less responsible, other family members need to fulfil these responsibilities including financial support. This leads to poor communication in the family. This finding is consistent with other study. (Theodore Jacob, 2006, Alex Get al, 2006).

The result shows moderate level of Co-dependency among care givers. This is in consistent with other study (Suzanne Kane 1999; C. Stanley, 2008). This is a pattern of living and coping based on a set of dysfunctional rules within the family system due to pre occupations and an extreme emotion dependence on the PWADS.

Burden and Quality of life has emerged as an important treatment outcome measure for alcohol dependence whose natural course comprises of remission and relapse. QOL is a multidimensional construct that incorporates the physical, mental, psychological, social and spiritual functioning of the individual. It helps to understand the effects of the disease on the patient (Tetyon Persons , 2003) and their caregiver. QOL is an important parameter that provides an insight into how a disorder impacts life of those affected. Among various psychiatric disorders, alcohol- related disorders significantly affect QOL, but this area has not been extensively studied.

The current study shows higher level of family burden in the area of financial, routine work, leisure, interaction, physical health, mental health and subjective burden. This is similar with earlier study (Kalhleen M Rospend PhD, et al 2010). This study shows substantial impairment in quality of life in all the domain. Earlier studies reported similar trends (Samira Reschetti Marcon et al 2012, Mannelli 2013).

Study shows negative co-relation between problem with alcohol abuse and alcohol abstinent rate. This indicates higher the abstinent rate lower the alcohol related problems. This is in similar to earlier study report. (Howmick, 2001, Suman Borah et al 2016). As the period of abstinence increases heath of PWADS improves, behaves in better way, interaction in family improves, burden reduces and quality of life improves in family.

The significant negative co – relation between co – dependency and physical, psychological and environmental quality of life of care givers, indicates that higher the co – dependency lower is the quality of life clearly says that when co-dependency is high, hard for the CGs to control their own emotions to coordinate daily family functioning which leads to dysfunction in the family, lowers the quality of life.

Positive co – relation between coping pattern and social relationship shows that higher the coping pattern, then higher is the social relationships. Further negative relation between burden and social relation also indicates that higher the burden, lower is the social relationships. This result emphasis that burden on CGs has direct effect on social relationships. When the burden is high socializing takes back seat. When there is better

coping skill higher the social relationships. Positive co – relation between physical & psychological quality of life, physical and environmental quality of life, psychological & social relationship is observed. In addition positive co – relation with respect to Psychological & environmental quality of life, social relationship & environmental quality of life, significantly shows how different dimensions has positive influence to each other with quality of life of CGs.

V. CONCLUSION

This study shows that, there is significant relationship between PWADS drinking behaviours and family burden, interaction, co – dependency and quality of life. This analysis also indicates that the current study method could be adopted for long-term result oriented research approach with respect to dealing with PWADS and their CGs. Implications of this study would help to understand the relevance of social work interventions to PWADS and their Care Givers there by guiding to higher research avenues .

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