

A comparative study on behavioural problems in children of alcohol dependent parents

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Abstract

Background: There is a tremendous increase in the pace and stress of life which may be the reason to increase the need for alcohol intake as a stabiliser for working class and causes tendency to alcohol dependency in long run process; which creates harm not only to the person who intakes alcohol persistently but also produces agony to family members. When one or both the parents are alcohol-dependent, usually children are the victims of behavioural abnormality.

Material and methods: A group of 60 children of four to 18 years of both sex of parents, who consume alcohol regularly (in experimental group) and those who don't consume (control group), was collected.

Results: The mean age of children of alcohol dependents (COADs) was 13.13 ± 4.42 (mean \pm standard deviation [SD]) years where as that of children of non-alcohol dependents (non-COADs) was 11.80 ± 4.17 (mean \pm SD). COAD group was significantly more educated than the control group. COAD group (21.30 ± 15.48 , mean \pm SD) had significantly higher total Child Behavior Checklist (CBCL) scores as compared to the non-COAD counterparts (5.63 ± 4.42 , mean \pm SD). There were significant differences in both groups for selected CBCL items. Girls have significantly more internalising behavioural problems e.g. feel dizzy. Externalising problems, especially conduct problems are represented more in boys than girls of alcohol dependents.

Conclusion: It has been found that the prevalence of behaviour problems in COADs was higher whereas in non-COADs it was much lesser.

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Introduction

Behavioural or emotional problem is manifestation of extremely difficult and challenging behaviours that are outside the norm according to age; characterised by oppositional defiant disorder (ODD), conduct disorder (CD) and attention deficit hyperactivity disorder (ADHD). It adversely affects educational performance, including academic, social, vocational or personal skills.[1] It is estimated that 6.6 million children of age under 18 years live in the family with at least one alcohol-dependent parent.[2] In addition, genetic studies indicate that alcoholism tends to run in families, generation after generation; so that a genetic vulnerability for alcoholism exists.[3-5] Children of alcohol dependents (COADs) reported to have an elevated risk for externalising, attention problem, aggression and delinquency[6] and conduct of antisocial personality disorder.[7,8] Other research[1] suggests that these children are at risk for a range of cognitive, emotional, and behavioural problems. Longitudinal research suggests that these behavioural problems are robust predictors of future alcohol-dependency or other addiction-disorders.[9] The results of several studies have shown that children from alcohol dependent families report higher levels of depression and anxiety and exhibit more symptoms of generalised stress (i.e. low self-esteem) than

do children from non-alcohol dependent families.[10,11] But some investigators also stated that many children from alcohol dependent homes develop neither psychopathology nor alcoholism.[12]

Common behavioural manifestation of children of alcohol-dependents: Child and adolescent psychiatrists know these children are at greater risk for having emotional problems than children of non-alcohol dependent parents (non-COADs). COADs are commonly victim of negligence or abuse. Living with chronic alcoholics, can create stress to all family members, but reaction of the various members of family may be different. The COPDs' behavioural pattern depends more on the level of resiliency of their non-alcoholic parent than alcohol dependent one. Children living with a non-recovering alcohol dependent parent score lower on intellectual-cultural orientation, family cohesion, active-recreational orientation, and independence. Their growth may be hampered according to desirable manner of development.[13]

Children of alcohol dependents score lower on tests measuring verbal ability—COADs tend to score lower on tests that measure cognitive and verbal skills. Their ability to express themselves may be impaired, which can affect their

school performance, peer relationships, ability to develop and sustain intimate relationships, and hamper performance on job interviews. Low verbal scores, however, should not imply that COADs are intellectually impaired.[14]

Children of alcohol dependents often have difficulties in school—COADs are more likely to be raised by parents with poorer cognitive abilities and in an environment lacking stimulation. Preschool aged COADs exhibited poorer language and reasoning skills than did non-COADs. COADs are more likely to be truant, drop out of school, repeat grades, or be referred to a school counsellor, or psychologist especially due to low self-concept. They may have difficulty bonding with teachers, other students and school; they may experience anxiety related to performance; or they may be afraid of failure.[15,16]

Children of alcohol dependents have greater difficulty with abstraction and conceptual reasoning—COADs might require very concrete explanations and instructions. Due to continuous fighting, arguments and conflicts; the child is robbed of attention, consistent discipline and a trustworthy environment. The family conflicts are painful to the child who is not only physically but also psychologically pushed aside. Study findings suggest that these children exhibit such problems as lying, stealing, fighting, truancy, and school behaviour problems, and they often are diagnosed as having conduct disorders.[17] Some theorists[17] have examined trajectories of disruptive behaviour problems from preschool to early adolescence in 302 boys from a community-recruited sample of high-risk families. Growth modeling showed that paternal alcoholism was associated with elevated levels of son's disruptive behaviour problem.[17]

Barnow et al.[18] aimed to evaluate the prevalence of externalising symptoms, such as attention problems, aggression and delinquency in the offspring of alcohol dependents. A total of 146 children were divided into three groups (group one, n=28), one or two (group two, n=103) and three or more (group three, n=15) first or second-degree relatives with an alcohol use disorder. Result and conclusion showed that the children of group three had significantly higher values for the Child Behavior Checklist (CBCL) scales of attention and delinquent behavioural problems.

Furtado et al.[19], in the Manheim Study of Risk Children, an ongoing prospective study of high risks, the data of 219 children (26 COADs and 195 non-COADs), were analysed from birth to the age of 11 years. Results showed a significantly higher rate of symptoms and disorder were found in children of alcoholic fathers from the age of two years onwards. Finally in the conclusion it has been noted that, the children of alcoholic fathers represent a group at risk for early onset of psychiatric problems and are deserving of more attention in prevention and early intervention programs.

Some scientists[20] investigated that, there are subtypes of antisocial personality disorder (ASPD) as manifested by distinctive symptom profiles or by associations with alcohol or other drug dependence or other psychiatric disorders. Bucholz et al.[20] collected data on 38 symptoms of ASPD (including childhood CD) from parents, their relatives and controls recruited for the collective study on the genetics of

alcoholism which were analysed using lateral class analysis. Overall, findings from both men and women did not support the existence of subtypes of ASPD but rather indicated a disorder distributed on a severity spectrum.[20]

Some study[21] showed structural equation modeling to test the hypothesis that parental distress would mediate the relations between parental lifetime alcohol and physical health and child behaviour problems. Participants were 182 alcohol-involved families and 83 matched controls with three to five years old biological sons. Results showed that sons of parents with alcohol and physical health problems at elevated risk for behaviour problems, partly related to the increased levels of distress their parents are experiencing.

Hill et al.[22] examined the relative importance of prenatal exposure to cigarettes and alcohol and familial/genetic susceptibility for alcohol dependence in the aetiology of childhood psychopathology. A longitudinal prospective study of 150 children/adolescents (51.3% male), who were at either high or low risk for developing alcohol dependence because of their familial loading for alcoholism, provided multiple diagnostic assessments (n=318) of these subjects. Results indicated that internalising and externalising disorders were found to be associated with familial loading for alcoholism and parental exposure to cigarettes and alcohol.

Conners et al.[23] examined the association between prenatal alcohol exposures and self-report of depressive symptoms in five to six years old children. Higher levels of prenatal alcohol exposure were hypothesised to be associated with endorsement of a greater number of depressive symptoms in children. It was also hypothesised that maternal depression would contribute independently to outcome. Finally the children as well as current drinking practices were postulated to mediate the relationship between prenatal alcohol exposure and child depressive symptoms. Forty one mother child dyads who had been followed longitudinally since the children were one year of age completed self-report questionnaires for maternal and child depression. Results revealed that prenatal alcohol exposure, maternal depression and child gender seemed to be highly associated with child depressive symptoms. Girls who had higher level of prenatal alcohol exposure and whose mother acknowledged higher levels of depression endorsed the highest number of depressive symptoms.

Method

The present study has been done with the objectives:

1. To identify behavioural problems in COADs.
2. To prepare a self-help group for wives of alcohol dependent to share their problems.
3. To make the family members aware of behavioural problems in their children.
4. To make them avail the facility of awareness regarding substance abuse in de-addiction.

The study was conducted at Central Institute of Psychiatry, Ranchi, India during 2004-05.

Sampling: A group of 60 children of four to 18 years of both sex of parents, who consume alcohol regularly (in experimental group) and those who don't consume (control

group), was collected. Children with psychiatric illness or of mental retardation were excluded.

Tools:

1. Sociodemographic data sheet.
2. General Health Questionnaire-5 (GHQ- 5).[24]
3. Alcohol Use Disorder Inventory Tool (AUDIT).[25]
4. CBCL.[26]

Procedure of data collection: Prior permission was taken from the parents of the experimental and control groups. The parents of experimental group, who consumes alcohol regularly was screened for alcohol dependence, using the AUDIT, as well as the parents who were diagnosed as alcohol dependence syndrome according to the tenth revision of the International Statistical Classification of Diseases and Related Health Problems (ICD-10)[27] diagnostic criteria were also taken for the study and were further assessed using the GHQ-5. In the control group, the children were matched with age, sex, and socioeconomic status and the non-alcohol dependent parents were assessed using the GHQ-5. Then to both the experimental and control group (60 children), a description of the items in the checklist (CBCL) was provided.

Statistical analysis: Statistical Package for Social Sciences (SPSS) for Windows Version 11.1 was used in this study. Descriptive statistics, Klotmogrov-Smirnov Test to estimate the characteristics of the sample; t-test, Z-test, and Pearson’s r analysis were applied as per their basic assumptions.

Results

Table 1 describes the demographic variables, which shows that out of a total sample size of 30 children in experimental group, 18 were males (60%) and 12 were females (40%), while in control group, 11 were males (36.7%) and 19 were females (63%). All the children in the experimental group were Christians and belonged to scheduled tribe (ST) category, while in control group 12 (40%) belonged to Hinduism, 11 (36.7%) children belonged to Muslim religion (36.7%), and five (16.7%) belonged to ‘others’ group (tribal community). The differences were significant in statistical terms. In control group, nearly two-thirds of children belonged to other backward castes (OBC) category. Nearly half of the experimental group (31 [51.7%]) children had less than three siblings whereas in control group, 29 (48.7%) had more than three siblings.

Table 1. Group differences in demographic variables

Item		Alcohol dependent (n=30)	Non alcohol dependent (n=30)	χ ²	p
		n (%)	n (%)		
Sex	Male	18(60.0)	11(36.7)	3.27	0.60
	Female	12(40.0)	19 (63.3)		
Religion	Hindu	-	12(40.0)	5.26	.000***
	Muslim	-	11(36.7)		
	Christian	30(100.0)	2(6.7)		
	Others	-	5(16.7)		
Category	General	-	2(6.7)	37.29	.00***
	OBC	-	20(66.7)		
	SC	-	1(3.3)		
	ST	30(100.0)	7(23.3)		
Socio-economic status	High	-	-	-	-
	Middle	-	-		
	Low	30(100.0)	30(100.0)		
Family type	Joint	2(6.7)	-	1.439	.155
	Nuclear	28(93.3)	30(100.0)		
Siblings	Less than 3	16(53.33)	14(46.66)	.766	.447
	More than 3	14(46.66)	16(53.33)		

* p ≤ 0.05; ** p ≤ 0.01; ***p ≤ 0.001

table 2. Differences between COAD and non-COAD for continuous variables

Item	COAD (n=30)	Non-COAD (n=30)	t	p
	(mean ± SD)	(mean ± SD)		
Age	13.13±4.42	11.80±4.17	1.20	1.33
Education	7.53±3.01	5.63±3.63	2.20	.031*
Total CBCL scores	21.30±15.48	5.63±4.42	5.21	.000

*p ≤ 0.05

Table 2 shows the mean age of COAD was 13.13 ± 4.42 (mean ± SD) years where as that of non-COAD was 11.80 ± 4.17 (mean ± SD). The table also shows that COAD group was significantly more educated than the control group. Importantly, COAD group (21.30 ± 15.48, mean ± SD) had significantly higher total CBCL scores as compared to the non-COAD counterparts (5.63 ± 4.42, mean ± SD).

Table 3. Group differences for selected CBCL items between COAD and non-COAD

CBCL items	Variable no. in CBCL	χ ²	p
Acts too young for his/her age	1	13.93	.001***
Argues a lot	3	13.60	.003**
Can't concentrate, and can't pay attention for long time	10	7.76	.020*
Refuses to talk	65	6.06	.031*
Repeats certain acts and over compulsion	66	6.66	.036*
Steals at homes	81	5.47	.006**
Stubborn, sullen, or irritable	86	5.09	.007**
Sudden change in mood or feelings	87	6.44	.004**
Talks or walks in sleep	92	5.45	.00**
Talks too much	93	10.65	.005**
Unhappy, sad or depressed	103	10.52	.005
Withdrawn doesn't get involved with others	111	21.09	.000***

* p ≤ 0.05; ** p ≤ 0.01; ***p ≤ 0.001

Table 4. Differences in CBCL summary scores in COAD and non-COAD groups

CBCL summary scores	COAD (n=30) (mean ± SD)	Non-COAD (n=30) (mean ± SD)	t	p
Externalising behaviour	6.70±5.89	1.83±2.64	4.12	0.00***
Internalising behaviour	7.23±5.42	1.60±1.61	5.45	0.00***
Social problems	0.96±1.15	0.10±. 30	3.96	0.00***
Thought problems	3.33±. 182	.50±1.16	2.16	0.04**
Attention problems	2.60±2.58	0.33±1.12	4.41	0.00***

*p ≤ 0.05; ** p ≤ 0.01; ***p ≤ 0.001

The chi square (χ^2) matrix shows (table 3) significant differences in both groups (COAD and non-COAD) for selected CBCL items. No significant differences were observed between the two groups for other CBCL items (101). Notably, none of the CBCL items were found to have a significantly higher representation in non-COAD as compared to COAD group.

Table 6 shows externalising problems, especially conduct problems to be represented more in boys than girls of alcohol dependents, and the differences show positive trends towards significant differences.

Table 7 shows that although there are significant differences in individual items, the mean total scores as represented by various domains do not show any significant differences.

Variables		Gender (n=60)		χ^2	p
		Boys (n=29) n (%)	Girls (n=31) n (%)		
Fears certain animals, situations or places	Very true	3 (100)	-	4.95	.08
	Somewhat true	-	3 (100)		
	Not true	27 (49.1)	28 (50.9)		
Feels dizzy	Very true	-	3 (100)	6.01	.05*
	Somewhat true	3 (100)	-		
	Not true	26 (48.1)	28 (51.9)		
Sleep more than most children during day or night	Very true	3 (33.3)	6 (66.7)	5.13	.07
	Somewhat true	4 (100)	-		
	Not true	22 (46.8)	25 (53.2)		
Steals at homes	Very true	2 (100)	-	8.41	.01**
	Somewhat true	5 (100)	-		
	Not true	22 (41.5)	31 (58.5)		
Uses alcohol or drugs	Very true	5 (83.3)	1(16.7)	5.83	.05*
	Somewhat true	2(100)	-		
	Not true	22(42.3)	30(57.7)		

*p ≤ 0.05; ** p ≤ 0.01; ***p ≤ 0.001

Table 5. Gender differences in behavioural problems across total sample

Table 4 shows significant differences of summary scores on CBCL, in both the groups. In all these summary scores, COADs scored high in comparison to non-COADs. It also reveals that there was significant difference in both the groups at 0.01 and 0.05 levels. That reflects more behavioural problems in COADs group in comparison to non-COADs.

Table 5 shows gender differences in CBCL items for the total sample. Girls had significantly more internalising behavioural problems e.g. feel dizzy. On the other hand boys show significantly more externalising behaviour such as steals at homes, use of alcohol or drugs.

Discussion

All COADs belonged to ST category and more than 60% belonged to one form of reserved category or the other. This finding is similar to a previous study from the same institute,[28] which found sociocultural influences to have an important bearing towards alcohol intake i.e. alcohol drinking was found to be more culturally acceptable in the tribal population.

Externalising problems include rule-breaking behaviour (e.g. breaks rules, lacks guilt, bad friends, lies, steals, swears, truant, uses drugs, etc.), aggressive behaviours (e.g. argues a lot, defiant, mean, destroys things, explosive, has

Variables		Gender (n=60)		χ^2	p
		Boys (n=18) n (%)	Girls (n=12) n (%)		
Cruel to animals	Very true	-	2 (100)	3.21	.07
	Somewhat true	-	-		
	Not true	18 (64.3)	10 (35.7)		
Steals at homes	Very true	1 (100)	-	5.00	.08
	Somewhat true	5 (100)	-		
	Not true	12 (50)	12 (50)		
Sulks a lot	Very true	-	2 (100)	3.21	.07
	Somewhat true	-	-		
	Not true	18 (64.3)	10 (35.7)		
Threatens people	Very true	-	2 (100)	5.00	.08
	Somewhat true	-	1 (100)		
	Not true	18 (66.7)	9 (33.3)		
	Very true	-	2 (100)		
Trouble sleeping	Somewhat true	-	-	3.21	.05*
	Not true	18 (64.3)	10 (35.7)		

* p ≤ 0.05

Table 6. Gender differences in selected CBCL variables in children of alcohol dependents

temper, loud, threatens, etc.). This study is in agreement with previous studies,[21] which show significantly higher externalising problems in COAD population than those of non-COADs.

Internalising behaviour problems include anxious/depressed mood (e.g. cries a lot, numerous fears, nervous, worries, feels worthless, self-conscious, feels too guilty, etc.), having a depressed mood and being withdrawn (e.g. enjoys little, shy, timid, sad, lacks energy, likes to be alone, etc.) and having somatic complaints (e.g. feels dizzy, overtired, aches, headaches, nausea, eye problems, stomach problems, etc.). As observed in previous studies,[29] this study shows significantly higher internalising problems in COAD population than those of non-COADs.

Behavioural problems in the social domain include being dependent on others, poor interpersonal relationship, gets teased a lot, not liked by others, overweight and preference to play with younger children. This study shows significantly higher social problems in COAD population than those of non-COADs. In the present study the COADs score higher in social problems compared to the non-COADs, who scored much lesser.

Attention problems include attention and concentration problems, being confused, restless and hyperactive, excessive day dreaming, impulsive behaviour, being tense and poor academic performance. This study is in agreement with previous studies,[30] which show significantly higher attention problems in COAD population than those of non-

COADs. In this domain, COADs scored higher in thought and attention problems compared to the non-COADs.

Excessive drinking by one or more family member results in several negative consequences for others in the family, especially for the wife and children of the male drinker. These effects are particularly serious for poor families. Much of the family income may be used to buy alcohol, wages may decline and the drinker may eventually lose his job. In such a situation, other family members including children are forced into work, often in low paid, hazardous jobs. Children may be unable to continue their schooling and may also suffer from nutritional deficiencies because there is not enough to eat at home. Poverty and lack of proper education are important factors contributing to increased behavioural problems.[31]

A study[32] examined possible risk factors associated with child adjustment in a sample of alcohol abusing fathers in Norway. Important risk factors that emerged from the study included socioeconomic status, severity of the fathers' alcohol abuse, parental psychological problems and family functioning. Although socioeconomic status was controlled in the present study, the wider impact of social problems contributing to increased behavioural problems in COADs cannot be ignored.

Interestingly, a study that underlines socioeconomic status as one of the determinants of behavioural problems in COADs, observed that factors such as low socioeconomic status and familial comorbidity if controlled, children from

Table 7. Gender differences in summary scores of CBCL in COAD

Variables	Boys (n=18) (mean ± SD)	Girls (n=12) (mean ± SD)	t	p
Externalising behaviour	6.33±5.19	7.25±7.02	.041	0.68
Internalising behaviour	7.94±5.40	6.17±5.52	0.88	0.39
Social problems	0.89±1.13	1.08±1.24	0.44	0.66
Thought problems	0.56±1.38	0.42±0.79	0.31	0.76
Attention problems	2.83±2.71	2.25±2.45	0.60	0.55

high-risk families with a multi-generational history of alcoholism or alcohol abuse, had similar rates of childhood disorders, when contrasted with low-risk children from community control families.[33] The home environment of alcohol dependent families is one of much conflict, abuse and neglect and violent acts among siblings.[33] Research indicates that child's pathway into risk for later alcohol use is not simply mediated by parental alcoholism and parental alcoholism influences adolescent substance use through several different pathways including stress, negative affects and decreased parental monitoring.[33]

Also, COADs are more likely to be raised by parents with poorer cognitive abilities and in an environment lacking stimulation. A lack of stimulation in the rearing environment may account in part for the pattern of failure found in COADs compared with non-COADs.[34] A previous study has shown that the homes of the "disturbed children" are characterised by greater exposure to the effects of parental drinking, more parent-child conflict and less parent-child interaction than the homes of the children who received no diagnoses. The child rearing practices of alcohol dependent fathers are more likely to be rejecting, harsh and neglecting.[35] Thus, poor parenting may be one of the contributor factors for increased behavioural problems in COAD population. Results of several studies have shown that COAD families report higher levels of depression and anxiety and exhibit more symptoms of generalised stress (i.e. low self-esteem) than do from non-COADs mainly because of poor coping strategies.[36]

Conclusions

The prevalence of behaviour problems in COADs was found to be higher whereas in non-COADs it was much lesser. Prevalence of behaviour problems was found to be high in Christian tribals, compared to Hindu and Muslim population. Religion, socioeconomic status and cultural factors had significant association with the prevalence of behaviour problems. Most of the COADs had high scores in both internalising and externalising behaviour problems; whereas non-COADs scored less in both the areas. Maximum numbers of males have internalising problems whereas females have high scores in externalising problems. There are significant differences in domain of social problems, thought problems and attention problems in both the groups but COADs' group scored high in all the domains. That shows high behaviour problems in COADs compared to non-COADs.

Further reading

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