

# A Case Control Study on School Dropouts in Children of Alcohol-Dependent Males Versus that in Abstainers/Social Drinkers' Children

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## ABSTRACT

**Objective:** To study and compare the children of alcohol-dependent males versus those in a socio-demographically similar control group, the occurrence of school dropouts, and to examine the link between certain factors like parental education and socioeconomic status on school dropout. **Materials and Methods:** This was a community-based case control study. The participants were 107 family units in both study group (alcohol-dependent male, wife, at least one child less than 14 years of age) and control group (abstainer/social drinker, wife, at least one child less than 14 years of age). It was conducted in an urban slum community in Mumbai. Interview technique was used for data collection. The study was conducted for a period of 1 year. **Statistical Analysis:** Using software SPSS version 17.0, percentages, Chi-square test. **Results and Conclusion:** The number of school dropouts was significantly higher (45.31%,  $P < 0.001$ ) in the children of alcohol-dependent males as compared to 22.47% in the abstainers/social drinkers' children. In the study group, there was higher number of school dropouts among boys (52.73%,  $P < 0.05$ ) as compared to girls (35.37%). There was a statistically significant association between parental illiteracy and school dropout in children in both the groups. In the control group, significantly higher number of school dropouts of socioeconomic class IV and V had dropped out as compared to those of socioeconomic class III and II.

**Keywords:** Case control study, children of alcohol dependent males, school dropout

## Introduction

Alcohol use and disorders are a major public health problem. Alcohol abuse in poor and deprived communities is particularly deleterious as the scarce financial resources of the family needed for food, health care, and education are diverted to alcohol.<sup>[1-4]</sup> Alcoholism is a family disease – one that affects every member of the family in a devastating way. Because the entire family revolves around the alcoholics' behavior, the children are often second best, and the children's problems are often invisible.<sup>[5,6]</sup> One in four children is exposed to family alcohol abuse or dependence.<sup>[7]</sup> An extensive amount of research has been conducted on the psychosocial correlates,<sup>[8,9]</sup> cognitive, behavioral, and emotional aspects,<sup>[10,11]</sup> psychological functioning,<sup>[12]</sup> nutritional neglect and physical abuse,<sup>[13]</sup> social competence,<sup>[14]</sup> dysfunctional family environment,<sup>[15]</sup> and alcohol abuse<sup>[16]</sup> in children of alcoholics,

although relatively few studies have addressed these children's school adjustment.<sup>[17]</sup> The upheaval that typifies the alcoholic household interferes with the children's concentration in and out of school. Poverty conditions combined with parental alcoholism contribute to dropping out of school in the children. Various studies<sup>[6,11,18]</sup> show that children of alcoholics constitute an at risk population for poor performance, skipping school days, and school dropout. Education is universally recognized as an important investment in human capital. It contributes to socioeconomic development by endowing individuals with the means to improve their health, skills, knowledge, and capacity for productive work.<sup>[19]</sup> Especially for the children of alcoholics it forms vital tool of escape from an abusive and unhealthy environment and provides hope for a better future. Keeping this in mind, the current study was conducted in an urban slum community.

## Materials and Methods

The study was conducted in an urban slum community at P/N

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ward of B. M. C., Mumbai, the field practice area adopted by a teaching institute and hospital of Greater Mumbai.

### Study group selection criteria

Family unit consisting of alcohol dependent male (diagnosed by DSM criteria IV),<sup>[20]</sup> wife, and at least one child less than 14 years of age, with no other substance abuse, excluding tobacco, with no other coexisting psychiatric illness [Table 1].

### Control group selection criteria

Family unit consisting of abstainer\*/social drinking male, wife, and at least one child less than 14 years of age, with no other substance abuse, excluding tobacco, with no other coexisting psychiatric illness.

(\*Abstainer – never drinks;<sup>[21]</sup> social drinker – drinks on infrequent occasions, ranging from less than once a month up to 1-2 times per week. No more than two drinks at a time.)

Socioeconomic classification was done as per the modified method of social classification (urban) by Kuppuswamy.<sup>[22]</sup> The alcohol-dependent males were diagnosed at the mental health outpatient department at the slum community’s urban health center. Their wives and children were visited at their houses in the community and interviewed. One hundred and seven family units were identified during the study period. The control group was selected from the neighborhood of the study group. House with first number in the same plot as the study group was considered. If the criteria of control group family unit were not fulfilled, the next serial order house was considered and so on till the same number of control group family units was obtained as the number of study units in that plot. Data collection was done by personal interview technique using a semi-structured questionnaire. Initially 10-15 minutes were spent on rapport building, the nature of the study was explained and consent taken. The entire study period was of 1 year. After collection, the data were analyzed using software SPSS; percentages and Chi-square test of significance were applied [Table 1].

## Results

Males (alcohol dependent, abstainers/social drinkers) were in the age range of 20-59 years and their wives ages ranged from 18 to 54 years. A majority of the families were nuclear type 87 (81.31%) and 94 (87.85%), while 20 (18.69%) and 13 (12.15%) were joint families in the study and control groups, respectively, a common feature of urbanization.

Table 2 shows the age-wise distribution of children.

School dropout was found to be significantly higher (45.31%,  $P < 0.001$ ) in the children of alcohol-dependent males as compared to (22.47%) in the abstainers/social drinkers’ children [Table 3]. There were seven and five repeaters among the schooling children in the study and control groups, respectively. Maximum number of dropouts was seen between 5<sup>th</sup> and

8<sup>th</sup> standards in both the groups. 58% in the study group had dropped out between 5<sup>th</sup> and 7<sup>th</sup> standards, while in the control group 67% had dropped out after 7<sup>th</sup> standard. In the study group, there was higher number of school dropouts in boys (52.73%,  $P < 0.05$ ) as compared to girls (35.37%) [Table 4].

**Table 1: Educational status of males, wives, and socioeconomic classification of both groups**

Educational and socioeconomic status	Study group (%)	Control group (%)
Educational status of males		
Higher secondary	2 (1.87)	3 (2.80)
Secondary	10 (9.35)	15 (14.02)
Primary	48 (44.86)	55 (51.40)
Illiterate	47 (43.92)	34 (31.78)
Educational status of wives		
Secondary	11 (10.28)	5 (4.67)
Primary	40 (37.38)	49 (45.80)
Illiterate	56 (52.34)	53 (49.53)
Socioeconomic class		
I	-	-
II	-	2 (1.87)
III	19 (17.76)	26 (24.30)
IV	83 (77.57)	76 (71.03)
V	5 (4.67)	3 (2.8)
Total	107 (100.00)	107 (100.00)

**Table 2: Age-wise distribution of the children**

Age group (years)	Study group children (%)	Control group children (%)	Total (%)
6-10	77 (44.10)	89 (39.21)	166 (39.62)
11-15	70 (36.46)	101 (44.49)	171 (40.81)
≥16	45 (23.44)	37 (16.30)	82 (19.57)
Total	192 (100.00)	227 (100.00)	419 (100.00)

**Table 3: Distribution of the children based on school dropout/continued schooling**

Status of schooling	Study group children (%)	Control group children (%)	Total (%)
School dropouts	87 (45.31)	51 (22.47)	138 (32.94)
Continued schooling	105 (54.69)	176 (77.53)	231 (67.06)
Total	192 (100.00)	227 (100.00)	419 (100.00)

$\chi^2=24.6$  (df=1); ( $P<0.001$ ) significant

**Table 4: Sex-wise distribution of children based on school dropout/continued schooling**

Sex	Study group children (%)			Control group children (%)		
	School dropouts	Continued schooling	Total	School dropouts	Continued schooling	Total
Male	58 (52.73)	52 (47.27)	110 (100.00)	28 (21.88)	100 (78.12)	128 (100.00)
Female	29 (35.37)	53 (64.63)	82 (100.00)	23 (23.23)	76 (76.77)	99 (100.00)
Total	87 (45.31)	105 (54.69)	192 (100.00)	51 (22.47)	176 (77.53)	227 (100.00)

$\chi^2=5.71$  (df=1); ( $P<0.05$ ) significant;  $\chi^2=0.06$  (df=1); ( $P>0.05$ ) not significant

In Tables 5 and 6, a statistically significant association between parental illiteracy and the number of school dropouts was seen in children of both groups.

In the study group, there was no significant relationship between socioeconomic class (SEC) and the number of school dropouts [Table 7]. In the control group, there was significantly higher number of school dropouts in SEC IV and V as compared to those of SEC III and II.

### Discussion

In this study, the two groups were matched on key sociodemographic variables and the alcoholism of the males (fathers) of the study group children was a major differentiating factor between the two. A significantly larger number of children 45.31% in the study group had dropped out of school as compared to 22.47% in the control group [Table 3]. Similar findings were reported in the studies conducted by Casas-Gil *et al.*<sup>[18]</sup> and in the TISS<sup>[24]</sup> study. In the 100

children studied by Sundari *et al.*,<sup>[23]</sup> 64% were school dropouts and 40% had alcoholic fathers. A significantly higher percentage of school dropouts were present in children with illiterate parents in both groups [Tables 5 and 6]. Khokkar *et al.*<sup>[25]</sup> also found in their study a statistically significant association between literacy status of parents and the desire to educate their children. This may be due to the general apathy of illiterate parents toward education or their inability to appreciate the educational needs of the child particularly in terms of time needed for homework and curricular activities.

In the control group, there was significantly larger percentage of dropouts in children belonging to SEC IV and V (25.54%) as compared to 9.3% in SEC III [Table 7]. Financial constraint is an important factor [Table 8], coupled with low parental motivation, for higher dropout of children of low SEC. In the study by Mohsin,<sup>[19]</sup> 56% students and 70% teachers gave educational expenditures as one of the causes of school dropout. Khokkar *et al.*<sup>[25]</sup> found that financial constraints accounted for 22.22% of dropouts. In the study by Maithly *et al.*,<sup>[26]</sup> financial

**Table 5: Distribution according to educational status of the males and school dropouts in their children**

Educational status of males	Study group children (%)			Control group children (%)		
	School dropouts	Continued schooling	Total	School dropouts	Continued schooling	Total
Literate	43 (35.25)	79 (64.75)	122 (100.00)	28 (17.28)	134 (82.72)	162 (100.00)
Illiterate	44 (62.86)	26 (37.14)	70 (100.00)	23 (35.38)	42 (64.62)	65 (100.00)
Total	87 (45.31)	105 (54.69)	192 (100.00)	51 (22.47)	176 (77.53)	227 (100.00)

$\chi^2=13.13$  (df=1); ( $P<0.001$ ) significant;  $\chi^2=8.72$  (df=1); ( $P<0.001$ ) significant

**Table 6: Distribution according to educational status of wives and school dropouts in their children**

Educational status of wives	Study group children (%)			Control group children (%)		
	School dropouts	Continued schooling	Total	School dropouts	Continued schooling	Total
Literate	27 (30.34)	62 (69.66)	89 (100.00)	13 (14.77)	75 (85.23)	88 (100.00)
Illiterate	60 (58.25)	43 (41.75)	103 (100.00)	38 (27.34)	101 (72.66)	139 (100.00)
Total	87 (45.31)	105 (54.69)	192 (100.00)	51 (22.47)	176 (77.53)	227 (100.00)

$\chi^2=15.01$  (df=1); ( $P<0.001$ ) significant;  $\chi^2=4.9$  (df=1); ( $P<0.001$ ) significant

**Table 7: Distribution according to socioeconomic class (SEC) and dropout**

Socioeconomic class (SEC)	Study group children (%)			Control group children (%)		
	School dropouts	Continued schooling	Total	School dropouts	Continued schooling	Total
III and II	8 (34.78)	15 (65.22)	23 (100.00)	4 (9.3)	39 (90.7)	43 (100.00)
IV	72 (46.15)	84 (53.85)	156 (100.00)	44 (24.58)	135 (75.42)	179 (100.00)
V	7 (53.85)	6 (46.15)	13 (100.00)	3 (60)	2 (40)	5 (100.00)
Total	87 (45.31)	105 (54.69)	192 (100.00)	51 (22.47)	176 (77.53)	227 (100.00)

$\chi^2=1.16$  (df=1); ( $P>0.05$ ) not significant;  $\chi^2=5.23$  (df=1); ( $P<0.05$ ) significant

**Table 8: Reasons for school dropout in the children (multiple responses)**

Reasons for dropout	Study group children (n=87) (%)			Control group children (n=51) (%)		
	School dropouts	Continued schooling	Total	School dropouts	Continued schooling	Total
Financial constraint	23	22	45 (51.72)	8	10	18 (35.29)
Earn income	17	0	17 (19.54)	3	0	3 (5.9)
Help in household chores, take care of siblings (girls)	0	16	16 (18.39)	0	8	8 (15.69)
Attitudes of parents, relatives; adolescence (girls)	2	2	4 (4.6)	1	6	7 (13.73)
Not interested in studies	11	4	15 (17.24)	13	3	16 (31.37)
Tuancy/absenteeism, failures	10	3	13 (14.94)	3	1	4 (7.84)

reason for dropout was given by 40% males and 30% female students. In the study group children, no significant relationship between SEC and dropout was seen as various other reasons besides financial problems contributed to school dropout in these children.

The reasons for dropout differed in both groups as well as between boys and girls of both groups [Table 8]. 19.54% boys in the study group had left to earn. This could be because the maximum family income in the study group is spent on the father's alcoholism, leading to severe financial problems. Similar findings were seen in the study of Sundari *et al.*<sup>[23]</sup> In the TISS study,<sup>[24]</sup> most of the children from alcoholics' homes had dropped out of school to take on financial responsibilities. Hyphantis *et al.*<sup>[27]</sup> in their study found that the alcoholics' families were of low socioeconomic status with increased economic needs so that the adolescents had to work simultaneously with their school education and finally at its expense. Sixteen girls in the study group as compared to eight in the control group mentioned "help in household chores and to look after siblings" as reasons for dropout. In the study group, due to financial crisis, there were many working mothers, so the girls were kept back to help at home. Some even accompanied their mothers as domestic help.

In their study, Khokkar *et al.*<sup>[25]</sup> reported that 53.33% girls were pulled out school to look after their siblings. In the Maithly *et al.*<sup>[26]</sup> study, 7% girls had dropped out to do household work. Pratinidhi *et al.*<sup>[28]</sup> in their study reported that 27.9% girls had dropped out of school as they were required at home for work. Other reasons for dropout were lack of interest in studies and adolescence (girls). Lack of interest in studies as the reason for school dropout was also reported by 26.16% subjects in the Khokkar *et al.*<sup>[25]</sup> study, by 31% boys and 13% girls in the Maithly *et al.*<sup>[26]</sup> study, and by 16 students in the Govindraju *et al.*<sup>[29]</sup> study. In the study group, 10 dropouts were due to truancy, absenteeism, and failures. Pathak *et al.*<sup>[30]</sup> in their study found that children in families with alcohol addiction had a three times higher prevalence of behavioral and emotional problems as compared to those from families without addiction. This could be because children of alcoholics, besides facing financial problems and the above-mentioned reasons, are also exposed to a chaotic environment at home, a poor role model in an alcoholic father, and parental fights, all of which contribute to an environment unfavorable for their scholastic as well as overall development.

### Limitation of study

Exploring the role of other factors (besides father's alcohol dependence and the socio-demographic factors considered here) on school dropouts in the children was beyond the scope of this study.

### Conclusion and Recommendations

Children in families where there is an alcohol-dependent father are at increased risk for behavioral, emotional, and scholastic problems due to dysfunctional environment and financial crisis

in the family; our study endorses these findings. Alongside sustained and committed efforts to curb alcohol use, screening for these vulnerable children with appropriate referrals should be incorporated within alcohol treatment<sup>[31]</sup> programs. A special "outreach activity" to these children in schools can be made through Alcohol and Drug Education programs to address their problems without secluding them from the rest of their peers. Availability of counseling facilities<sup>[32]</sup> in schools, and workshops for school teachers to create awareness in them about the plight of these children, ways to identify them, and methods of dealing with them should be conducted. Medical social workers at hospitals and health centres form an important link to network with social welfare organizations and charitable trusts to arrange funds for the education of these children. Children of alcoholics form an important "at risk" group and preventive strategies in the form of early assessment and multidisciplinary coordinated interventions are the need of the hour.

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