

Factors affecting School Absenteeism and its Effect on Scholastic Performance

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Abstract

Introduction: School absenteeism is an important issue, which affects educational achievement and also results in false estimation of the prevalence of disease in school programs. This study was carried out to estimate the magnitude and its causes and their relation to school absenteeism. **Objectives:** To study the medical and social factors affecting school absenteeism and to know the effect of school absenteeism on scholastic performance. **Method:** It is a cross sectional study done in randomly selected children between five and fifteen years of age. The study sample included 754 children. Socio-demographic profile and pre-designed questionnaires as well as school records were obtained. The marks cards of the entire year were taken to assess the scholastic performance. Significant absenteeism was taken when absenteeism was more than 15 percent. **Results:** The incidence of school absenteeism was 3.12 percent. Increased incidence was found in children aged 11 to 14 years. Incidence of absenteeism was more in males, children with higher birth order and larger family size, lower education status of the parents and in Hindu religion. Majority of the school children were anemic. Illness was the most important cause of school absenteeism. Poor academic performance is significantly correlated with increased absenteeism. **Conclusion:** Illness constituted the major reason of absenteeism. School absenteeism had positive correlation with academic performance of the students.

Key Words: Absenteeism, academic performance, school children.

INTRODUCTION

Schools are increasingly being recognized as effective tools to reach the community. School based screening and intervention programs have helped in developing and implementing control measures for several disorders of public health importance. However, the effectiveness of these programs depends on the number of children attending schools. Previous studies have shown that school absenteeism has been linked to maternal education, residence, and specific illnesses like asthma, headache, and abdominal pain.^[1-5] However, other causes and relation of school absenteeism to academic performance has not been evaluated. School absenteeism is an important issue, which affects not only educational achievement but also results in false estimation of the prevalence of disease in school based screening programs. Further, school based intervention programs may miss out several affected children.^[6] This study was done to evaluate the medical causes and social factors affecting school absenteeism and to know the effect of school absenteeism on scholastic performance.

MATERIAL AND METHODS

The present study was a prospective study, conducted in rural school, for a period of one year between June 2008 and May 2009. Clearance was obtained from the hospital's ethical

committee. All children between five and fifteen years of age of this school were included in the study. The objectives of the study were explained and informed consent was obtained from the school head, parents and teachers to participate in the study. Total of 754 children, of both sexes in the age group five to fifteen years were taken in different standards. Each standard had three to five sections. One section per standard was randomly selected and all students in selected classes were eligible for enrollment. Where there were more than three sections per standard, two were chosen randomly. Informed written consent was taken from the participants included in the study.

School absenteeism conceptual models were structured in order to measure the phenomenon associated with problematic school related absenteeism [PRSA], namely, school-related absenteeism and parental condoned absenteeism.

School-Related Absenteeism Conceptual Model

The Student Questionnaire: School-Related Absenteeism incorporates a questionnaire in order to assess students' perceptions of specific situations relevant to school absenteeism like truancy, school refusal, delinquency etc. The rationale for employing this particular questionnaire highlights categories and risk factors associated with school absenteeism.

Parental Condoned Absenteeism Conceptual Model

Parental condoned absenteeism refers to parental approved withdrawals such as family functions, holidays, and personal appointments. Parental condoned incorporates questionnaire in order to assess schools' measurement of parental condoned absenteeism. The rationale for employing this particular questionnaire is to elicit specific information relevant to parental condoned absenteeism.^[7]

At enrolment, information on socio-demographic profile of the students was collected including age, sex, class, education and occupation of the parents, their family structure and income.

A pre-designed questionnaire as mentioned above was administered to ascertain the duration of absence and the causes for absenteeism, medical and non-medical. Participants were assured of confidentiality and were enquired about school truancy and various phobias of schools, teachers and subjects. The causes of absenteeism were also ascertained by school records, leave applications and one month's recall by the students. Students, teachers and parents were interviewed whenever needed.

Significant absenteeism was taken when absenteeism was more than 15 percent and detailed data obtained from those students who were absent for the whole day for more than 15 percent of the total days.^[8] The marks cards of various tests and exams performed in the entire year were taken to assess the scholastic performance. These children were also clinically examined.

Descriptive statistical analysis has been carried out in the present study. Results on continuous measurements are presented in MeanSD (Min-Max) and results on categorical measurements are presented in Number (%). Significance is assessed at 5 percent level of significance. Chi-square/ Fisher Exact test has been used to find the significance of study parameters on categorical scale between two or more groups.

RESULTS

A total of 754 students were randomly selected from class one to class ten in the study. The total number of working days was 240 days over the last 12 months. Female students were more compared to male students in the study (397 vs. 357). The incidence of school absenteeism was 3.12 percent (23 children) in our study.

Table 1 - Incidence of absenteeism in different age groups

Baseline variables	Incidence of absenteeism				P value	
	Yes (n=23)		No (n=731)			
	No	%	No	%		
Age in years						
5-7	4	17.4	220	30.1	0.283	
8-10	6	26.1	210	28.7		
11-14	13	56.5	301	41.2		

Table 2: Parents education

Baseline variables		Incidence of absenteeism				P value	
		Yes (n=23)		No (n=731)			
		No	%	No	%		
Father's education	<8 th standard	9	39.1	163	22.3	0.058+	
	>8 th standard	14	60.9	568	77.7		
Mother's education	<5 th standard	13	56.5	192	26.3	0.001**	
	>5 th standard	10	43.4	539	73.7		

Increased incidence was found in children aged 11 to 14 years (early adolescent group) due to unique problems faced by adolescent group like growth and hormonal balance, menstrual irregularities, obesity, acne, diabetes, convulsive disorders and rheumatic carditis [Table 1].

There was increased incidence of absenteeism when mother's education is low as mother is the first and best teacher in home. Lower maternal education was significantly correlated with increased incidence of absenteeism [Table 2].

Majority of the school children had anemia followed by respiratory problems. Complaints were present in (5.96%) of the children of which majority had pallor (anemia) followed by cough. Pallor was present in 16 children among which seven (44%) were absent [Table 3]. Illness was the most important cause of school absenteeism [Table 4].

Presence of medical problems is significantly associated with incidence of absenteeism and poor academic performance is significantly associated with incidence of absenteeism [Table 5].

DISCUSSION

In our study, incidence of school absenteeism was 3.12 percent. A wide range of incidence of school absenteeism has been recorded in different studies ranging from 4.73% percent to 17.84% percent.^[9] This diversity of incidence of absenteeism is mainly due to varying groups taken for the study and basic differences between rural subgroups related to geographic, educational status, cultural factors and religion. In our study, the incidence of school absenteeism is correlating with study done by Awasthi et al [10]. Increased incidence was found in children aged 11 to 14 years (early adolescent group) due to unique problems faced by adolescent group like growth and hormonal balance, menstrual irregularities, obesity, acne, diabetes, convulsive

Table 3: Complaints of children recorded

Complaints of children recorded	Number of children (n=754)	%
Absent	709	94.1
Present	45	5.96
Pale/pallor	16	2.12
Cough / Fever	6	0.8
Afraid of home work/teacher	6	0.8
Blurring of vision	5	0.7
Weak and tired	3	0.4
Bullying in school	2	0.3
Convulsion	2	0.3
Family problems	2	0.3
Playing	1	0.13
Palpitations	1	0.13
Wheezing	1	0.13
Burning micturition	1	0.13

Table 4 - Causes of school absenteeism

Cause of School absenteeism	Number of children (n=23)	%
Illness	10	43.47
Family problems	2	8.7
School load	2	8.7
School Phobia	2	8.7
School truancy	2	8.7
Chronic Illness	1	4.3
Family Function	1	4.3
Family Illness	1	4.3
Perception of Ill health	1	4.3
Tuitions	1	4.3

Table 5 - Effect of medical problems on absenteeism and academic performance

Medical Problems	Absenteeism				Absenteeism Academic Performance				
	Yes (n=23)		No (n=731)		Yes (n=23)		No (n=731)		
	No	%	No	%	No	%	No	%	
Present	11	47.8	20	2.7	Fail	4	17.39	7	0.9
Absent	12	52.2	711	97.3	Pass	19	82.61	724	99.1
Inference	$\chi^2=114.99; P<0.001^{**}$		$\chi^2=41.890; P<0.001^{**}$						

disorders and rheumatic carditis.

Present study shows that parental education especially mother's education are significant predictors of incidence of absenteeism, which was also seen in other studies [9,11-13]. Majority of the school children had anemia followed by respiratory problems. Complaints were present in (5.96%) of the children of which majority had pallor (anemia) followed by cough. The present study shows that illness was the major cause of school absenteeism (43.47%) which is similar to study done by Sreenivas et al [11]. Present study shows that more students failed among absentees (17.39%) when compared to non-absentees (0.95%) which are similar to study done by Romero et al [14]. Hence, illness constituted the major reason for school absenteeism and school absenteeism had positive correlation with the academic performance of the students.

CONCLUSION

This study provides a model to predict absenteeism in school children based on its correlates and also identifies illness as a major cause with anemia as a significant factor associated with school absenteeism. This is more in adolescent age group especially males and also shows that poor academic performance is significantly associated with increase in the incidence of absenteeism.

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