Magnitude and factors contributing school absenteeism among adolescents of Ujjain city

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ABSTRACT

Background: School absenteeism is prevalent in Madhya Pradesh and other states of India. Various psychosocial, domestic, and health-related factors have been implicated for absenteeism. Objectives: The objectives of this study were to determine the magnitude of school absenteeism and its contributing factors among adolescent students of Ujjain city. Methods: An observational study was conducted in government schools of Ujjain district. Students studying in 6th–8th standard between 11 and 14 years were interviewed using a predesigned questionnaire. The factors reported for school absenteeism were recorded. Results: A total of 1250 students were studying in the 6th, 7th, and 8th standard. Of these, 434 (34.7%) students had significant absenteeism >2 days/month. Frequent absenteeism (Group A, absenteeism >4 days per month) occurred in 388 (89.4%) and rest were infrequent absentees (Group B, absenteeism ≤4 days per month). Analysis of sociodemographic factors revealed significant influence of lower socioeconomic status (A=43.1% and B=28.2%; p=0.03), maternal illiteracy (A=19.3% and B=6.5%; p=0.004), paternal illiteracy (A=12.6% and B=0), rural background (A=23.2% and B=6.5%; p=0.031), and unskilled and semiskilled profession of the father (A=30.9% and B=8.6%; p=0.001) on frequent absenteeism. Helping the mother in the kitchen was the only social factor responsible for the significant absenteeism (A=44.0% and B=26.1%; p=0.02). Watching television (TV) was also reported as a cause of frequent absenteeism. Medical morbidities and school-related factors did not influence significant absenteeism. Conclusion: School absenteeism has a high prevalence in government schools of Ujjain district. Lower socioeconomic status, parental illiteracy, rural background, unskilled occupation, helping the mother in the kitchen, and watching TV resulted in frequent absenteeism.

Key words: Adolescents, Medical, Psychosocial, School absenteeism

School absenteeism results in adverse short- and long-term impacts in the form of academic deterioration, isolation from peers, family conflict, and financial and legal consequences, school dropout, delinquent behaviors, economic deprivation, social isolation, marital problems, and difficulty in maintaining employment [1]. School absenteeism lacks standard definition. Average absenteeism of more than 2 days per month was defined as significant absenteeism by Uppal et al. [2]. School absenteeism has been increasing in recent years and a recent report by the U.S. Department of Education identifies “chronic absenteeism” as a hidden educational crisis. Burden of chronic absenteeism has been reported to be 14% in this nationwide survey [3]. The average school absenteeism per child reported from a cross-sectional, school-based study conducted in three government schools in South Delhi was 10.2% [2]. School absenteeism has been reported to be high in states like Madhya Pradesh also.

According to Consortium for Research on Educational Access, Transitions, and Equity community and school surveys, 35% of children were absent from schools in Rewa and 47% in Dindori on the day of the field visit [4]. It has been linked with various factors such as poor health, social factors, poor infrastructure, and difficult accessibility [4-7]. A better understanding of causative factors for school absenteeism is critical to implement the interventional strategies to achieve the goal of universal primary education. However, there is a paucity of literature on the comprehensive factors determining school absenteeism from Madhya Pradesh. Therefore, the present study was undertaken to evaluate the magnitude of school absenteeism and its contributing factors in Ujjain district of Madhya Pradesh.

MATERIALS AND METHODS

A cross-sectional school-based study was conducted in four government schools of Ujjain city which were chosen randomly. Absenteeism was studied among students of 6th, 7th, and 8th standard over a period of 1 year from April 2011 to March 2012. Schools were visited once every Monday. Any student absent in the prior week was interviewed. Students were categorized into significant absentees (absenteeism >2 per month) and occasional...
absentees (absenteeism ≤2 per month). Data available only from significantly absent students were included in the final analysis. The study was approved by the institutional ethics committee.

There is no consensus on the definition of the significant absenteeism in the literature. We accepted average absenteeism for >2 days per month as significant absenteeism for the present study as in a study by Uppal et al. [2]. Significantly, absent students were further classified into frequently absent group (Group A, absenteeism >4 days per month) and infrequently absent group (Group B, absenteeism ≤4 days per month).

Adolescents of both the genders in the age group of 11–14 years studying in 6th–8th standard were assessed for significant absenteeism from school attendance register. Significantly, absent students were interviewed on a predesigned pro forma after informed consent. The causes of absenteeism were ascertained by school records, leave applications, and 1-week recall by the students. Poor school attendance due to late admission and those who changed the school during the study period were excluded from the study.

A predesigned questionnaire was used to collect the sociodemographic profile, psychosocial, medical, and school-related causes of absenteeism. A pilot study was done to identify the existing causes of absenteeism. Its results were discussed with faculties of Pediatrics and Community Medicine with thorough knowledge of the subject. After their comments, the questionnaire was redesigned and also translated in Hindi.

The sample size for the prevalence of significant school absenteeism in the present study was calculated by the formula, \( Z^2 \times P \times (1-P)/d^2 \). The expected prevalence, \( P \) was taken as 0.48 as reported by Uppal et al. [2], for 95% confidence level \( Z=1.96 \) and \( d \), the allowable error margin was chosen as 10% of the expected prevalence, i.e., 0.048. Thus, a sample size of 96 was derived. However, we interviewed all 434 students with significant absenteeism who were absent for >2 days per month. Statistical analysis was done using SPSS version 16. Categorical variables are presented as proportions. Chi-square or Fisher’s exact test was used to compare categorical variables. The prevalence of absenteeism, odds ratio, and \( p \) value of the risk factors of frequent absenteeism was calculated along with 95% confidence interval. \( p<0.05 \) was considered statistically significant.

### RESULTS

A total of 1250 students were studying in the 6th, 7th, and 8th standard. Of these, 434 students were included in the study as they were significantly absent (absenteeism >2 days per month). Overall, significant absenteeism was 34.7%. There were 286 (65.8%) males. Frequent absentees (absenteeism >4 days per month) were 388 (89.4%) constituting Group A and rest 46 (10.6%) were infrequent absentees (absenteeism ≤4 days per month) composing Group B. Sociodemographic factors such as rural background (\( p=0.03 \)), studying in lower standard (\( p<0.001 \)), parental illiteracy (\( p<0.005 \)), and lower socioeconomic status (\( p=0.03 \)) were significantly associated with frequent school absenteeism (Table 1).

| Parameters | Group A (n=388) | Group B (n=46) | \( p^* \) |
|------------|----------------|---------------|----------|
| Sex        |                |               |          |
| Male       | 258 (66.5)     | 28 (60.8)     | 0.44     |
| Female     | 130 (33.5)     | 18 (39.2)     |          |
| Standard   |                |               |          |
| 6th        | 160 (41.3)     | 6 (13.0)      | <0.001   |
| 7th        | 135 (34.8)     | 19 (41.3)     |          |
| 8th        | 93 (23.9)      | 21 (45.7)     |          |
| Religion   |                |               |          |
| Hindu      | 366 (94.3)     | 43 (93.4)     | 0.82     |
| Others     | 22 (5.7)       | 3 (6.6)       |          |
| Maternal education |        |               |          |
| Illiterate | 75 (19.3)      | 3 (6.5)       | 0.004    |
| School educated | 241 (62.1) | 30 (65.3) |          |
| Graduate   | 63 (16.2)      | 8 (17.3)      |          |
| Professional | 9 (2.4)     | 5 (10.9)      |          |
| Father education |         |               |          |
| Illiterate | 49 (12.6)      | 0             | <0.001   |
| School educated | 224 (57.7)    | 22 (47.8)     |          |
| Graduate   | 94 (24.3)      | 11 (23.9)     |          |
| Professional | 21 (5.4)    | 13 (28.3)     |          |
| Area       |                |               |          |
| Rural      | 90 (23.2)      | 3 (6.6)       | 0.031    |
| Urban      | 298 (76.8)     | 43 (93.4)     |          |
| Occupation |                |               |          |
| Unskilled  | 62 (15.9)      | 0             | 0.001    |
| Semiskilled| 58 (14.9)      | 4 (8.6)       |          |
| Skilled    | 190 (48.9)     | 25 (54.4)     |          |
| Semiprofessional | 58 (14.9) | 16 (34.7) |          |
| Professional| 20 (5.2)     | 1 (2.3)       |          |
| Family type|                |               |          |
| Nuclear    | 144 (37.1)     | 13 (28.2)     | 0.23     |
| Joint      | 244 (62.9)     | 33 (71.8)     |          |
| Socioeconomic status |         |               |          |
| Upper      | 15 (3.8)       | 5 (10.9)      | 0.03     |
| Middle     | 206 (53.1)     | 28 (60.9)     |          |
| Lower      | 167 (43.1)     | 13 (28.2)     |          |

**Group A** - Frequently absent group, absenteeism >4 days per month.

**Group B** - Infrequently absent group, absenteeism ≤4 days per month. *Chi-square test was used to compare the proportions

Medical morbidities (asthma, pain in abdomen, headache, cough, cold, and fever) cited by children as a reason for absenteeism are shown in Table 2. None of them had statistically significant role in frequent absenteeism (absenteeism >4 days per month). Table 3 summarizes the psychosocial factors implicated for school absenteeism in our study population. Adolescents frequently absent themselves to help their mother in the kitchen work. School- and environment-related factors as a cause of school absenteeism were reported by less than one-third of the absentee (Table 4). Watching television (TV) was significantly associated (\( p=0.02 \)) with frequent absenteeism.
DISCUSSION

Of 1250 students studying in 6th–8th standard of four schools of Ujjain city, only 434 significantly absent students (>2 days/month) were included in the study as rest were only occasionally absent. The prevalence of overall significant absenteeism (>2 days/month) in the present study group was 34.7%. Uppal et al. reported that 48% of the children absented themselves for more than 2 days in a month in government schools in Delhi [2]. School absenteeism reported from M.P. in the past includes 35% in Rewa and 47% in Rajnandgaon [4]. In a study conducted in Lucknow, the incidence of school absenteeism was observed to be 70.9% at least once in preceding 3 months [8]. These differences in observation between various studies can be explained by the difference in the geographical and sociodemographic characteristics, settings of the study and methods of estimation of school absenteeism.

Among the sociodemographic parameters, lower standard, parental illiteracy, occupation, socioeconomic status, and rural background were significantly associated with frequent absenteeism. These factors have been found to affect absenteeism previously [4,9]. In a study from Tamil Nadu...
School absenteeism has a high magnitude in government schools of Ujjain city. Frequent school absenteeism was associated with lower socioeconomic status, parental illiteracy, rural background, lower class, and unskilled and semiskilled profession of the father. Children frequently absented themselves from school for watching TV and assisting mother in the kitchen work in the present study.

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