Exploring Relationship between Health Conditions, Chronic Absenteeism and Learning Skills: Evidences from Primary School Students

Introduction

Child illness, which is considered as one of the most common factors behind school absenteeism is often taken for granted, despite the fact that it is important to address in the sense that young children are more prone to short-term illness that continuously affects their school going behavior. In addition to this, larger school distance and teacher's adverse behavior such as punishments, unfriendly attitude further adds up the health concerns both physically (fatigue) and psychologically (fears or disinterest). The *habitual* absenteeism can not only result in poor cognitive growth of child but can have serious consequences of lower attendance subsequent upper grades, lower learning skills, dropouts, lower quality education and un-skilled labor force ahead. As per Annual Statistics of Education Report (ASER), while India reported 97 percent of the enrolment at primary grade in 2017, only 71.4 percent of them attended the school, clearly indicating about it seriousness.

Significance & Purpose

Chronic absenteeism is a kind of an educational disaster that adversely affects the student learning outcomes. When student are absent from classes they miss valuable information, interactive lectures and benefits of specific examples used to clarify the difficult concepts which cannot be repeated when teacher re-teach those lectures to absent students (Williams, 2000; Weller, 1996). Worldwide, although lot of research has gone into empirically testing the relationship between learning outcomes and school attendance (Asahi, 2014; Jones, 2006; Bashaiza, 2016; DeKalb, 1999; Rothman, 2001) but less has been done to investigate the causes behind absenteeism. Particularly in case of India, a considerable knowledge gap exists on this subject. Therefore, this paper investigates the causes of chronic absenteeism among primary grade students in India, while evaluating poor health conditions of students, school proximity and other school/family related factors. In addition to this, paper also captures the implications of chronic absence on learning skills.

Data & Methodology

The research questions were investigated using a sample of 10,105 primary grade students in the age-group 8-11 years in India, drawn from nationally representative India Human Development Survey (IHDS-II) for 2011-12. Here, we have defined 'Chronic Absenteeism'

as absence from school for 6 days or more per calendar school month either continuous or non-continuous (based on UNESCO's Early Warning Signs). The analysis has been done at following stages: *Firstly,* paper has highlighted the urgency of controlling excessive absenteeism by studying global trends of net attendance rates in schools. *Secondly,* a comparative assessment of WASH facilities in primary schools is presented, while relating it to child' health and further plotting the extent of absenteeism with type and frequency of short-term morbidity days. *Third,* binary logistic regression model has been run to predict the probabilities of various determinants of chronic absenteeism among primary grade students in India and *finally,* variations in learning skills are evaluated between those who were chronically absent from school vs those who were not.

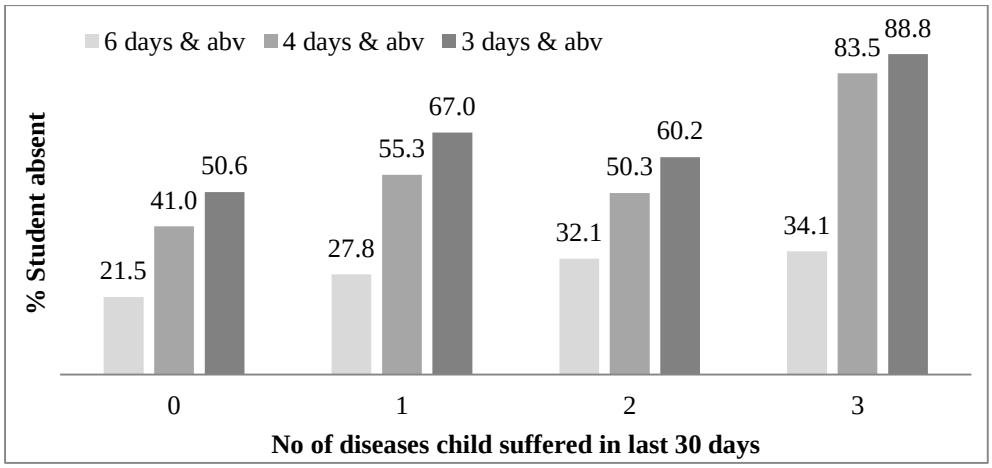
Findings and Suggestions

The findings are discussed as follows:

WASH Provisions. Health Conditions and School Absenteeism: In India, one third of students in primary schools lacks access to safe drinking water, while 45 percent lacks hygiene facilities in primary schools (as per Global report UNICEF 2018). The lack of these facilities in schools results in frequent health problems among students and causes lower attendance in school. The two-dimensional plotting of frequency and type of diseases that primary grade students have suffered during last 30 days (wherein three types of common diseases among children are fever, cough with short breath and diarrhea that causes short-term morbidity) with students absent days reveals following results:

1. The proportion of children absent from primary grades for different categories of days (6 days and above, 4 days and above and 3 days and above) show positive association with number of diseases suffered by students in a month;
2. The impact of short-term morbidity is much higher if absenteeism from school lies between 3-4 days in a month, implying that illness is one of the major reasons if absence is of less than 6 days but when it comes to the absence of 6 days and above (a situation of chronic absenteeism), then in addition to poor health condition of children, other factors may also contribute. To find other reasons, we adopted logistic regression model.

Fig.1. Short-term morbidity vs. school absenteeism among primary grade students in India



Note: i) Frequency and type of disease given as: 0 refer to no disease, 1 refers to fever, 2 refer to both fever and cough and 3 refer to fever, cough and diarrhea. ii) Absence categories given as: 3 days & above, 4 days & above and 6 days & above (chronic)
Source: IHDS-II survey data 2011-12 (author's calculations)

Logistic Model: Findings reveal strong and positive association between short-term morbidity, school distance beyond 3 km and chronic absenteeism among primary students in India. Model further indicates that school and teaching factors such as harsh punishments, teacher's unfair behavior, frequent absence of teachers in classroom, appointment of male teachers and lack of parents-teachers interaction predicts higher probabilities of chronic absenteeism among primary grade students.

Through rural-urban models, we found that the impacts of longer school distance and poor health conditions on chronic absence are much higher in rural areas than in urban. Moreover, the attendance of females are more vulnerable in rural than in urban. Although India is running largest mid-day meal programme in primary schools to retain students in classrooms but our model confirms that these programmes are effective only in case of urban government schools but not in rural areas in reducing absenteeism among students.

Recommendations: This paper suggest that schools should be accessible to all students within 3 km of distance from home so as to reduce stress and fatigue of long school journeys and also calls the need for taking measures towards promoting safe and healthy lifestyles among students such as: maintaining healthy atmosphere in school/classrooms and cleanliness in schools, self-hygiene instructions to students, provision of WASH facilities in schools and preparation of nutritious mid-day meals. The finding also calls for efforts towards improving the teacher–student interaction in schools, employing more of female local teachers and strict

regulations for teacher's presence in classroom. To conclude, dealing with chronic absenteeism is utmost important for nations due to its huge implications on learnings outcomes of young minds. India is already suffering from the problem of poor foundational skills among students and failure to deal with lower attendance in class could worsen the situation. Seriously, there is a need for collaborative efforts from all including parents, teachers and schools authorities in creating healthy learning school environment so that students can feel positive about class activities, studies and teachers, thereby reducing the possibilities of lower attendance and thus improving the learning outcomes.

Limitations of the Study

The results are bound to be affected by certain limitations. Firstly, the analysis is restricted to the children in the age group of 8-11 years as IHDS provides qualitative school information for this age group only. Secondly, there could be other factors affecting absenteeism in schools, for instance climatic changes, sudden tragedies/events in family, child disinterest, etc. which are not considered here due to data limitations.