

Determinants of Personal Hygiene among School Children

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ABSTRACT

Children who are healthy and well-nourished are more able to fully participate in school and thus benefit from education. Poor hygiene practices lead to days lost to sickness and play a major role in the increased burden of communicable diseases. It is important to assess the personal hygiene practices of schoolchildren in order to suggest where improvements can be made. This paper studies the personal hygiene practices of school children in a city in the Northern Indian state.

Keywords: Personal Hygiene, Schools, Children, India

INTRODUCTION

A significant proportion of mortality and morbidity recorded in the Global Burden of Disease is due to communicable (infectious) disease.¹ The World Health Organization (WHO) estimates that South East Asia contributes 27% of the global burden of infectious and parasitic diseases and 30% of respiratory infections.

Developing countries bear a notable burden of these diseases – respiratory and intestinal infections are the primary causes of morbidity and mortality among young children. This is attributed to inadequate sanitary conditions and poor hygiene practices¹ that lead to a number of conditions including diarrhoea, worm infestations, skin infections and dental diseases. The global burden of diarrhoeal disease is estimated to cause 3.6% of all Disability Adjusted Life Years (DALYs). A significant proportion of infections could be prevented by access to safe water, adequate sanitation services and better hygiene practices.

Poor health among schoolchildren often results from a lack of awareness of the health benefits of personal hygiene. In recent years, hand washing has been the main focus in the promotion of hygiene practice, not least because many upper respiratory and diarrhoeal infections, especially colds and gastroenteritis, are contracted through unwashed hands. Personal hygiene goes beyond just the hands, however. For example, oro-dental hygiene, which includes regular brushing and flossing of teeth, can prevent bad breath, gum disease and teeth cavities. Poor body hygiene, including wearing dirty clothing, can lead to unpleasant body odor and skin diseases.

All the above conditions can be prevented by good personal hygiene, yet a number of studies have shown that personal hygiene is often poor among schoolchildren and students, and leads to significant morbidity. One study observed that a majority of school children frequently suffer from

morbidity associated with poor personal hygiene, including diarrhoea, fever with or without cough/cold, parasitic worms, head lice, scabies, dental caries and multiple boils.

Including health and hygiene education in the school curriculum has the potential to significantly improve the health behaviour of students and may lead to improved personal hygiene at home as well as at school. Promotion of hygiene practices is contingent upon the availability of sufficient resources, however, such as well-designed and regularly serviced latrines, conveniently located hand washing facilities and a continuous supply of soap and clean water.¹ Educating students on correct hygiene practices can be a low cost and effective measure for disease prevention, which in turn promises to reduce school absenteeism due to illness. A study by Khatoon on school children in the Lucknow district of India reported that school-based hygiene and keeping the school environment clean is vital for decreasing the rates of communicable diseases; other studies have reported the same. Currently, data on the personal hygiene of students in Haryana, a State in Northern India, is limited. This study observed personal hygiene habits of schoolchildren; it thus adds to literature and proposes an appropriate intervention.

Only schools that had been established for more than five years were included; less established schools, and primary schools, were excluded. Schools had to grant permission for the study to go ahead. Students for whom consent could not be obtained and those who were absent on the day the study was conducted were also excluded. The study was part of a larger investigation into environmental, water, sanitation and hygiene conditions within Indian schools.

Overall personal hygiene

Overall, the level of personal hygiene observed during morning health inspection in the presence of a school teacher and a female health worker was low. Across all five hygiene attributes (hands, nails, oral dental, body and clothes), the majority of the students scored poor and many scored moderate and only a few scored good adequate hygiene on all five attributes. This is a lower rate of personal hygiene than has been observed, who reported many good, some moderate, and only a few poor, but higher, which recorded almost entirely moderate and poor.

Hand hygiene

Adequate hand hygiene was recorded in just over half of the participants. This is significantly lower than that observed in other studies. More girls practiced adequate hand hygiene than boys. Hand hygiene was slightly higher among urban students as compared to rural students, but this was not statistically significant.

Nail hygiene

Long fingernails can harbor bacteria and are thus an infection risk, but this can easily be mitigated by carefully cleaning and trimming fingernails. In this study, nail hygiene was observed to be adequate in the majority of participants which is much higher than has been observed in other

studies. We found nail hygiene to be slightly higher among students from rural schools compared to their urban counterparts, but this was not statistically significant. There was a statistically significant difference between girls and boys however.

Clothes and body hygiene

School students are encouraged to wear clean clothes. Untidy and dirty clothes can adversely affect confidence and self-esteem; and dirty clothing can lead to ecoparasitic and fungal infections. Clothes and body hygiene tend to go together: body hygiene was higher among participants with better clothes hygiene practices. Other studies have found wide variation in clothes and body hygiene, with the proportion of students recorded wearing dirty school uniform.

Just over three quarters of participants demonstrated good body hygiene. This is lower than has been found by other studies. But much higher than that reported, in which the majority of the respondents reported they bathed just once per week. There was no significant difference in body hygiene between the students from rural schools compared to the urban ones. Girls reported practicing slightly higher body hygiene compared to boys, contrary to a study that recorded higher body hygiene among boys, but the difference was not statistically significant.

Oral dental hygiene

Brushing teeth at least twice daily is considered necessary to keep healthy teeth, especially when coupled with regular health check-ups and follow-up services provided through schools. In our study, just under half– of the students reported adequate oral-dental hygiene. This was better than has been found in some previous studies. We found girls to have better oral-dental hygiene but this was not statistically significant. Dental hygiene has been found to be inconsistent in previous studies: Higher oral-dental hygiene in girls than boys, but observed better oral dental hygiene among boys.

Hygiene according to age

The majority of participants were from years age group, with a mean age of 13.6 years. Good personal hygiene was observed more often among students aged 16 and above. Personal hygiene improved as≤Grade.

Hygiene according to gender

Our results suggest that girls are more aware of and engage in more hygienic practices than boys. Gender differences were statistically significant: girls scored ‘good’ compared with boys, while fewer girls scored ‘poor’ than boys.

Similar trends have been observed, where more girls reported higher levels of good personal hygiene than boys. However, Elsabagh reported contrary findings: many of boys were reported as observing good hygiene, but only less than half of girls.

Location and ownership of schools

Overall, more students from government schools than private ones were observed to have good hygiene practices. Between urban and rural schools, personal hygiene levels were broadly comparable –respectively scored ‘good’, while students respectively scored ‘poor’. This was not statistically significant.

In India, school health services include health education (though clinical assessment and monitoring of nutritional status is provided by Primary Healthcare Centers). Health services in urban areas are generally better than in rural India, and literacy is also higher amongst the urban population, which may account for the differences.

Availability of hand washing facilities and soap

In our study, a good level of personal hygiene was observed among few of the students in schools where soap was available at hand washing facilities and among very less students in schools where it was not. As this difference is not statistically significant, it may suggest that the presence of soap alone does not make an appreciable difference in this setting. Availability of soap at school does lead to better hand hygiene practices however; the difference between this and our study could be due to poor understanding of adequate hand washing practices among students.

Teacher training

Among students from schools where teachers’ own knowledge regarding school health was considered to be inadequate when measured against the criteria developed by Ranga and Majra, had a good level of hygiene had a poor level. This was significantly lower than students from schools where teachers had moderately adequate knowledge for school health. Concerning, none of the school teachers were assessed as having a completely adequate level of knowledge regarding school health.

DISCUSSION

Poor hygiene practices play a major role in the increased burden of communicable diseases, presenting a barrier to child health, full participation in school activities and sufficient education. School teachers should provide health education to the students and encourage hygienic habits to improve their health. They should be aware of local health programs to ensure they deliver relevant health education to their students. Whist several of the schools in our study had either a designated teacher to deliver health education and/or a teacher who had been trained to do so, only the teacher’s own level of knowledge of school health made a significant difference, rather than their training.

Limitations of the study

This study is based on a representative sample that includes randomly selected participants from government and private schools located in urban as well as rural areas. However, as it was conducted in only one district, it may not represent the whole state of India. Other classrooms and other schools may show some variations.

CONCLUSION

The study reports overall poor personal hygiene among school children. The future of a nation depends on the health of its children. We recommend that schools engage adequately trained teachers to promote school health, impart health education regarding personal hygiene, and improve hygienic practices among schoolchildren so that they can carry healthy habits back to their family and communities. Delivering health education to students improves their level of personal hygiene. Teachers need to promote handwashing.

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