Original article

“STUDY OF AWARENESS OF PERSONAL HYGIENE AMONGST TRIBAL PRIMARY STUDENTS IN PALGHAR DISTRICT, MAHARASHTRA”

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ABSTRACT - Introduction: Health education in school children is most effective method of health protection. Many rural school children suffer from many morbidities. The current study was undertaken to understand the awareness of personal hygiene, to determine the prevalence of lice infestation and scabies among the rural primary school children. Materials and Methods: This community based cross-sectional, study was conducted among children of age group 6 to 13 years attending two state government run primary schools in rural area. Pre-designed, pre-validated, semi-structured demographic proforma and questionnaire was used. Information regarding demographic characteristics and personal hygiene practices was interviewed. Results: Out of 101 participants, Lice infestation was seen in 42.22% of girls, and 12.5% of boys, whereas Scabies infection was present in 2.22% girls and 3.57% boys. Conclusion: The study revealed satisfactory awareness and good condition of personal hygiene. There was no gender-wise difference in hygienic practices followed, but the prevalence of lice infestation was more in females.

Keywords: personal hygiene, rural area, lice manifestation, scabies, gender-wise difference

Introduction:
Schools are considered as an important setting to build up the skills and capacity of students, parents and wider community to combat the challenges of outbreak of communicable diseases.[1] Health education to school children in their formative age is the most effective method for protection and promotion of their health. Primary school children are more open minded and are likely to be receptive to changes in ideas and agreeable to modifications of their habits.[2] In several developed countries, school health programs have evolved during the post-second World War period and addressed nutritional and physical-fitness aspects.[3] Still, Each year, diarrheal and respiratory diseases kill > 5.5 million people and lead to > 140 million disability-adjusted life-years lost.[4] The vast majority of these deaths occur among children in low- and middle-income countries, where access to health-care services is suboptimal.[5] About 30-50% of rural school children suffer from many morbidities like anaemia, worm infestation, under nutrition and dental caries.[6]

The current study was undertaken to understand the awareness of personal hygiene, to determine the prevalence of lice infestation and scabies among the rural primary school children in Raigad District of Maharashtra and to determine the gender-difference in personal hygiene if any.

**Methodology:**

This community based cross-sectional, study was conducted among 101 children of age group 6 to 13 years attending two state government run primary schools in Bandhan and Kondhan village of Palghar District in Maharashtra. The schools are primary co-educational school comprising of classes I to IV, where children mainly from neighbouring locality study. The study was conducted over a period of one month in September 2016. Permission of the institute and the representative authorities from primary school were obtained before commencing the study. The
students not fitting in the age group of 6 to 13 and who were absent in the study period were excluded from the study. Pre-designed, pre-validated, semi-structured demographic proforma and questionnaire was used as a tool for data collection. Information regarding demographic characteristics and personal hygiene practices was interviewed. The policy for personal hygiene of school was interviewed from the respective authorities.

Table-1. Age-wise, class-wise distribution of students.

<table>
<thead>
<tr>
<th>Standard</th>
<th>Males (%)</th>
<th>Females (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>15 (26.79%)</td>
<td>11 (26.83%)</td>
</tr>
<tr>
<td>2nd</td>
<td>16 (28.57%)</td>
<td>10 (24.39%)</td>
</tr>
<tr>
<td>3rd</td>
<td>16 (28.57%)</td>
<td>9 (21.95%)</td>
</tr>
<tr>
<td>4th</td>
<td>9 (16.07%)</td>
<td>15 (36.59%)</td>
</tr>
<tr>
<td></td>
<td>56</td>
<td>45</td>
</tr>
</tbody>
</table>

Table-2. Mothers’ Occupation

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>%</th>
<th>Females</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Housewife</td>
<td>42</td>
<td>75.00</td>
<td>28</td>
<td>62.22</td>
</tr>
<tr>
<td>Farmer</td>
<td>10</td>
<td>17.86</td>
<td>11</td>
<td>24.44</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>7.14</td>
<td>6</td>
<td>13.33</td>
</tr>
</tbody>
</table>

Table-3. Fathers’ occupation

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>%</th>
<th>Females</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Majuri</td>
<td>22</td>
<td>39.29</td>
<td>16</td>
<td>39.02</td>
</tr>
<tr>
<td>Farmer</td>
<td>10</td>
<td>17.86</td>
<td>8</td>
<td>19.51</td>
</tr>
<tr>
<td>Company employee</td>
<td>17</td>
<td>30.36</td>
<td>10</td>
<td>24.39</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>8.93</td>
<td>8</td>
<td>19.51</td>
</tr>
</tbody>
</table>

Table-4. Tooth brushing

<table>
<thead>
<tr>
<th></th>
<th>Males</th>
<th>%</th>
<th>Females</th>
<th>%</th>
</tr>
</thead>
</table>
Results:

Demographics: Out of 101 participants, 56 were males (mean age: 8.06 ±0.90yr) and 45 were females (mean age: 8.00±1.59yr) (Table-1). The mothers of majority of children (69.3%) were housewives (69.31%), farmers (20.79%), a few were on job or daily-wage workers (9.9%). One boy’s mother was ASHA worker. (Table-2) Out of 101, 4 children had lost their father. Amongst remaining, majority were daily wages workers(38.61%), company employee (26.73%), farmers (17.82%). Others were driver, shopkeeper, daily-wage worker. (Table-3)

All children reported to be taking bath daily. 82.22% girls and 46.43% boys, respectively, were taking it twice a day. Only 4.44% girls and 12.5% boys were taking daily head-bath. All children reported to be washing hands before eating and after visiting toilet.

Articles used for brushing and its frequency are given in Table-4.

More than fifty percent of children reported to be using open air toilet. All the girls and 94.64% of boys cut nails regularly.

All children reported to be cleaning ears regularly. All used hairpin except one who reported to be using cotton earbud.

Lice infestation was seen in 42.22% of girls, and 12.5% of boys, whereas Scabies infection was present in 2.22% girls and 3.57% boys.
**Discussion:**

Health behaviours are strongly determined by the different social, economic and environmental circumstances of individuals and populations.[7] It is said that people of rural areas have been trapped in various unhygienic health practices and undesirable health attitudes because of poverty, illiteracy, ignorance, misconception and superstition.[8]

In this study, soap and water were reported to be used most often for hand washing after visiting toilet, single boy and girl used ash and water, and one girl used mud and water for the same. There was no gender discrimination in hand washing practices, unlike reported by Deb[3], that girls had better hand-washing practices than boys before eating.

In the current study, 97.48% of girls and 96.43% of boys were wearing washed clothes regularly. This is comparable with the study conducted at Kolkata. [3]

A considerable number of girls and boys (42.22% and 33.93%) were reported to be wearing siblings’ or others’ clothes.

The prevalence of pediculosis in this study is 25.74%. It is comparable with studies by Talukdar *et al* 18.5%[8] and Dongre *et al*[9], 42.8%. In a study from Nagpur this is 3.5%. [10]

The prevalence of scabies in this study is 2.97% This is comparable with study by Charuhas *et al*[10] Nagpur 5.6%. Other studies have reported a higher incidence ranging 21.7% to 36.6%.[8,9]

**Limitations:** Sample collection for the study is only from a convenient group from two schools of same region. Investigation for intestinal parasitic infestations is not done due to feasibility.

**Conclusion:**
The present study revealed satisfactory awareness and good condition of personal hygiene amongst primary school children in the given area. There was no gender-wise difference in the practices of hand washing, cutting nails and wearing clean clothes, except for the prevalence of lice infestation.

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**Conflicts of interest:** None

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