Child malnutrition: Rural-urban disparities in Jabalpur district

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ABSTRACT

Malnutrition among children under five has remained a major public health challenge in developing countries and has constituted a long-time barrier to a healthy life and constant threat to human capital development. It is widely noted that children raised in urban areas are generally healthier than rural areas. Therefore to know the gap between rural urban children under five years a study was conducted in Jabalpur District. To find the prevalence of malnutrition, a house to house survey was conducted. Gomez classification was used to classify children on the basis of weight for age. Results showed that 53.44% children were malnourished in urban areas while maximum 66.67% children were found malnourished in rural areas.

Keywords: Child Malnutrition, Rural-Urban, Under Five Years.

1. INTRODUCTION

Malnutrition is a silent emergency and it continues to be a major public health problem worldwide, especially in India. It is an indicator of poor nutrition and it is one of the most common causes of morbidity and mortality among children under five (UNICEF, 2008). Every year, more than 10 million children under five worldwide die from preventable and treatable illnesses. Half of these deaths are caused by malnutrition (Menjistu K., 2013). The health consequences of a prolonged state of malnutrition among children include delayed physical growth and impaired motor and cognitive development, diminished cognitive performance, lower intellectual quotient (IQ), poor social skills, greater behavioral problems and vulnerability to contracting diseases (Park K., 2005).

Malnutrition among children under five has remained a major public health challenge in developing countries and has constituted a long-time barrier to a healthy life and constant threat to human capital development (Chakraboety P., 2011). It is one of the worst nutritional outcomes among children worldwide. Nutritional outcomes have been reported to be influenced by rural–urban differentials in the place of residence of children. It is widely noted that children raised in urban areas are generally healthier than rural areas (Faghahamigbe A.F. et al., 2020).

The overall prevalence rates of underweight, wasting and stunting in India according to NFHS-4 are- 35.7%, 21.0% and 38.4 respectively. In urban areas these are- 29.1%, 20.0% and 30.0%, while in the rural area they are- 38.3%, 21.5% and 41.2% respectively. The mean of nutritional indices (weight-for-age), (weight-for-height) and (height for age) are lower in rural areas. Rural urban difference is also showing a gap in Jabalpur district. According to NFHS-4, 33.3% are underweight, 26.7% are wasted and 28.1% are stunted in urban areas of Jabalpur, while 52.6% are underweight, 34.8% are wasted and 44.8% are stunted in rural areas of Jabalpur (NFHS-4, 2016)). The present study will investigate the regional difference of malnutrition among children under five years in Jabalpur block.

2. MATERIALS AND METHODS

A cross-sectional study was conducted in Jabalpur district of Madhya Pradesh. The current study was carried out in rural and urban areas of Jabalpur. Data was collected through house to house survey. With the permission of mothers of children under five, weight and date of birth of children were noted in pre designed Performa. Total 120 children were taken as a sample for the study.
60 rural and 60 urban children were assessed. For the assessment of malnutrition Weight for Age indicator was used. Gomez classification was applied to classify malnutrition among children under five years (Table-1).

<table>
<thead>
<tr>
<th>Nutritional Status</th>
<th>Grade</th>
<th>Percentage of Weight for Age (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>Normal</td>
<td>91-100</td>
</tr>
<tr>
<td>Mild</td>
<td>I</td>
<td>76-90</td>
</tr>
<tr>
<td>Moderate</td>
<td>II</td>
<td>61-75</td>
</tr>
<tr>
<td>Severe</td>
<td>III</td>
<td>&lt;60</td>
</tr>
</tbody>
</table>

3. RESULTS
In the present study 60 rural children under five years and 60 urban children under five years were analyzed. It was found that nutritional status of children under five years in urban areas was 41.66% normal, 35% mild underweight, 13.34% moderate underweight and 10% severe underweight, however nutritional status of children in rural areas was 33.33% normal, 40% mild underweight, 15% moderate underweight and 11.17% severe underweight. The overall prevalence of malnutrition was found 53.44% among urban children and 66.67% among rural children (Table-2).

<table>
<thead>
<tr>
<th>Nutritional Status</th>
<th>Number of children (Urban)</th>
<th>Percentage (%)</th>
<th>Number of Children (Rural)</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normal</td>
<td>25</td>
<td>41.66</td>
<td>20</td>
<td>33.33</td>
</tr>
<tr>
<td>Mild Underweight</td>
<td>21</td>
<td>35</td>
<td>24</td>
<td>40</td>
</tr>
<tr>
<td>Moderate Underweight</td>
<td>8</td>
<td>13.34</td>
<td>9</td>
<td>15</td>
</tr>
<tr>
<td>Severe Underweight</td>
<td>6</td>
<td>10</td>
<td>7</td>
<td>11.17</td>
</tr>
<tr>
<td>Total</td>
<td>60</td>
<td>100</td>
<td>60</td>
<td>100</td>
</tr>
</tbody>
</table>

4. CONCLUSION
The situation of malnutrition is visible from data that nutritional status of urban children is comparatively better than rural children. Results are clearly showing that it is necessary to take steps for improving the health and nutritional status of children in rural areas.

5. REFERENCES