Original Research Article

A study of nutritional status and personal hygiene among adolescent girls of rural Bikaner

B. L. Vyas, Renu Sethia*, Rekha Acharya

Department of Community Medicine, S.P. Medical College, Bikaner, India

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*Correspondence:
Dr. Renu Sethia,
E-mail: dr.renusethia@gmail.com

ABSTRACT

Background: Adolescent girls form an important vulnerable sector of population that constitute about one tenth of Indian population.

Methods: The study was conducted at Udairamsar village at Bikaner which is the field practice area of Department of Community Medicine, S.P. Medical College, Bikaner.

Results: Out of 489 girls, 436 were Hindu. 73.21% girls were living in nuclear family and 60.32% girls belonged to socio-economic status IV. Out of 489 girls, 46.42% girls were anaemic and 2.04% girls were having vitamin–B deficiency.

Conclusions: Anaemia was common problem among adolescent girls in rural area. The personal hygiene was good among adolescent girls.

Keywords: Adolescent girl, Rural, Personal hygiene

INTRODUCTION

Adolescent girls form an important vulnerable sector of population that constitute about one tenth of Indian population. Under-nutrition among adolescents is a serious public health problem internationally, especially in developing countries. Early adolescence after the first year of life is the critical period of rapid physical growth and changes in body composition, physiology and endocrine.

The Ministry of Women and Child Development is significantly involved in the issues of nutrition and development of children, particularly girl children. Empowerment of the hostel girl is necessary to help her cope with the changes and promote awareness of health particularly nutrition and reproductive health, so as to break the intergenerational life cycle of nutritional and gender disadvantage and provide an enabling and supporting environment for self-development.

Adolescent girl’s health covers nutritional status, morbidity, and reproductive health. During the period of adolescence the nutrient needs are the greatest. The girls are usually physically stunted a manifestation of chronic protein energy malnutrition. A large proportion of adolescent girls suffer from various gynecological problems, particularly menstrual irregularities such as menorrhagia, polymenorrhea, oligomenorrhea, and dysmenorrhea. The present study was undertaken nutritional status and personal hygiene among adolescent girls of rural Bikaner.

METHODS

Study design: Community based cross-sectional study.
**Study area:** The study was conducted at Udairamsar village at Bikaner which is the field practice area of Department of Community Medicine, S.P. Medical College, Bikaner.

**Study duration:** Study duration one year (June 2005 to May 2006).

**Study population:** Study population was including the girls of age group 10-19 yrs.

**Inclusion criteria:** The girls of age group 10-19 yrs.

**Exclusion criteria:** The girls who were not willing to participate study and girls below 10 yrs and above 19 yrs.

**Data collection:** A house to house survey of entire village was carried out. All adolescent girls present during study period were interrogate. A detail schedule was designed for collecting various information. Total 489 girls participate in this study.

**Data analysis:** Data collected were entered into excel Microsoft sheet and then analyzed with the help of frequencies, tables, figures and appropriate tests of significance wherever required.

**RESULTS**

Out of 489 girls, 436 were Hindu. 73.21% girls living in nuclear family and 60.32% girls belonged to socio-economic status IV.

**Table 1: Socio-demographical distribution of girls (n=489).**

<table>
<thead>
<tr>
<th>Variables</th>
<th>No. of girls</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Religion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hindu</td>
<td>436</td>
<td>89.16</td>
</tr>
<tr>
<td>Muslim</td>
<td>53</td>
<td>10.84</td>
</tr>
<tr>
<td>Family type</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nuclear</td>
<td>358</td>
<td>73.21</td>
</tr>
<tr>
<td>Joint</td>
<td>131</td>
<td>26.79</td>
</tr>
<tr>
<td>Socio-economic status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>I</td>
<td>3</td>
<td>0.62</td>
</tr>
<tr>
<td>II</td>
<td>41</td>
<td>8.39</td>
</tr>
<tr>
<td>III</td>
<td>120</td>
<td>24.54</td>
</tr>
<tr>
<td>IV</td>
<td>295</td>
<td>60.32</td>
</tr>
<tr>
<td>V</td>
<td>30</td>
<td>6.13</td>
</tr>
</tbody>
</table>

**Table 2: Distribution of girls having anaemia and vitamin B deficiency (n=489).**

<table>
<thead>
<tr>
<th>Condition</th>
<th>No. of girls</th>
<th>Percentage (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anaemia</td>
<td>227</td>
<td>46.42</td>
</tr>
<tr>
<td>Vitamin B deficiency</td>
<td>10</td>
<td>2.04</td>
</tr>
</tbody>
</table>

Out of 489 girls, 46.42% girls were anemic and 2.04% girls were vitamin-B deficiency. 73.62% girls were having good personal hygiene.

**DISCUSSION**

The present study was carried out at Udairamsar village, a field practicing area of PSM department of S.P. Medical College, Bikaner.

Out of 489 girls, 436 were Hindu and rest were Muslim. The picture was in conformity with picture of Rajasthan and with the study carried out by Sharam at Jodhpur.7

73.21% girls living in nuclear family and rest were living in joint family. This may show urbanization on the type of family. 60.32% girls belonged to socio-economic status IV.

Out of 489 girls, 46.42% girls were anemic and 2.04% girls were vitamin-B deficiency. Singh et al was found that vitamin B deficiency in 7.14% and anaemia in 14.29% girls and Choudhary et al found prevalence of anaemia in 30% girls.8,9

73.62% girls were having good personal hygiene. Similar result were found in Choudhary el al.9

**CONCLUSION**

Anaemia was common problem among adolescent girls in rural area. The personal hygiene was good among adolescent girls.

**Funding:** No funding sources  
**Conflict of interest:** None declared  
**Ethical approval:** The study was approved by the Institutional Ethics Committee

**REFERENCES**


