A dolescence is broadly defined as a period of transition from childhood to adulthood (Panda, 2004). It comprises 20 percent of the world’s total population. In India, there are 190 million adolescents comprising 21 percent of India’s total population. Among adolescents, girls are particularly vulnerable. Approximately 15 million young females aged 15-19 give birth each year, accounting for more than 10 percent of all babies born worldwide; 20 percent of women in the world become pregnant before attaining 20 years of age. Seventeen percent of total fertility in India is still attributed to young women in the 15-19 age groups (Sharma, 2002). Young mothers, especially those under 16, have increased likelihood of serious health risks. The risk of death in childbirth is five times higher among 10-14 year-olds than among 15-19 year-olds and, in turn, 10 times among 15-19 year-olds as among 20-24 year-olds (Augustina, 2003).

Teenagers are over represented among those seeking abortion and even more so among those needing medical care for complications of unsafe abortion. One in 20 adolescents contracts a sexually transmitted disease (STD) each year, and half of all cases of HIV infection take place among people under age 25 (Gupta et al, 2004). Accessing reproductive health services the adolescents may also experience resistance or even hostility and bad attitudes from the adults. Sexual health in India and more especially in Odisha has been a ‘hidden subject’ in the society. It is still considered as taboo. Kotwal et al conducted a comparative study of school going girls and dropout girls of Jammu and observed that both school going and school dropout girls have poor knowledge on reproductive health care. Slum area is the worst affected area for behavioural problems due to all types social disadvantages. Girls of slums are at special risk to develop different reproductive health problems due to lack of knowledge.

The National Population Policy-2000 has recognised adolescents as an underserved vulnerable group that need to be served especially by providing reproductive health information and services.

Objectives
The purpose of the study was:
♦ To assess the level of knowledge of adolescence girl regarding reproductive health, and
♦ To compare the demographic variable with the knowledge of adolescence girl regarding reproductive health.

Hypothesis
H₀: There is no significant association between the knowledge score of adolescence girls regarding reproductive health care with their demographic variables.

Methodology
The study was conducted in Urban slum area, Niladribihar Bhubaneswar, Khurda District, Odisha (which is the Urban community for KIMS Medical college of KIIT University) by using convenient sampling technique. An exploratory research design with cross sectional survey approach was used to assess the knowledge of adolescent girls regarding reproductive health care residing in study area. Adolescence girls of Harekrushna basthi were selected as sample. The sample size comprised of 84 adolescent girls. A

Knowledge of Adolescent Girls Regarding Reproductive Health Care

Bijayalakshmi Dash *

Abstract
The period of adolescence (usually 15-19 years) is marked by physiological changes in the body, more so with females. Unfortunately sex and sex education continue to be taboo. A study was therefore conducted among adolescent girls of urban slum area of Niladribihar, Khurda district of Odisha. The sample consisted of 84 adolescent girls. The analysis showed that adolescent girls had average reproductive health care that can lead to numerous health problems and there is dire need of evolving measures to improve their knowledge on reproductive health care. Nursing professionals in hospital setting can significantly contribute in this area.

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2-part structured interview schedule was used to collect the data which had two parts A and B. Part A contained demographic characteristics of the adolescence girls and Part-B had 40 multiple choice items pertaining reproductive health care with 40 maximum scores. Data was collected by the investigator herself during 28 Aug to 10 Sep 2010.

<table>
<thead>
<tr>
<th>S.No.</th>
<th>Area</th>
<th>Max score</th>
<th>Mean</th>
<th>SD</th>
<th>Mean %</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Adolescence periods &amp; its effects</td>
<td>4</td>
<td>2.21</td>
<td>0.89</td>
<td>55.25</td>
</tr>
<tr>
<td>2.</td>
<td>Behaviour</td>
<td>3</td>
<td>1.75</td>
<td>0.80</td>
<td>43.75</td>
</tr>
<tr>
<td>3.</td>
<td>Menstrual cycle and menstrual hygiene</td>
<td>12</td>
<td>5.9</td>
<td>1.63</td>
<td>49.17</td>
</tr>
<tr>
<td>4.</td>
<td>Nutrition</td>
<td>12</td>
<td>4.96</td>
<td>1.54</td>
<td>41.33</td>
</tr>
<tr>
<td>5.</td>
<td>Prevention of STD including AIDS and contraception</td>
<td>6</td>
<td>2.22</td>
<td>1.03</td>
<td>37</td>
</tr>
<tr>
<td>6.</td>
<td>Reproduction</td>
<td>6</td>
<td>2.76</td>
<td>1.35</td>
<td>46</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>40</strong></td>
<td><strong>19.05</strong></td>
<td><strong>3.7</strong></td>
<td><strong>48.75</strong></td>
</tr>
</tbody>
</table>

**Table 1 : Area wise distribution of mean, SD and mean percentage of pre-test KS of adolescent girls regarding reproductive health**

- Highest percentage (53.57%) of the adolescent girls was in the age group of 15 to 19 years, 42.86 percent had high school education, highest percentage (53.57%) of the adolescent girls were students. About 28 percent of the adolescent girls belonged to the income group of Rs. 2001 to Rs. 3000 and Rs. 3001 to Rs. 4000. Almost all (89.29%) of the adolescent girls were non-vegetarian and highest (77.38%) were from nuclear family. Almost all (97.61%) of the adolescent girls were Hindus and highest 40.48 percent got information through family members. Majority (71.42%) of the adolescent girls had no history of previous reproductive health problems.

- Area wise analysis of knowledge score reveals that highest mean knowledge score was 2.21 ± 0.89 which is 55.25 percent of total score revealing average knowledge in the area of adolescence periods and its effects whereas the mean was lowest (2.22 ± 1.03) which is 37 percent of total score obtained revealing poor knowledge obtained in the area of prevention of HIV & AIDS. Similar mean score 1.75 ± .80, which is 43 percent of total score and 4.96 ± 1.54, which is 41 percent of total score for Behavior and Nutrition respectively. In other two areas the menstrual cycle and hygiene and reproduction, the knowledge score is 49 percent and 46 percent respectively. The overall mean knowledge score was 19.35 ± 3.7 which is 48.75 percent of the total score revealing average knowledge of the adolescent girls (Table 1).

- The adolescent girls had average knowledge on reproductive healthcare with regard to adolescence periods and its effects behaviour menstrual cycle and menstrual hygiene nutrition and reproduction. However they had poor knowledge on prevention of STD including AIDS and contraception.

- Overall level knowledge on reproductive healthcare shows that 64.29 percent of them had average knowledge, 8.33 percent had good and 27.38 percent had poor knowledge, revealing that adolescence girls had average knowledge regarding reproductive health (Fig 1).

- Percentile distribution of knowledge scores (KS) reveals that 25th, 50th and 75th percentile scores were 12, 15 and 19, respectively and mean KS was 19.05. It seems that all the KS values were concentrated between 17 to 23 score value (Fig 2).
Association between KS of the teachers with their demographic variables shows that there is no significant association (p>0.05) between knowledge scores and the age, occupation, income, diet, type of family previous source of information. However, significant association was found between knowledge scores and the education of the adolescent girls (Table 2).

**Conclusion**

Over all, the adolescent girls had average knowledge regarding reproductive health care which leads to various reproductive health problems of themselves. Hence, it is essential to improve their knowledge on reproductive health care to prevent themselves from different type of complication. The findings of the present study will help the nursing professionals working in hospitals and community to teach the adolescence girls on identification of reproductive health problems in early stage and its prevention for further complication. Further the significant relationship between education and knowledge score encourage the community health nurse to conduct health education programme regarding reproductive health care.

**Recommendations**

- Similar study can be conducted on larger samples to generalise findings.
- A comparative study can be conducted on knowledge of adolescent girls regarding reproductive health care among urban & rural areas.
- A study can be conducted to observe the actual practice of the adolescence girl regarding reproductive health care.
- An experimental study can be conducted to improve the knowledge of adolescence girl regarding reproductive health care.

### Table 2: Association between post-test KS of the adolescence girls with their demographic variables

<table>
<thead>
<tr>
<th>Demographic variables</th>
<th>Chi-Square value</th>
<th>Level of significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.92</td>
<td>Not significant</td>
</tr>
<tr>
<td>Education</td>
<td>19.23</td>
<td>Highly significant</td>
</tr>
<tr>
<td>Occupation</td>
<td>0.07</td>
<td>Not significant</td>
</tr>
<tr>
<td>Income</td>
<td>3.49</td>
<td>Not significant</td>
</tr>
<tr>
<td>Diet</td>
<td>0.69</td>
<td>Not significant</td>
</tr>
<tr>
<td>Previous source of information</td>
<td>1.43</td>
<td>Not significant</td>
</tr>
<tr>
<td>Previous history of reproductive health problem</td>
<td>3.66</td>
<td>Non-significant</td>
</tr>
</tbody>
</table>

p ≥ 0.05, df=1; t-value =12.71

**References**

12. BN Joshi, SL Chauhan, UM Donde, VH Tryambake, NS Gaikwad V. To assess their reproductive health problems and help seeking behaviour among urban school going adolescents Bhadoria Department of Operational Research, Department of Molecular and Immunodiagnostics, National Institute for Research in Reproductive Health