A cross sectional study on demographic profile and role of education in adolescent girls
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Abstract:
Adolescent is a period of rapid growth and maturation in human development. It is a crucial period of women's life where sociocultural factors not only influence her health but also health of future generation. Hidden behind the socially sanctioned cloak of marriage, underage girls are deprived of their personal freedom, forced into non-consensual sex, exploitation of their labour and discrimination of their educational development and individual life choices. A community based cross sectional study was carried out among 250 adolescent girls aged 13 -19 years. This age group was considered for the study because of marked acceleration of physical and emotional development which occurs during this period. Aim of this study was to find out the incidence of early marriage and pregnancies among adolescent girls and the impact of education. It was observed that 18.8% of adolescents were married and 8.4% were pregnant at one or the other time. Pressure of elders was the major reason for early marriage (53%) and early pregnancy (57%) among married girls. The education of adolescent girls plays a major role on the marital status and awareness of the health problems.

Key words: Adolescent girls, Early pregnancies, Marriage education.

Introduction:
Nature and nurture are two important factors in the flowering of an individual’s personality. Like the budding flower, the adolescent girl needs caring environment at home, supported by a friendly, emphatic and sensitive health system to help her to bloom and mature into healthy women for development of family, society and country. This period is very crucial since these are the formative years of life of an individual when major physical, psychological and behavioural changes take place. This is also a period of preparation for undertaking greater responsibilities in future, including responsibility of healthy parenthood. It is a tragedy that in developing countries including India, some of these blossoms are nipped in the bud.

High rates of adolescent childbearing found in South and South-West Asia are obviously related with early age at marriage. Bangladesh has one of the highest levels of adolescent childbearing, followed by Nepal and India (Nair, 2004). Out of 4.5 million marriages that take place in India, three million marriages occur in girls of 15-19 years age group. Married adolescent girls comprises of 20/1000 population. Rani & Lule (2004) found that 6% of urban and 21% of rural women aged 15-19 years were married before the age of 15 years. Furthermore, they are subjected to life threatening damage to their health by having to go through pregnancy and child birth before their bodies are sufficiently mature to bear the burden. Therefore, there is a need to address the special needs of this vulnerable group. In this perspective, the present study was undertaken to find out the incidence of early marriage and pregnancies among adolescent girls and the impact of education.

Material and Methods
The present study was a community based cross-sectional study, carried out among 13-19 years old adolescent girls of an urban community-Rajapur, which is a field practice area of Department of Community Medicine, M. R. Medical College, Gulbarga. The population of Rajapur was 3380. The area was selected as it was the training center and it was expected that due to the services rendered, people would be more cooperative. The study was carried out from April 2004 to March 2005.

Adolescent girls constitute 10% of female population (Kumar & Sharma, 1999). WHO expert committee (1974) proposed that the age limit of 10 to 19 years be used to identify adolescent, but there is no statutory legal age limit of when the adolescence begins and ends. Probably developmental changes are the better markers rather than age limits, as there is a marked acceleration of physical and emotional development between age of 13 to 19 years (Wani, 1999). We decided to include all the adolescent girls...
aged 13-19 years, residing in the study area. Thus we studied 250 adolescent girls who have completed 13 years of age and all those who have not completed 20th years. Due care was taken to ensure that the families of the study subject were a permanent resident of Rajapur. In present study the interview technique was used maintaining full privacy. The objectives of the study were explained to families before interviewing them to ensure co-operation. The information was collected in the pre-designed and pre-tested semi structured interview schedule. Data was collected for occupation, type of family, age at menarche, age at marriage, age at first pregnancy, literacy status of girls, reasons for early marriage and pregnancy operational definition used for classification of educational label were; (a) illiterate-one who could not read or write with understanding in any language, (b) primary school-from class one to seven, (c) secondary school-eighth to tenth class, (d) higher education – PUC or equivalent and degree. Knowledge regarding health related issues was collected by asking 25 questions related to important health issues like, legal age of marriage, adverse effect of too early, too close, too many pregnancies, prevention of HIV/AIDS, contraception methods etc. The data was analyzed by the scoring system. The best score for knowledge was 100 followed by as >81 as good, 51-80 as fair as and lower than 50 as poor awareness regarding health. Data was coded and analyzed by microsoft window excel 2007 with chi-square test and frequency distribution. In the absence of the respondent during the first visit, repeat visits were paid to contact them.

**Results:**

Out of 250 adolescent girls studied, 18.8% were married and majority of them 63%, belonged to a nuclear family. The literacy status indicated that 31(12.4%) were illiterates, 66 (26.4%) had primary education, 92 (36.80%) had secondary education and 61(24.4%) had higher education or were college going. As regard to their occupation, 100 (40%) helping in house hold activities (unpaid workers) and 29 (11.6%) were working as tailors, labourer, maidservants while, only 121 (48.4%) were currently studying.

Among married adolescent girls 23.3 % were married before the age of 15 years and 34.1% were married in the age group of 15 of 17 years. It was observed that out of 47 married girls, 21 (44.7%) were pregnant at one or the other time. Among all pregnancies, 19.1% of pregnancies were in the age group <15 years. Out of 21 pregnant women 5 (23.8%) had experienced adverse out come of pregnancy like abortion or still births. The major reason for early marriage was pressure from elders (53%) and similarly out of 21 ever pregnant women, 57% of pregnancies were due to pressure of elders and 33.55% were due to lack of contraceptive knowledge (Fig.I).

Among married subjects majority, (41.4%) were illiterate and only 23.4% had education qualification upto secondary and above (Fig. II). On the other hand among 203 unmarried females, majority (70.1%) had education qualification of secondary and above and only 6.8% were illiterate. The difference was statistically significant (p<0.05).

Out of 250 adolescent girls, 22% had good, 65.2% had fair and 12.8% had poor awareness regarding health problems. Among adolescent girls who had good knowledge of health problems 60% had higher education i.e. PUC and above and only 5.5% had studies upto primary school and none of them was illiterates. On the contrary girls who had poor awareness to health problems, 46.9% were illiterate and only 6.3% had higher education indicating that educational status has a bearing on awareness of the health problems and this was statistically significant (p<0.001).

**Table I. : Age wise distribution study population**

<table>
<thead>
<tr>
<th>Age group (years)</th>
<th>Number (n=250)</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-14</td>
<td>28</td>
<td>11.20</td>
</tr>
<tr>
<td>14-15</td>
<td>33</td>
<td>13.20</td>
</tr>
<tr>
<td>15-16</td>
<td>35</td>
<td>14.00</td>
</tr>
<tr>
<td>16-17</td>
<td>33</td>
<td>13.20</td>
</tr>
<tr>
<td>17-18</td>
<td>28</td>
<td>11.20</td>
</tr>
<tr>
<td>18-19</td>
<td>51</td>
<td>20.40</td>
</tr>
<tr>
<td>19-20</td>
<td>42</td>
<td>16.80</td>
</tr>
</tbody>
</table>

**Table II. : Age wise distribution of adolescent girls at the time of marriage & first pregnancy.**

<table>
<thead>
<tr>
<th>Age Distribution</th>
<th>Age at Marriage (n=47)</th>
<th>Age at 1st Pregnancy (n=21)</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;15</td>
<td>11 (23.4 %)</td>
<td>04 (19.1 %)</td>
</tr>
<tr>
<td>15-17</td>
<td>16 (34.1 %)</td>
<td>05 (23.8 %)</td>
</tr>
<tr>
<td>17-19</td>
<td>20 (42.5 %)</td>
<td>12 (57.1 %)</td>
</tr>
</tbody>
</table>
Discussion:

Age at marriage is an important determinant of the health of young people as well as for future opportunities for education and employment. A large number of girls from poor households are pushed into early marriage, almost immediately after menarche. Out of 4.5 million marriages that take place in India, three million marriages involve girls in 15-19 years age group (Majumdar & Ganguly, 2000). Current study revealed that mean age of menarche was 13.6± 1.09 years and median age of marriage was 16 years. Similar findings were observed by Singh et al (1999) and Sheila et al (1993), who found mean age of menarche to be 13.06± 0.83 years and 13.6 years respectively.

In the present study married adolescents constituted 18.8% of the total study group. Similarly Nahar et al (1999) observed in their study that 16% of rural and 25% of urban slum adolescent girls were married. These girls were not only married but soon after marriage they became pregnant. The reasons for early marriage given by elders were; difficulty in finding an eligible bridegroom as age advances, preventing premarital affairs and to maintain social prestige. Once married, the girl should prove her fertility and hence early pregnancy.

In the present study 19% adolescent pregnancies were below the age 15 years; 24% and 57% pregnancies were in the age group of 15-17 and 17-19 years respectively. However, Kushwaha et al (1993) observed 7.8% of adolescent pregnancies were in the maternal age group of <15 followed by 45.5% and 46.7% in the age group of 15-17 and 17-19 years respectively. The education of adolescent girls plays a major role on the marital status and awareness of the health problems. Education needs to be a positive force in building peaceful communities in a rapidly changing world and to make use of it in the service of the community.

Recommendations:

The present study suggests empowering girls yield undeniable returns for everyone in the community. This can be tackled by creating awareness by in community by involving local NGO’s or self health groups regarding:

- Impact of education on health
- Adverse effect on health due to early marriage,
- Link between the education and the economic and health benefits especially in the rural India.

Bibliography:


