Study of biosocial problems amongst adolescent girls of Rajapur area of Kalaburagi district of Karnataka, India

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Received: 21 October 2015
Accepted: 12 December 2015

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ABSTRACT

Background: Adolescent girls are not only the future citizens but also the mother of the future nation. In this age group they have to go undergo a complex process of emotional, physical and social changes. In physical sector the menstrual problems are predominant and in psychological part the behavioral problems, negligence from the parents end, early marriage and high school drop out rate are important. The objective of the study was to study the biosocial problems amongst adolescent girls of Rajapur area of Kalaburagi district of Karnataka.

Methods: A community based cross-sectional study was carried out amongst 238 adolescent girls aged 15 -19 years in an urban community of Kalaburgi from April 2009 to March 2010. This age group is considered as it corresponds with late adolescents as per WHO.

Results: Out of 238 adolescent girls, 31.5% were married, 41.18% went to school and remaining were cases of school dropouts. 9.24% were neglected major reason for negligence of girl child was girls were not being the future earning member, in 10 (4.20%) cases only among all the girls examined. 30.18% had menstrual problems most common was dysmenorrhoea (27.73%). 36.97% were free from behavioral problems. Depression that tops the list (63.02%) followed by shyness (57.14%). It was a good sign to note that addiction and suicidal tendency were at lower score (2.1% and 1.26%) respectively.

Conclusions: In our study, we observed that root cause of behavioral morbidity was not exactly known, so we recommend that to find out the root cause, a proper psychological counselling should be done by setting up counselling centers and find out the prevalence of psychiatric problems amongst girls. With the help of these centers the increased school dropout rate can also be checked.

Keywords: Adolescent girls, Health problems, School dropout, Behavioral problems

INTRODUCTION

Adolescence word is derived from a Latin word adolescere which means "to grow up." 1 It is a transitional stage of human development which includes both physical and mental development generally occurring between puberty and adulthood. In the study of adolescent development, adolescence can be defined biologically as the physical transition marked by the onset of puberty and the termination of physical growth. Cognitively it can be defined as changes in the ability to think abstractly and multi-dimensionally. Socially it can be defined as a period of preparation for adult roles. 2 The major biological and pubertal changes include development of the sex organs, increase in muscle mass, increase in height and weight of the individual as well as major changes in brain structure and organization. Cognitive advances encompass both increases in...
knowledge and in the ability to think abstractly and to reason more effectively.

According to Erik Erikson’s stages of human development, a young adult is generally a person between the ages of 20 and 40 years, whereas an adolescent is a person between the ages of 13 and 19 years. There are various programmes and policies that define the adolescents’ age group differently. The ICDS programme considers adolescent girls to be between 11-18 years and the adolescents in the draft Youth Policy have been defined as the age group between 13-19 years where as the Constitution of India and labour laws of the country consider people up to the age of 14 years as children. The Reproductive and Child Health Programme mentions adolescents as being between 10-19 years of age and internationally, the age group of 10-19 years is considered to be the age of adolescence. Adolescent girls are not only the future citizens but also the mother of the future nation. In this age group they have to go undergo a complex process of emotional, physical and social changes. In physical sector the menstrual problems are predominant and in psychological part the behavioral problems, negligence from the parents end, early marriage and high school drop out rate are important. Due to the natural reluctance to diagnose mental disorder in adolescents for fear of being labelled as psychiatric patients, the future of these ill-fated adolescent become gloomy. A major percentage of these girls become the victims of more serious disorders such as schizophrenia and manic-depressive disorder. Hence the present study was carried out to assess the biosocial problems amongst adolescent girls of Rajapur area of Kalaburagi district of Karnataka.

METHODS

The present study was a community based cross-sectional study, carried out amongst adolescent girls (15-19 years of age) of an urban community (Rajapur), which is a field practice area of Department of Community Medicine of M. R. Medical College, Gulbarga, Karnataka. This age group is considered as it corresponds with late adolescents as per WHO. The population of Rajapur was 3380. The area was selected as it was the training center, it is expected that due to the services rendered people would be more cooperative. The study was carried out from April 2009 to March 2010.

Adolescent girls constitute 10% of female population. We decided to include all the adolescent girls (aged 15-19 yrs), residing in the study area as study subjects. Detailed house to house surveys was done to know total adolescents in the area. The individuals with age group 15-19 years and willing to participate in the study were included in the study. Out of 306 people, 238 adolescents were studied after taking consent. Due care was taken to ensure that the families of the study subject were a permanent resident. In our study the interview technique and clinical examination was done maintaining full privacy. The purpose and the objective of the study were explained before to ensure cooperation. The information was collected in the pre-designed and pre-tested semi-structured interview schedule. Data was collected on education, marital status, menstrual problems, etc. In the absence of the respondent during the first visit, repeat visits were paid to contact them. Data were entered in Microsoft Excel and percentage and proportion were calculated.

RESULTS

Table 1 shows the age wise distribution of adolescent girls according to marital status. It clearly shows that most of the girls (68.49%) remain unmarried up to 19 years. Among the total 75 married girls, 30 girls belonged to 19 years of age group, contributing about 12.06% which was maximum in the married group. It also shows that maximum number of girls i.e. 66 out of 238 girls were 15 years old, contributing to 27.73%.

Table 1: Age and marital wise distribution of study population.

| Age (In years) | Marital status | Total |
|---------------|----------------|-------|
|               | Married        | Unmarried |       |
|               | No  | %    | No  | %    | No  | %    |
| 15             | 07  | 02.94 | 59  | 24.79 | 66  | 27.73 |
| 16             | 11  | 04.62 | 32  | 34.44 | 43  | 18.06 |
| 17             | 09  | 03.78 | 24  | 10.01 | 33  | 13.08 |
| 18             | 18  | 07.56 | 31  | 13.03 | 49  | 20.59 |
| 19             | 30  | 12.06 | 17  | 07.14 | 47  | 19.74 |
| Total          | 75  | 31.51 | 163 | 68.49 | 238 | 100   |

Table 2 shows the distribution of adolescent girls according to menstrual problems. It is shown that 165 out of 238 adolescent girls were free from menstrual problems. In the remaining 73 adolescent girls the most common menstrual problem was dysmenorrhea (27.73%) and oligomenorrhea was least found in this area (0.42%).

Table 2: Menstrual problems amongst study population.

| Menstrual problems       | No. of respondents | Percentage |
|--------------------------|--------------------|------------|
| Dysmenorrhea             | 66                 | 27.73      |
| Oligomenorrhea           | 01                 | 0.42       |
| Menorrhagia              | 04                 | 1.68       |
| Combined menstrual problems | 02              | 0.84       |
| Normal cycles            | 164                | 68.91      |
| Not attained menarche    | 01                 | 0.42       |
| Total                    | 232                | 100.00     |

Table 3 shows distribution of adolescent girls according to behavioral problems. In 15-19 years age group of adolescent girls, 36.97% free from behavioral problems.
Remaining adolescent girls suffered from depression that tops the list (63.02%) followed by shyness (57.14%). It was a good sign to note that addiction and suicidal tendency were at lower score i.e. 2.1% and 1.26% respectively.

**Table 3: Behavioral problems amongst study population.**

| Sr. no. | Behavioural Problems       | Adolescent girls (n=238)* |
|---------|---------------------------|--------------------------|
|         |                           | No. | %        |
| 1.      | Addiction                 | 05  | 2.10     |
| 2.      | Suicidal tendency         | 03  | 1.26     |
| 4.      | Shyness                   | 136 | 57.14    |
| 5.      | Anxiety neurosis           | 13  | 5.46     |
| 6.      | Depression                | 150 | 63.02    |
| 7.      | No problem                | 88  | 36.97    |

*multiple response

Table 4 shows distribution of neglected female children according to the reasons of neglect. In contrast to the common trend of the nation 90.76% of the 15-19 years age group girls were not neglected here. For not being the future earning member, the girls are neglected in 10 cases (4.20%) among all the girls examined.

**Table 4: Reasons of neglect amongst study population.**

| Sr. No. | Reasons for neglecting female child | No. (n=238) | %   |
|---------|------------------------------------|-------------|-----|
| 1.      | Male as future earning person       | 10          | 4.20|
| 2.      | Born as a girl                      | 06          | 2.52|
| 3.      | Girl as “Paraya dhan”               | 03          | 1.26|
| 4.      | Dependence during old age            | 03          | 1.26|
| 5.      | Not neglected                        | 216         | 90.76|

**Table 5: Reasons for school dropout amongst study population.**

| Sr. No. | Reasons for school dropout   | No. (n=238) | %   |
|---------|------------------------------|-------------|-----|
| 1.      | Poor Performance              | 15          | 6.30|
| 2.      | Care of younger siblings      | 27          | 11.34|
| 3.      | Domestic work                 | 23          | 9.67|
| 4.      | Poverty                       | 23          | 9.67|
| 5.      | Economic Reasons              | 03          | 1.26|
| 6.      | Ignorance                     | 20          | 8.40|
| 7.      | Menarche                      | 08          | 3.36|
| 8.      | Goes to school                | 98          | 41.18|
| 9.      | Others                        | 21          | 8.82|

Table 5 reveals the distribution of adolescent girls according to reasons for school drop out. Among the adolescent girls of 15 – 19 years of age group, 41.18% went to school and remaining were cases of school dropouts. Among the causes of school drop out, the burden to care for younger siblings tops the list with 11.34% and the other significant causes were domestic works, poverty and ignorance 9.67%, 9.67% and 8.40% respectively.

**DISCUSSION**

The duration of ages between 15 to 19 years is characterized by dramatic changes in the adolescent’s physical, educational and relational contexts, as well as in biological, cognitive, emotional and social processes.7 Our study done on 238 adolescent girls, majority of the girls were unmarried up to the age of 19 years and our study had maximum girls in the age of 15 years. Our study showed that majority of the girls had regular menstruation and do not counter any menstrual disorders. In a similar study done by Begum J et al, revealed that 152 (87.4%) respondents had regular cycles, whereas 22 (12.7%) had irregular cycles. Difference was mainly due to environmental, racial, nutritional factors.8 In another study conducted by Patil SN where they found that 83.1% girls had regular and 16.9% had irregular cycles.9

In our study, we observed that only 36.97% was free from any behavioural problems and depression was the most common symptom the remaining girls suffered. Anne Mari Sund et al, in their study found that adolescent girls were majorly suffering from depression.10 In a study done by Mishra A and Sharma AK, found that 13.76% girls showed psychiatric morbidity. The most common problem was anxiety/depression.11 Similar findings were observed in the study done by Kashani et al12 and Cristi et al.13

In our study, we also found a very good change in the trend that 90.76% of the adolescent group was not neglected. Arnold in his study highlighted one of the most alarming trends in India that son is given more preference. This can be a normal attribute for couples who have only girls, is accompanied by the neglect and death of millions of females through lack of medical care, improper nutrition, infanticide and sex selective abortions.14 A study done by Das Gupta M, also observed that always son has more preference than daughters.15

A very disheartening observation of our study was that 41.18% were only school going rest of them were school drop outs due to the many reasons, one of them being the care taking of the younger siblings. Grant M et al, in their study observed that menstruation and its irregularity was one of the reason for school dropouts.16 Some studies argue that there are some specific characteristics of girls with dropout status include girls with poor school performance, low economic status, family migratory life styles and the consequent vulnerability of girls. Dunne Leach observed in his study that some unexpected circumstances of girls such as lack of social and economic opportunities and gender inequality in
education system lead to motherhood and consequence dropout from schools. They also stated that the dropout rate of girls was higher than the dropout rate of boys.17

CONCLUSION

In conclusion it can be stated though the rate of early teenage marriage and the frequency of menstrual disorders are low in this area, the trend of depression in high. One fact that in this area adolescent girls were not neglected was very encouraging.

Recommendations

In our study we observed that root cause of behavioral morbidity was not exactly known, so we recommend that to find out the root cause, a proper psychological counseling should be done by setting up counseling centers and finding out the prevalence of psychiatric problems amongst girls. With the help of these centers the increased school dropout rate can also be checked.

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

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Cite this article as: Indupalli AS, Giri PA. Study of biosocial problems amongst adolescent girls of Rajapur area of Kalaburagi district of Karnataka, India. Int J Community Med Public Health 2016;3:200-3.