



GENERAL HEALTH PROBLEMS OF ADOLESCENT GIRLS IN RURAL AREA - A STUDY IN CHIDAMBARAM AREA OF CUDDALORE DISTRICT IN TAMILNADU

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Abstract

There are 1-2 billion adolescents in the world, 85% of them live in developing countries. The adolescent population constitutes about one-fifth of India's population is in the adolescent age group of 10-19 years. In India, girls constitute 5.1% of adolescents in 10-14 years age group and 48% in 15-19 years age group. Adolescents constitute a sizeable proportion of the Indian mothers. However, despite adolescents being a huge segment of the population, policies and programs in India have focused very little on the adolescent group. A large proportion of adolescent girls suffer from various gynecological problems, particularly menstrual irregularities such as amenorrhea, polymenorrhea and dysmenorrhea. Nearly 40-45% of adolescent girls reported menstrual problems. These are mainly due to psychosocial stress and emotional changes. Teenage pregnancy is the major cause of poor reproductive health and health outcomes among adolescents. About 15% pregnancies are among teenage girls under age 18 and they have a 2-5 times higher risk of maternal death. Adolescent pregnant mothers, who are often already poorly nourished before becoming pregnant, run a high obstetric risk for premature delivery, giving birth to a low birth weight baby, prolonged and obstructed labour, and severe intrapartum and postpartum hemorrhage. The data used in the present study were collected from 300 girls as selected randomly from the village under the Chidambaram taluk of Cuddalore District. The association between the general health problems of adolescent girls at various levels reported in the study area and their Socio-economic and Demographic variables were established with the use of suitable statistical tools.

Key Words: Adolescents, Gynecological Problems, Amenorrhea, Teenage Pregnancy and Postpartum Hemorrhage.

Introduction

World Health Organization defines adolescence as the segment of life between the ages of 10-19 years. Adolescence is a transition phase through which a child becomes an adult. It is characterized by rapid growth and development; physiologically, psychologically and socially. There are 1-2 billion adolescents in the world, 85% of them live in developing countries. The adolescent population constitutes about one-fifth of India's population is in the adolescent age group of 10-19 years. In India, girls constitute 5.1% of adolescents in 10-14 years age group and 48% in 15-19 years age group. Adolescents constitute a sizeable proportion of the Indian mothers. However, despite adolescents being a huge segment of the population, policies and programs in India have focused very little on the adolescent group. Adolescents constitute perhaps the healthiest group in the population, having the lowest mortality and morbidity compared with other population age groups. Adolescents are an "in between group", with some nutrition problem, some common with children and some with adults. The World Health Organization defines adolescents as young people aged 10-19 years. As they grow they feel a sense of independence, but depend on adults for their material needs. And as they change, so do their needs change with them.

Importance of Adolescent Health

Adolescent girl's health covers morbidity, mortality, nutritional status and reproductive health and linked to these are environmental degradations, violence and occupational hazards, all of which have implications for adolescent girls health. Adolescent girl's health plays an important role in determining the health of future population, because adolescent girl's health has an intergenerational effect. The cumulative impact of the low health situation of girls is reflected in the high MMR, the incidence of low birth weight babies, high perinatal mortality and foetal wastage and consequent high fertility rates. A transitional period between childhood and adulthood, adolescence provides an opportunity to prepare for a healthy productive and reproductive life, and also to prevent the onset of nutrition related chronic disease in adult life, while addressing adolescence specific nutrition issues and possibly also correcting some nutritional problems originating in the past.

Health Status of Adolescent Girls

For a number of years, the health of adolescents has not been a major concern and research has consequently been limited, as they are less susceptible to disease and suffer from fewer life-threatening conditions than children and elderly people. Mortality and morbidity trends among adolescents are quite similar in developing and developed countries. In all countries of the region, at least 40-50% of adolescent pregnant girls are anaemic. Under nutrition was highly prevalent in three of the 11 studies of ICRW: 53% in India, 36% in Nepal. The collaborative study done in Hyderabad, New Delhi, Calcutta and



Madras showed that amongst girls between 6-14 years of age, the prevalence of anemia was 63.8%, 65.7%, and 98.7% respectively. A study in rural area showed that 65.5% parents of adolescent girls never spoke about the physical changes during puberty, like menarche, with their daughters.

Special Health Problems of Adolescent Girls

A large proportion of adolescent girls suffer from various gynecological problems, particularly menstrual irregularities such as amenorrhea, polymenorrhea, oligomenorrhea, and dysmenorrhea. Nearly 40-45% of adolescent girls reported menstrual problems. These are mainly due to psychosocial stress and emotional changes. Teenage pregnancy is the major cause of poor reproductive health and health outcomes among adolescents. About 15% pregnancies are among teenage girls under age 18 and they have a 2-5 times higher risk of maternal death. Adolescent pregnant mothers, who are often already poorly nourished before becoming pregnant, run a high obstetric risk for premature delivery, giving birth to a low birth weight baby, prolonged and obstructed labour, and severe intrapartum and postpartum hemorrhage.

The adolescent girls in the study area were probed to obtain information on adolescent health problems experienced by them. In this context an attempt has been made to study the general health problems of adolescent girls in the rural area with the following objectives.

Objectives

- To study the general health problems of adolescent girls in the study area.
- To analyse the prevalence of general health problems of girls adolescent with select socio-economic and demographic variables.

Methods and Materials

The data used in the present study was collected from 300 girls as selected randomly from the village under the Chidambaram taluk of Cuddalore District. The association between the general health problems of adolescent girls at various levels reported in the study area and their Socio-economic and Demographic variables were established with the use of suitable statistical tools.

Results and Discussion

General Health Problems of Adolescent Girls

Although adolescence and young adulthood are generally considered healthy times of life, several important public health and social behaviours and problems either start or peak during these years. Most of these problems are linked with social determinants and lifestyles operating and interacting in complex environments that precipitate or trigger these conditions or behaviours. Developmental transition of young people makes them vulnerable particularly to environmental, contextual or surrounding influences. Environmental factors, including family, peer group, school, neighborhood, policies, and societal cues, can both support or challenge young people's health and well-being. Available evidence indicates that young people are prone to a number of health impacting conditions due to personal choices, environmental influences and lifestyle changes including both communicable and non-communicable disorders and injuries. Others include substance use disorders (tobacco, alcohol and others), road traffic injuries (RTIs), suicides (completed and attempted), sexually transmitted infections (STI) including human immunodeficiency virus (HIV) infection, teen and unplanned pregnancies, homelessness, violence and several others. In all countries, whether developing, transitional or developed, disabilities and acute and chronic illnesses are often induced or compounded by economic hardship, unemployment, sanctions, restrictions, poverty or poorly distributed wealth at both individual and country level. The importance of investing in youth has been recognized in India's Constitution. As per 2011 Census, there were about 1.24 crore adolescents in Tamil Nadu and more than half of them living in the rural areas. Literacy level among adolescent (97.70%) in Tamil Nadu is higher than the State's literacy rate (80.09%). Even though the literacy rate is high, majority (63.16%) of the adolescents in rural areas were employed, particularly 27.16% in the agricultural sector. In the urban areas, only 36.83% of the adolescents were employed. The fertility rate in rural areas (20.1) was high when compared to urban areas (18.5). Tamil Nadu's parameters as far as adolescents were concerned, were in line with the national scenario where more youths live in rural areas than in urban areas and the literacy rate is also higher in the group when compared to overall literacy level.

Though adolescence is usually a healthy period, several risk factors of adult diseases which begin in adolescence can be prevented with proper interventions during this period, though with challenges. Exclusive data pertaining to the adolescent health issues in Indian scenario is not available and hence we used the data pertaining to South East Asia Region for comparison in which India is a major constituent country. The data about important adolescent's health issues in different areas are limited. Hence detailed investigation and reports on adolescent's health issues is the need of the hour.



The information collected relating to general health problems of adolescent girls in the sample once were tabulated and analyzed. Out of 300 adolescents girls assessed, 195(65%) reported health problems during their adolescent stage. It can be found from the table-1 that, abdominal pain, profuse bleeding, irregular periods, breast tenderness, painful menstruation and back pain, vomiting sensation and headache and white discharge were the common health problems experienced by the girls in the sample area. Among the 195 respondents who have experienced problems. Majority of girls had abdominal pain, leg pain /back pain and white discharge. Profuse bleeding was also to common problem experienced by 50 percent of the girls. Irregular periods and vomiting sensation were also the problems reported by 43 percent of the girls. While analyzing the duration of illness of the problems that most of problems mentioned in the table were last long for three days of their menstruation. Very few problems last long for more than 5 days.

Table 1: Distribution of Respondents by Nature of General Health Problems of Adolescent Girls

Nature of General Health Problems of Adolescent Girls	Sub-variables	No. of Respondents	Percentage
Any health problems of Adolescent Girls	Yes	195	65.00
	No	105	35.00
	Total	300	100.00
Health problems of Adolescent Girls (The percentage of girls general health problems adds to more than 100 due to multiple responses)	Abdominal Pain	115	58.97
	Profuse Bleeding	97	49.74
	Irregular Periods	83	42.56
	Breast Tenderness	30	15.38
	Painful Menstruation	61	31.28
	Pain in legs / backache	123	63.08
	Feeling of Headache/Vomiting	83	42.56
	White discharge	115	58.97
Duration of Illness (Days)	1	63	32.31
	2	37	18.97
	3	44	22.57
	Above 4	51	26.15
	Average-2.43		
Treatment Taken	Yes	62	31.79
	No	133	68.20
	Total	195	100
Types of Treatment	Govt.Hospital	12	19.35
	Private Hospital	40	64.52
	Traditional Practice	10	16.13
Persons Consulted	Govt. Doctor	12	19.35
	Private Doctor	40	64.51
	Traditional Method	10	16.14
Medicine of taken	Allopathy	46	74.19
	Homeopathy	6	9.68
	Local Medicine	10	16.13
Duration of Treatment (days)	1	23	37.10
	2	14	22.58
	Above 3	25	40.32
	Total	62	100
	Average – 2.03		

The above table shows that 195 girls reported general health problems during adolescent period, only 62(32%) girls sought care for their problems with a majority (64.5%) using private providers followed by (19.35) government providers. 16.13 percent of girls in the sample area still sought locally available traditional medicines for their illness. The average duration of treatment taken for their problems has been calculated as 2.03 days. Hence, Girls general health seeking behavior appears far from optimum. Future intention for home delivery and unskilled child birth was highly indicated. Inadequate awareness and decision making were obvious. Effective measures need to be considered at the community and health sector level.



Prevalence of Health Problems of Adolescent Girls and their Background Characteristics

The adolescent girls in the study area were probed to obtain information on general health problems experienced by them.

Table 2: Distribution of Respondents by Adolescent Health Problems of Girls and their Background Characteristics

SED/Sub-Variables	No	Yes	Total	Chi-square	df	P Value
Religion Hindu	104(35.6)	188(64.04)	292(100.0)	1.82	1	0.17 (NS)
Christian	1(12.5)	7(87.56)	8(100.0)			
Caste SC/ST	15(20.3)	59(79.7)	74(100.0)	9.36	1	0.002 (S)
Others	90(39.8)	138(60.2)	226(100.0)			
Education Illiterate	16(57.1)	12(42.9)	28(100.0)	19.85	4	0.003 (S)
Primary	30(42.3)	41(57.7)	71(100.0)			
Middle	22(40.0)	33(60.0)	55(100.0)			
High School	25(32.1)	53(67.9)	78(100.0)			
Hr. Secondary	12(17.65)	56(82.35)	68(100.0)			
Present Age < 13	43(20.0)	88(80.0)	131(100.0)	7.08	4	0.13 (NS)
14-15	21(30.0)	49(70.0)	70(100.0)			
16-17	22(45.8)	26(54.2)	48(100.0)			
18-19	19(37.3)	32(62.7)	51(100.0)			
Age at Menarch ≤ 12	5(25.0)	15(75.0)	20(100.0)	5.26	4	0.26 (NS)
13	7(20.6)	27(79.4)	34(100.0)			
14	13(33.3)	26(66.7)	39(100.0)			
15	35(38.0)	57(62.0)	92(100.0)			
16 & above	45(39.1)	70(60.9)	115(100.0)			
Occupation Agriculture	42(38.5)	67(61.5)	109(100.0)	2.46	3	0.48 (NS)
Agri. Coolies / wagers	38(36.5)	66(63.5)	104(100.0)			
Business / Trade	10(32.3)	21(67.7)	31(100.0)			
Employed	15(26.8)	41(73.2)	56(100.0)			
Annual Income ≤10,000	42(37.5)	70(62.5)	112(100.0)	13.92	6	0.03 (S)
10,001-20,000	39(36.1)	69(63.9)	108(100.0)			
20,001-30,000	11(44.0)	14(56.0)	25(100.0)			
30,001-40,000	3(25.0)	9(75.0)	12(100.0)			
40,000- 50,000	3(33.3)	6(66.7)	9(100.0)			
50,001-60,000	1(10.0)	9(90.0)	10(100.0)			
Above 60,000	6(25.0)	18(75.0)	24(100.0)			
Medical Expendt. ≤500	46(35.4)	84(64.6)	130(100.0)			
501-1000	34(42.0)	47(58.0)	81(100.0)			
1001-1500	10(34.5)	19(65.5)	29(100.0)			
1501-2000	4(33.3)	8(66.7)	12(100.0)			
2001-2500	7(22.6)	24(77.4)	31(100.0)			
Above 2500	7(22.6)	24(77.4)	31(100.0)			
Total	105(35.0)	195(65.0)	300(100.0)			

Note: Figures in parentheses denote percentages (Row wise)

S – Significant; NS – Not significant

As far as the religion is concerned, nearly 65 percent of the respondents belong to Hindu religion were suffered by many of the health problems during adolescent. The percentage of girls suffered by these problems among scheduled caste respondents (79.7%) is higher than that of the girls belong to other castes (60.2%). Surprisingly, the prevalence of problems was higher among the girls with higher education than the girls with relatively lower education and illiterates. While examining the girls reported general health problems with their present age, it was found that, 80 percent of the girls who suffered general health problems were in the age group of less than 13 years. The age group wise analysis of the girls who suffered one or more general health problems revealed that higher percentage (70%) of the girls in the age group of 14-15 years reported general health problems than the girls in the other age groups. The analysis shows that there is no significant association between the occupational status of the respondents and the prevalence of general health problems. As most of the respondents belong to the income category of less than Rs.20,000 per annum, the girls suffered general health problems were also high among the girls belong to low income category of less than Rs.20,000. More than 63.3 percent of the girls spending



lesser amount of money as their medical expenses reported general health problems. The percentages of girls in the higher income and higher medical expenses categories were less in number it is not meaningful to collaborate these variables with the girls reported general health problems during adolescent period.

The association between the prevalence of general health problems and their socio-economic and demographic background were tested with the use of chi-square statistical test. The analysis shows that, caste, educational level, annual household income and medical expenses of the household are significantly associated with the prevalence of general health problems of adolescent girls since the value of $p < 0.05$.

Conclusion

Out of 300 girls assessed, 195(65%) reported general health problems during their adolescent stage. Among the 195 respondents who have experienced problems, majority of girls reported abdominal pain, leg pain/ back pain and white discharge. Profuse bleeding was also a common problem experienced by 50 percent of the girls. Irregular periods and vomiting sensation were also the problems of 43 percent of the girls. Only 62(32%) girls sought care for their problems with a majority (64.5%) using private providers followed by (19.35%) government providers. 16.13 percent of girls in the sample area still sought locally available traditional medicines for their illness. The average duration of treatment taken for their problems has been calculated as 2.03 days. Hence, girls general health seeking behaviour appears far from optimum. Future intention for home delivery and unskilled child birth was highly indicated. Inadequate awareness and decision making were obvious. Effective measures need to be considered at the community and health sector level.

While analyzing the girls with general health problems with their socio-economic and demographic background, it can be inferred that the percentage of girls suffered by these problems among scheduled caste (79.7%), Christians (87.5%), higher secondary (82%), lower present age (80%), higher household income (90%), employed (73%) reported general health problems of adolescent girls.

While the general health problems of adolescent girls were cross classified with the socio economic and demographic variables, it can be inferred that there was no significant association between religion present age, occupation, age at menarche are not significant ($P > 0.05$). But the education, household income, and medical expenditure is significantly associated with the health problems of adolescent girls ($P < 0.05$).

Policy Suggestions

Girls' health care seeking behavior during adolescence appears far from optimum. Future intention for home delivery and unskilled child birth was highly indicated. Inadequate awareness and decision making were obvious. **Effective measures need to be considered at the community and health sector level to enhance the awareness and increase the utilization of health care services.**

Awareness campaigns for menstrual hygiene along with an active participation from these girls themselves, in voicing their problems and solving them mutually with girls' community action, is the immediate need of the hour.

It is suggested to strengthen health education programmes and media responsibility with regard to adolescent girls' health. Awareness among adolescent girls about the needs of adolescent girls within the health care and education organizations should be improved. Health guidelines should be made for promoting proper health behavior in adolescent girls.

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