

**ABSTRACT**

Most of the surveys show that health status of adolescent girls are at sub-optimal level. It is also an intense anabolic period when requirements for all nutrients increase. The health problems of adolescents are very different from those of younger children and adults. Majority of adolescents still do not have access to information on reproductive health and rights, nor do they have access to preventive and curative services. This study was done to review the literature on various morbidities among adolescent girls. The health and nutritional status of adolescent girls is very poor in rural areas. It is because of gender discrimination in the families. Regular health check-ups and periodical examination in the schools and families should be done by health workers. De-worming should be done on a mass level at regular intervals. Adolescent clinics should be opened in the health centres.

**KEYWORDS:** morbidity, adolescent girls, review

**INTRODUCTION**

WHO defines Adolescence as the segment of life between the ages of 10-19 years? It is a transition phase through which a child becomes an adult. It is characterized by rapid growth and development; physiologically, psychologically and socially (9). So they should be given care in terms of health, nutrition and education. Most of the surveys show that health status of adolescent girls are at sub-optimal level (10). It is also an intense anabolic period when requirements for all nutrients increase (11). The health problems of adolescents are very different from those of younger children and adults (12). Majority of adolescents still do not have access to information on reproductive health and rights, nor do they have access to preventive and curative services (13).

This study was done to review the literature on various morbidities among adolescent girls.

**REVIEW OF LITERATURE**

There was a cross sectional study conducted from June 2008 to May 2009 among adolescent girls residing in six social welfare hostels for scheduled caste students in Nellore. **In that(1) study**, the leading causes of morbidity were pediculosis (83.2%), pallor (41%), dysmenorrhoea (43.6%), dental caries (28%), skin diseases (26.4%), vitamin deficiency (21.5%), and passing worms in stools (13.2%) and defective vision (12%).

The Morbidity pattern among the adolescent girls in urban and rural areas of Lucknow district was conducted in another **study(2)**, which reported the leading causes of morbidity were undernutrition 45%, dental caries (26%), dysmenorrhoea (20%), clinical anaemia (pallor) 30% and 8%, 5% skin and eye infections respectively.

There **was a study(3)** which was aimed to find out the psychogenic co-morbidity among adolescent school going girls and to assess the socio-demographic factors associated with it. Psychiatric illnesses were significantly high (30.6%) in the girls who have no siblings as compared to the girls those have one (10.2%) or two (12.8%) siblings. Psychiatric problems were higher in 3<sup>rd</sup> or more birth order girls, but not found significant statistically. No significant effect of mother's education was found on psychiatric problems, while psychiatric illnesses were significantly high in professional & semi-professional mothers child.

**Another study(4)** was conducted in the year 2008 in a periurban school which is the field practice area of department of community medicine, Mahatma Gandhi Institute of Medical Sciences, Sewagram. 116 children in the age group of 10 to 19 years studying in high school of peri urban area. Nutritional deficiency related health

problems were strikingly high in that study. Overall 28.45% of the school going adolescents had anaemia with girls suffering significantly more 38.89% ( $p < 0.05$ ) as compared to boys 23.75%. Avitaminosis manifested by adolescents was also high but notably absent in the urban girls. 35.34% adolescents had dental caries. 13.79% adolescents were found to be suffering from refractive error. 7.76% adolescents had worm infestation. 6.9% adolescents had skin problems. 2.59% adolescents had tonsillitis and 2.59% had wax in the ear.

**Another cross sectional study(5)** was carried out in an urban population of western Uttar Pradesh. Maximum girls (77.3%) were having morbidity related to blood and blood forming organs followed by psychological morbidities (20.3%) and infective and parasitic (10.9%) diseases. 62.2% girls were found to be anaemic. Morbidity in the present study was maximum (81.8%) in OBC followed by Scheduled caste (69.2%) and least in General caste (55.8%) and this relation of morbidity with caste was statistically significant ( $P < 0.001$ ). The reason for high morbidity in lower caste could be due to lack of money, either due to poverty or due to more number of children in the family, lack of knowledge about child care practices, and poor personal hygiene.

**In a study in Maharashtra(6)**, a high prevalence of dysmenorrhoea (53.60%) was found among adolescent girls. Backache during menstruation was found to be a second common morbidity among 93(41.52%) girls. Other common morbidities were menorrhagia (16.07%) and irregular cycles (11.16%). Very few girls (5.35%) reported of having excessive white discharge. Headache, irritability and breast pain were common symptoms in premenstrual syndrome. Awareness regarding health care seeking behaviour during reproductive illness was found to be very poor and only 37.67% girls sought health care for reproductive illness.

**In another study(7) in Karnataka**, 45.2% of girls were found to be anemic, of which 40.14% had mild anemia (Hb 10.9-11 gm %), 54.92% had moderate anemia (Hb 10.9-8 gm %), and 4.92% had severe anemia (Hb < 8 gm %). Among socioeconomic class higher percentage of anemia found in class four was 33% and class five 32.4%. None of the subject belongs to upper (class I) in this study. A statistically significant association of anemia was found with iron deficiency, weight loss and presence of pallor. Other factors like socioeconomic status, attainment of menarche, age group were not significantly associated with anemia. Among anemic subjects correlating with Body Mass Index (BMI) it was found that 60% were underweight, 38% were normal weight and 2% were overweight. The prevalence of anemia was 71% in postmenarchal girls as compared to 29% in premenarchal girls. A high prevalence of dysmenorrhoea (37.10%) was found **in another study(8)** among adolescent girls followed by menstrual irregularities (18.6%), menorrhagia (1.4%), white discharge per vagina (1.2%) and burning micturition (1.4%). Among those who were having morbidities only 23.89% girls sought health care and 76.11% girls remained silent without approaching health care.

## CONCLUSION

Health education regarding reproductive health and its morbidities should be conducted in schools and colleges and in communities. It can be included as a part of school health programme. Emphasis should be given to make them aware about the importance of seeking of health care. There is need for regular supply of iron and folic acid tablets at AWCs and to increase the compliance regarding consuming tablets among adolescent girls. The health and nutritional status of adolescent girls is very poor in rural areas. It is because of gender discrimination in the families. Regular health check-ups and periodical examination in the schools and families should be done by health workers. De-worming should be done on a mass level at regular intervals. Adolescent clinics should be opened in the health centres.

## REFERENCES

- [1] KM Susmitha, Jyothi C, Prabakaran J. Morbidity pattern among the adolescent girls: A study in the social welfare hostels for scheduled castes, Nellore city, A.P., India. *Nat.J.Res.Com.Med.*, 1(1):01-60, 2012.
- [2] Vijay B, Ranjana B. A study of morbidity status of adolescent girls residing urban / rural areas of Lucknow district *Indian Journal of Basic and Applied Medical Research*; September 2016: Vol.-5, Issue-4, P:188-192.
- [3] Ratandeep L, Sanjeev K, Ravi R. A study of pattern of psychogenic morbidity and associated biosocial factors in school going adolescent girls. *Int J Community Med Public Health*. 2016 Dec; 3(12):3493-3497
- [4] Dambhare DG, Bharambe MS, Mehendale AM, Garg BS. Nutritional Status and Morbidity among School going Adolescents in Wardha, a Peri-Urban area. *Online Journal of Health and Allied Sciences* Volume 9, Issue 2; Apr-Jun 2010.
- [5] Kajal Jain, Deepika Agrawal, S.K. Gupta High Morbidity among Urban Adolescent Females: A Cause For Concern. *International Journal of Contemporary Medical Research*, Volume 3; Issue 4; April 2016.

- 
- [6] Meenal V. Kulkarni and P. M. Durge .Reproductive Health Morbidities among Adolescent Girls:Breaking the Silence. *Ethno Med*, 5(3): 165-168 (2011).
  - [7] Siddharam SM, Venketesh GM, Thejeshwari HL. A Study of Anemia Among Adolescent Girls in Rural Area of Hassan district, Karnataka, South India. *Int J Biol Med Res*. 2011; 2(4): 922 – 924.
  - [8] Ramya V, Mayuri RR,Sridevi B. A Study on reproductive morbidity and menstrual hygiene among adolescent girls of urban slum area of Chitradurga. *National Journal of Community Medicine*;Volume 7,Issue 3,Mar 2016.
  - [9] World Health Organization-Adolescent Nutrition:A Review of the Situation in Selected South-East Asian Countries.2006.
  - [10]Department of women development and childwelfare.Declaring the year 2003 as the year of the adolescent girl.Government of Andhra Pradesh;2003.
  - [11]DiMeglio G.Nutrition in adolescence.*Pediatr Rev* 2000;21:32-3.
  - [12] Adolescent Health.Reproductive and child health for Medical Officers:NIHFW,2001;662-665.
  - [13]National Family Health Survey NFHS 3 India 2005-06,International Institute for Population Sci,Mumbai,India.