



## A Study of the Health and Nutritional Status of Anganwadi Adolescent Girls in the Field Practice Area of Urban Health Centre Jonakapuram, Travancore Medical College, Kollam

### KEYWORDS

Adolescent girls, Nutritional status, malnutrition, Anganwadi

**Dr.Malini M Bhattathiry**

Associate Professor, Department of Community Medicine, Mount Zion Medical College, Adoor, Kerala

**Dr Malini M.Bhattathiry**

Saraswathy Nilayam, Kawdiar P O  
Thiruvananthapuram-695003

**ABSTRACT** *Background:- Adolescence is a significant period for physical growth and development It is closely linked to the diet received during childhood and adolescence. The aim of the study was to assess the health and nutritional status as well as the proportion of malnutrition among adolescent girls and the associated risk factors.*

**METHODOLOGY :** *Community based cross sectional study which was done among fifty four adolescent girls in the field practice area of Jonakapuram. Majority of the adolescent girls belonged to early adolescence (40.7%) . 11.1% had past history of respiratory infections .Pallor suggestive of anemia was found in 33.3% of the study group . 2% had pedal edema suggestive of protein energy malnutrition. BMI assessment showed more than half (55.55%) were underweight .Recommendations after the problem analysis was that Anganwadi workers should be educated about adolescent health issues and their proper management . There should be classes about adolescent health problems in each anganwadis providing the adolescent girls with maximum benefits possible.*

### INTRODUCTION

Adolescence is a period of growth which ranges from 10 to 19 years of age. The term adolescence is derived from the Latin word 'adolescere'; meaning "to grow, to mature".<sup>(1)</sup> It involves rapid physical growth and significant emotional, psychological & spiritual changes. Within all these perspectives adolescence is viewed as a transitional period between childhood and adulthood whose cultural purpose is the preparation of children for adult roles<sup>(2)</sup> It is also a period of greatly enhanced awareness and attention to physical status and well-being. Adolescents constituted 22.8% population of India as on 1<sup>st</sup> March 2009.<sup>(3)</sup> About a quarter of India's population comprises of girls below 20 years.<sup>(4)</sup> Within the adolescent age group, proportion of 10-14 year age is greater than that of 15-19 year group. This has important implications for programming & demography as the needs of two subgroups are different.

The problems of adolescents are multi-dimensional in nature & require a holistic approach. A relevant response to their needs-equipping the adolescents with the knowledge, skills, values & providing them with support, appropriate role models & opportunities can set the stage for their healthy development & growth towards responsible adulthood.

This community based study was chosen as it makes more sense to find out the current issues of physical and mental health among adolescents of the selected regions of community.

Investing resources in adolescents is a sound economic, socio-political and public health strategy and is cost effective in the long-run.

**METHODOLOGY:** A community based cross-sectional descriptive study was carried out to find out the health and nutritional status of adolescent girls residing in field practice area of UHTC Jonakapuram, attached to Travancore Medical College, Kollam.

Data was collected from seven selected anganwadis in the

field practice area which was carried out from 01.03.12 to 30.04.12.

The study was focused solely on the health problems among adolescent girls and 54 girls between 10-19 years old were identified from 7 anganwadis of Jonakapuram coastal area which belongs to Kollam district in which our medical college hospital is situated

The survey was conducted with a pre-tested questionnaire consisting of the relevant physical and mental health questions . Anganwadis were chosen for sample selection with the intention to assess the health education levels, nutritional status and extra activities performed by anganwadis for improving the health status of adolescent girls of the selected regions.

### RESULTS

Among the 54 adolescent girls who participated in the study 41% were in the early adolescent group, 57% belonged to joint families and 59% were below poverty line. The study showed that 33% of the girls were anemic. Other health parameter assessments were not significant except that 31% gave a history of allergy.

Nutritional status was assessed using BMI which showed that 56% were under-nourished and 2% obese or overweight. At least 48% of them consumed junk foods. Life style pattern showed that more than half (52%) were engaged in exercises in the form of either outdoor or indoor games.

Mental health profile showed that 37 % had conflicts with their family and 24% had episodes of depression



**Table 1: Body Mass Index of Adolescent Girls**

BMI	Frequency	Percentage
<18.5	30	56
18.5- 24.5	23	43
>24.5	1	01
Total	54	100

## DISCUSSION

The study to assess the health and nutritional status of adolescent girls attending the Anganwadis of an urban area of Kollam showed that 41% were in their early adolescence. Among the girls 33% were found to be anemic. A study was done on the anaemia prophylaxis in adolescent school girls by weekly or daily iron folate supplementation by Mohan Joshi et al among adolescent girls among whom 37% were anemic.<sup>(5)</sup> Prevalence of anemia was 90% in those girls residing in the urban slums of Nagpur<sup>(6)</sup> and in the urban slums of Lucknow it was 67%..<sup>(7)</sup> Nutritional status was assessed using BMI which showed that 56% were under-nourished and 2% were obese or overweight.

Wi-Young et al in a study on the prevalence of obesity in Korean adolescent girls showed that 8.7% were obese.<sup>(8)</sup> A cross-sectional study on the prevalence of malnutrition among adolescent school girls in Kochi showed 7.5% obesity.<sup>(9)</sup> In this study at least 48% of the girls consumed junk foods. A study on lifestyle associated risk factors in adolescents was done by Singh A K, Maheshwari A, Sharma N, Anand K<sup>(10)</sup> which showed that 30% of them consumed fast food 3-4 times a week. Life style pattern showed that more than half (52%) were engaged in exercises in the form of outdoor / indoor games. Indian Journal of Pediatrics study was conducted to evaluate the prevalence of lifestyle-associated risk factors for non-communicable diseases in apparently healthy school children in an urban school of Delhi using standard criteria.<sup>(11)</sup> Mental health profile showed that 37% had conflicts with their family and 24% had episodes of depression. A study done by Nair et al to find out the prevalence of depression among adolescents showed that 11.2% had extreme grades of depression.<sup>(12)</sup>

## CONCLUSION

The problems of adolescents are multi-dimensional in nature & require a holistic approach. A relevant response to their needs-equipping the adolescents with the knowledge, skills, values & providing them with support, appropriate role models & opportunities can set the stage for their healthy development & growth towards responsible adulthood..

Investing in adolescents makes sense as they are not only in large numbers but also are the citizens and workers of tomorrow who are going to take the country to its prosperous future. Investing resources in adolescents is a sound economic, socio-political and public health strategy and is cost effective in the long-run. This so called 'burden of population needs to be engineered into a 'basket of resources'.

The adolescent psychological changes also deserve attention, including the development of identity distinct from parents and developing own self worth, exploration of new relationships with their peer groups, opposite sex, families and community is a hallmark of adolescence.

## REFERENCES

1. O.P.Ghai. Essentials of Paediatrics.7<sup>th</sup> Edition 2009.

2. Anandha Lakshmi S. Priya. Study on the prevalence of premenstrual syndrome among female adolescents and its association with college absenteeism Int J Biol Med Res. 2011; 2(4): 1011 -1016
3. Park.K. Park's Text book of Social and Preventive Medicine,23<sup>rd</sup> Edition,2015.
4. Anil Agarwal . A Study of Dysmenorrhea During Menstruation in Adolescent Girls.Indian J Community Med. 2010 Jan; 35(1): 159-164.
5. Mohan Joshi,Raghavendra. Weekly iron folic acid supplementation in adolescent girls- An effective nutritional means for the management of iron deficiency anemia. Global Journal of Health Science,Vol 5,No.3:2013.
6. M V Kulkarny et al.Prevalence of anemia among adolescent girls in an urban slum in Nagpur. Natl Jr of community medicine,Vol 3;issue1:jan-mar 2012.
7. Singh JV,Srivastava AK.A study on the health status of Adolescent girls in the slums of Lucknow. Intl jr of med sciences & public health 2014.3(8):951-54.
8. Wi-Young et al . Prevalence of obesity in Korean adolescent girls and its relationship to physical education classes.Jr of sports science and medicine 2011;10(4):679-84.
9. Cherian AT, Cherian SS, Subbiah S Prevalence of obesity and overweight in urban school children in Kerala, India.. [Indian Pediatr](#). 2012 Jun;49(6):475-7.
10. Singh AK, Maheshwari A, Sharma N, Anand K. Lifestyle associated risk factors in adolescents. [Indian Jr of Pediatrtrics](#). 2006 Oct;73(10):901-6
11. Maria Frances Bukeo, Deepthi Kiran Risk factors for non-communicable diseases among rural adolescents [Indian J Pediatr](#). 2004 Jun;71(6):523-24.
12. Nair MK,Paul MK,John R. Prevalence and pattern of depression among adolescents. Indian J Pediatr (2004) 71