

A Study to Assess the Knowledge Level of Anaemia among Adolescent Girls in Eriyamangalam

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ABSTRACT

The present aim was to assess the knowledge level of anaemia among adolescent girls in rural area. A quantitative approach with descriptive research design was used for the present study. 30 adolescent girls were selected by using non probability convenience sampling technique. Self structured questionnaire method was used to collect the demographic data and the knowledge level of anaemia among adolescent girls. Among 30 samples, the mean score of knowledge among adolescent girls was 12.30 with standard deviation 2.20 with minimum score of 6.0 and maximum score of 16.0. The knowledge level of anaemia among adolescent girls with 21(70%) had good knowledge, 6(20%) had average knowledge and 3(10%) had excellent knowledge level in anaemia. The study concluded that there is significant difference in the knowledge level of anaemia among adolescent girls in rural area.

Keywords: Adolescent Girls, Anaemia Knowledge

INTRODUCTION

Anaemia is defined as a condition in which the number of red blood cells (RBCs) and their oxygen-carrying capacity is insufficient to meet the body's physiologic needs. It is a condition when the normal number of RBCs (<4.2 million/ μ l) or haemoglobin (Hb) level <12 g/dl in women and <13 in men. ^[1] Globally, anaemia is the most common and inflexible nutritional problem affecting around 2 billion of the world's population having major impact to human health and social and economic

development; and more than 89% of this burden occurred in developing countries. ^[1]

Adolescent period is defined by the WHO as the period of life spanning the age between 10 to 19 years. This is the formative period of life when the maximum amount of physical, psychological, and behavioural changes take place. This is a vulnerable period in the human life cycle for the development of anaemia, which has been constantly neglected by public health programs. Anaemia is one of the India's major public health problems affecting all societies, especially most prevalence among adolescent girls. WHO (2001): stated that peak prevalence of anaemia occurs among females during adolescence. Adolescent period have been recognized as a special period in the life cycle that require specific and special attention. There are direct linkage between poverty and anaemia. Adolescent girls caught in this vicious cycle are the young mothers of 21st century. They are deprived of the basic rights to health, education, development and independences. Adolescent girls' scheme is a special intervention programme for girls between 13 to 18 years of age to meet the special needs in nutrition education and development. Adolescent health is one important thrust of the new reproductive and child health programme. ^[2]

Adolescence has been defined by WHO as the period of life span, the age between 10- 19 years. It is a formative period of life when maximum amount of physical, psychological and behavioural changes take place. Adolescence is a

critical stage in the life cycle, when health of the female is affected due to growth spurt, beginning of menstruation, poor intake of iron due to poor dietary habits and gender bias² which may lead to iron deficiency anaemia among the adolescent girls. The average monthly menstrual blood loss is about 45 ml and causes the loss of about 22mg of iron³. Anaemia during adolescence limits its growth and delays the onset of menarche, which in turn may later lead to cephalo pelvic disproportion.^[3]

About 75% teenage girls, do not meet their dietary requirements for iron, compared to only 17% of teenage boys.⁵ Total nutrient requirements are increased during adolescence period to support a dramatic growth and development. Eating right food at right time will prevent nutritional deficiencies especially iron deficiency disorders.^[4] Total nutrient requirements are increased during adolescence period to support a dramatic growth and development. Eating right food at right time will prevent nutritional deficiencies especially iron deficiency disorders.^[5] The prevalence of anaemia is disproportionately high in the developing countries, due to poverty, inadequate diet, worm infestations, pregnancy/ lactation and poor access to the health services.⁷ Iron deficiency anaemia is one of the most prevalent common nutritional deficiencies in the world especially among adolescent girls.^[6]

According to WHO 2014 survey estimation the highest prevalence of anaemia is in pre-school children (47.4%), and the lowest prevalence is in men (12.7%) nearly 50% of women in reproductive age are anaemic. National family health survey in 2006 stated that 56% adolescent girl is anaemic in India. In the world health report of world health organization, it was seen that the worldwide mortality rate of iron deficiency anaemia was 60,404,000 and mortality rate in India was 13,704,953 in 2005¹⁰. A study was conducted on prevalence of iron deficiency anaemia among adolescent girls in 16 districts of

India in 2006. The survey showed that 90.1% adolescent girls were exposed to moderate iron deficiency anaemia and 71% of girls were exposed to severe iron deficiency anaemia.^[7]

The prevalence of iron deficiency anaemia among adolescent girls is consistently high nowadays because most of the adolescent girls have an intention to maintain a slim structure. An influence of junk foods and fast foods will reduce the intake of dietary iron rich foods. To prevent iron deficiency anaemia, teenage girls and young women need to be aware of the condition. Education and motivation can bring in awareness and it is hoped that other females will also be more inclined to eat iron-rich foods and foods that are iron sources, practice home-based methods of food fortification and monitor monthly bleeding. The study was conducted on women of reproductive age in a rural area showed that 55.8% of the participants had inadequate knowledge and 44.2% had adequate knowledge on prevention of iron deficiency anaemia. Adolescent girls are very important section of our society as they are our potential mothers and future homemakers. Therefore they should be targeted in providing education regarding iron deficiency anaemia and help them to have a healthy life.^[8]

The purpose of the study is 1. To assess the demographic variables of adolescent girls, 2.To assess the level of knowledge on anaemia among adolescent girls, 3.To find out the association between the level of knowledge on anaemia among adolescent girls with their selected demographic variables.

METHODS AND MATERIALS

The quantitative approach with descriptive research design was used for the present study. After obtaining ethical clearance from the Institutional Ethical Committee (IEC) of Saveetha Institute of Medical And Technical Sciences and a formal permission from the rural authorities, the study was conducted. A total of 30

adolescent girls, who meet the inclusion criteria, was selected by using convenient sampling technique as the samples. The inclusion criteria for the study participants was the adolescent girls between the age group of 10- 19 years who are available during the study period who were willing to participate and are able to read , write and understand Tamil and English. The exclusion criteria for the study participants were adolescent girls who are willing and to participate the study .The purpose of the study was explained by the investigator to each of the study participant and a written informed consent was obtained from them. The demographic data and the level of knowledge were collected by using the self structured questionnaire and the collected data were tabulated and analysed by using descriptive and inferential statistics.

RESULTS & DISCUSSION

SECTION – A: Demographic characteristics

Among 30 samples, the rural area, with regards to age 17 (56%) were the age group of 10-15 years, with regarding educational qualification 16(53.3%) had primary education, with regarding occupation 30(100%) were coolie, with regarding dietary pattern 15(50%) were vegetarian and non vegetarian and with regarding socio economic status 15(50%) belongs to middle and lower class in adolescent girls.

SECTION- B: Assess the level of knowledge on anaemia among adolescent girls.

The level of knowledge shows that in the rural area, 21(70%) had good knowledge, 6(20%) had average knowledge and 3(10%) had excellent knowledge on anaemia among adolescent girls.

Table 1: Frequency and percentage distribution of level of knowledge on anaemia among adolescent girls. n= 30

Level of Knowledge	No.	%
Low (0 – 25%)	0	0
Average (26 – 50%)	6	20.0
Good (51 – 75%)	21	70.0
Excellent (76 – 100%)	3	10.0

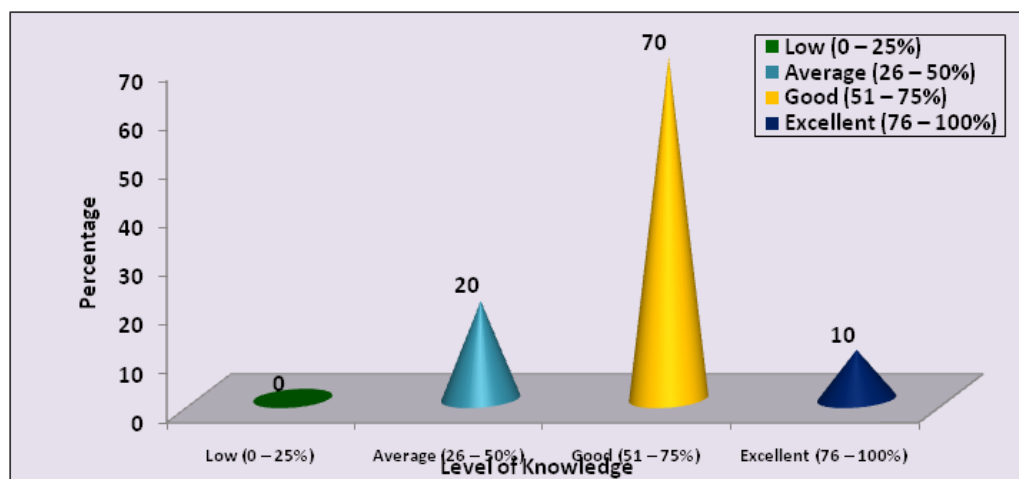


Fig1: Percentage distribution of level of knowledge on anaemia among adolescent girls

In the present study, the mean score level of knowledge among adolescent girls was 12.30 with standard deviation 2.20 with minimum score of 6.0 and maximum score of 16.0. This clearly infers, there is a significant difference in the level of knowledge on anaemia.

Table 2: Mean and standard deviation of knowledge scores on anaemia among adolescent girls. n = 30

Knowledge	Score
Minimum Score	6.0
Maximum Score	16.0
Mean	12.30
Standard Deviation	2.29

SECTION-C: Association of level of knowledge on anaemia among adolescent girls with their selected demographic variables.

The study findings revealed that there was none of the demographic variables had shown statistically significant association with level of knowledge on anaemia among adolescent girls.

CONCLUSION

The finding revealed that the level of knowledge on anaemia among adolescent girls had adequate knowledge about anaemia and there is need to improve the knowledge through the advertisement and conduction the health education programmes.

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