TO ASSESS THE PREVALENCE OF ANAEMIA AMONG GIRLS, BETWEEN THE AGE GROUP OF 18-22 YEARS RESIDING IN INSTITUTIONAL RESIDENTIAL COMPLEX

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Abstract

Girls between the age of 18-22 years is a traditional stage of physical and mental human development generally—between puberty and legal adulthood but largely characterized as beginning and ending with the teenage stage. According to Erik Erikson, stages of human development for example, a young adult is generally a person between the ages of 20 & 40 whereas an adult is a person between the ages of 13 &19.They account for 1/5 of the worlds' population and in India they account for 22.8% of the total population Number of adolescence in India particularly girls live under suboptimal conditions marked by poor nutritional status and high level of morbidity and mortality. They are the ones who are potential mothers and future homemakers constitute an important part of our society.

This study aims to assess the prevalence of anaemia among girls between the age group of 18-22 years residing in institutional residential complex.Exploratory method was adopted with the purpose of finding out the prevalence of anaemia through Sahil's method.

Material and method

A non-experimental descriptive research design was undertaken while the approach utilized was quantitative. Non-probability purposive sampling technique was used for sample selection of 30 samples. The study was done at selected institutional residential complex of the city. Structured questionnaire was used as a tool for collecting the data which included demographic questions and haemoglobin was assessed by Sahil's method.. Analysis was done by using descriptive inferential statistics.

Results

Analysis revealed that 12(40%) of the girls have >10.5gm %(normal) haemoglobin level, 09(30%) of them have haemoglobin level between 9.5-10.4gm %(moderate anaemia)

and 09(30%)of them have haemoglobin level between 8-9.4gm% (mild anaemia), none were found in the categories of severe(6.6-7.9gm%) & very severe (<6.5gm%) anaemia. Mean Hemoglobin level of nursing students was **10.7gm%** and the Standard Deviation was **1.4798.**

Conclusion

From the present study it is revealed that 30% of the girls have moderated & mild Hb levels which is a cause of concern. This range to shift to severe category if immediate attention is not drawn towards the remedial measures for correction of anaemia.

Keywords:prevalence, anaemia, girls, 18-22 years, institutional residential complex

1.Introduction

Girls between the age of 18-22 years is a traditional stage of physical and mental human development generally—between puberty and legal adulthood but largely characterized as beginning and ending with the teenage stage. According to Erik Erikson, stages of human development for example, a young adult is generally a person between the ages of 20 & 40 whereas an adult is a person between the ages of 13 &19.They account for 1/5 of the worlds' population and in India they account for 22.8% of the total population Number of adolescence in India particularly girls live under suboptimal conditions marked by poor nutritional status and high level of morbidity and mortality. They are the ones who are potential mothers and future homemakers constitute an important part of our society.

The nutritional requirement of adolescent is influence primarily by the normal event of puberty and simultaneous spurt of growth. Puberty is intensely anabolic period with increase in height and weight, alteration in the body composition resulting from increased lean body mass and change in quantity and distribution of fat and enlargement of many organ systems.Girls between the ages of 18-22 years are particularly susceptible to iron deficiency anemia in view of the increased need for dietary iron for haemoglobin and myoglobin synthesis during the rapid period of growth when blood volume and muscle mass are increased. They do suffer from low haemoglobins levels which if not detected or diagnosed at an early stage may have adverse effects on her health status .In view of this the present study was undertaken to assess the prevalence of anaemia among girls in the age group of 18-22 years residing in institutional residential complex .

Materials and Method:

In order to achieve the desired objective of the study, a non-experimental exploratory approach was adopted for the study. The design adopted for the study is non-experimental exploratory design. Research variable for the study was prevalence of anaemia. The population is selected for the study comprised of female students aged between 18-22 years residing in institutional residential complex. Sample selected for the present study comprised of female students between the ages of 18-22 years residing in selected institutional residential complex. Inclusion criteria required the students to be staying in residential complex and within the age group specified. The samples who were already on Iron therapy /treatment were excluded from the study.The total sample size for the study was 30. Non probability purposive sampling technique was selected for sample selection.Tool was developed with two sections,section I – Demographic profile questionnaire and section II for Haemoglobin estimation through Sahil's method.Reliability of the apparatus was done in terms of its accuracy to interpret the results,content validity of the tool was done by experts in the field. Pilot study was done to assess the feasibility of the study the study could not identify any flaws and it was feasible to conduct the main study.

Results

Analysis of the demographic data

SECTION I:

The study of 30 samples reveals that 8 students (26.66%) belongs to 18 & 19 years of age,6 of them (20%) in the age group of 20 & 21 years,2(6.7%)were 22 years of age.

Among 30 samples it was found that majority students (22) were non-vegetarian (73.34), 8 of them (26.66%) were vegetarian. Based on the consumption of vegetarian food it shows that 16 (53.34%) consumed soya bean in their diet & other 11(36.66%) consumed spinach & only 3(10%) consumed drumstick in their diet, 14 (46.66%) students consumed vegetarian foods once a week,10(33.34%) consumed twice a week &3(10%) consumed once a month. It reveals that 50% consumed all type of non-vegetarian foods & another 50% consumed eggs in their diet. It revealed that 77.28% students consumed non vegetarian food once a week,4.54% students consumed non vegetarian foods rarely & monthly. Based on the quality of foods 40% nursing students agree that the quality of food was good, 36.66% said it has poor quality whereas 23.34% of them said it was average.

Menstrual history revealed that 83.34% nursing students had normal menstrual flow, 10% said the flow was scanty & 06.66% of them had heavy flow.

SECTION II:

Classification of anaemia among girls between the ages of 18-22years residing in institutional residential complex.

Analysis revealed that 12(40%) of the girls have >10.5gm %(normal) haemoglobin level, 09(30%) of them have haemoglobin level between 9.5-10.4gm %(moderate anaemia) and 09(30%)of them have haemoglobin level between 8-9.4gm% (mild anaemia), none were found in the categories of severe(6.6-7.9gm%) & very severe (<6.5gm%) anaemia. Mean Hemoglobin level of nursing students was **10.7gm%** and the Standard Deviation was **1.4798.**

DISCUSSION:

Many researchers in the past and present had used Sahli"s method in estimation of haemoglobin in finding out anaemia. In this section the major findings of the present study have been discussed with reference to the results obtain by other investigators.

From the present study it is revealed that 30% of the girls have moderated & mild Hb levels which is a cause of concern. This range to shift to severe category if immediate attention is not drawn towards the remedial measures for correction of anaemia.The study are results are supported by similar study conducted in Tamilnadu (2019) where the overall prevalence of anaemia among adolescent girls was 48.63% among an overall sample of 124 girls, 55.64% of girls were having mild anaemia.

Recommendation for further research

The study can be replicated in determining the causes of anemia.

A comparative study can be carried out in urban and rural area regarding prevalence of anaemia among adolescent girls

Data study statement

This article contains all of the data generated during the study

Funding

There is no research fund included for this proposal

Conflicts of interest

There are no competing interests in this study, according to the authors

Ethical approval

Permission from Bharati Vidyapeeth (Deemed to be University) College of Nursing, Pune Institutional Research Cell for conducting the study, prior permission was obtained from authority of residential complex for girls to conduct the study and consent was taken from participants

Acknowledgement

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5.References

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