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A DESCRIPTIVE STUDY TO ASSESS THE KNOWLEDGE ABOUT IRON DEFICIENCY ANEMIA AMONG SCHOOL GOING ADOLESCENT STUDENTS AT RURAL AREA, KOLHAPUR, WITH A VIEW TO DEVELOP AN INFORMATION BOOKLET

Nursing

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ABSTRACT

BACKGROUND: Anemia, including Iron Deficiency Anemia (IDA), is prevented in children and young adolescent males and females. In IDA, red blood cells are unable to oxygenate tissue in the body due to the lack of essential iron. India has had a particularly high consistent prevalence of IDA since the National Family Health Survey. **Method:** Main study was conducted on 04/04/2023. The research approach used to the study was quantitative approach, design was non experimental, descriptive survey research design, by using Non probability purposive sampling technique 100 school going adolescent students of rural area at Kolhapur were selected. 25 multiple choice questionnaire items on knowledge regarding iron deficiency anemia were given. Average time given for data collection to each sample was 30 min approximately. Data was analyzed by using mean, median, mode, Chi square test for finding association. **Result:** The result of the study revealed that 100 samples were selected purposively from selected rural area of Kolhapur of which 37% were females and 63% males, most of them were in the age group of 14 – 15years. The findings of the study revealed that majority 54 (54%) of the sample had good knowledge, 31 (31 %) of them had average knowledge and 15 (15%) were having poor Knowledge. **Conclusion:** The findings of the study revealed that majority 54 (54%) of the sample had good knowledge, 31 (31 %) of them had average knowledge and 15 (15%) were having poor Knowledge.

KEYWORDS

Anemia, Knowledge, Assess, Prevention

INTRODUCTION

Anemia is an important public health problem, and it can affect people of all ages and from any region. The most prevalent type of anemia is nutritional anemia, caused by a lack of iron, folate, or vitamin B12. Iron deficiency anemia (IDA) is a quite simple disease to identify, but because of its generic clinical indications, it can lie untreated for a long period.

According to the World Health Organization (WHO), adolescent age is defined as a period between the ages of 10 and 19. As the youth age is in a formative developmental year, anemia has long-term implications at this stage in life, including developmental problems, cognitive functioning, decreased immunity, irregular menstrual cycles, and subsequent poor pregnancy effects. Furthermore, a higher prevalence of anemia has been linked to a number of medical conditions such as essential hypertension, hypothyroidism, congestive heart failure, coronary artery disease, and rheumatoid arthritis. Mild-to-severe anemia typically manifests during adolescence, and if treated early, most anemia-related consequences can be avoided.

According to the WHO, anemia affects 24.8% of the world's population and affects on adolescent age group in impoverished countries and 6% of adolescent females in affluent nations. According to National Family Health Survey (NFHS-4), 53% of Indian women aged 15 to 49 are anemic. The prevalence of anemia varies significantly across India, with a particularly high prevalence in rural areas. As a result, it is critical to comprehend the factors linked to anemia in rural regions. The adolescent age group who are aware of anemia and its symptoms will be better prepared to take care of their own health as they grow older. Also, understanding these factors enables the development of a multimodal strategy for the prevention and management of anemia in the adolescent age group. Keeping these aspects in mind, the purpose of this study was to determine the prevalence, knowledge, and associated factors of anemia among the school-going adolescent age group (Boys & Girls) in a remote area.

NEED FOR STUDY:- There is more prevalence of anemia among adolescent age group it can be prevented with the help of providing supplementary therapy and proper educational program. So, for implementing the education program we have to assess their knowledge regarding the prevention of anemia among the adolescent age group. That is why investigator conducted this survey study to assess the knowledge regarding prevention of anemia. The result of the study will help for community to plan an appropriate educational program.

AIM OF THE STUDY

The present study was undertaken to assess the knowledge regarding the knowledge about iron deficiency anemia among school going adolescent students at rural area, Kolhapur, with a view to develop an information booklet ".

MATERIALS AND METHODS

The Quantitative, descriptive study was undertaken at Sidhnerli Vidyalaya Kolhapur, Maharashtra. The study population consisted of adolescent school going student between the age group of 13 to 14 years residing at selected rural area at Kolhapur. A total 100 adolescent school going students were selected by non-probability, purposive sampling technique. Adults who were willing to participate were included in the study, whereas not present during data collection were excluded from the study.

After an extensive review of literature, referring the books and journals as well as discussion with the guide and experts in field, the study tool was developed. It contained two sections. **Section A** The socio-demographic variables used for the present study are Age in years, Gender, Education status of parents, Religion, Geographical area, types of food, Number of children in the family, Family monthly income, **etc. Section B c**onsists of 25 items of Knowledge regarding iron deficiency anemia.

Prior permission was obtained from the concerned authority. For maximum co-operation, the investigators introduced themselves to the respondent and willingness of the participants was ascertained. The respondents were assured the anonymity and confidentiality of information provided by them. The data was collected from the subject on 04/04/2023 which took on an average 30 minutes for each subject. data collected were recorded systematically for each subject & was organized in a way that facilitates.

Data was analyzed by following steps:

- Organizing the data in master sheet.
- Frequency & percentage of data will be calculated for describing demographic variables.
- In Inferential statistics, Chi square test was used to determine the association levels of knowledge score with their selected socio demographic variables among adolescent school going students.

In the main study indicates that

1. Maximum of 100 (100%) of all students were age group of 14 years to 15 years.
2. In gender Majority of participants 63 (63%) were Male students and the remaining 37 (37%) were Female students.
3. In education majority of participants 63 (63%) parents were Primary

education and a minimum of 2 (2%) parents were Uneducated.
4. In religion majority of participants 99 (99%) students belonged to the Hindu religion and a minimum of 1 (1%) Students were Muslim.
5. In a type of diet of a majority of participants 85 (85%) had a Mixed type of diet and a minimum of 15 (15%) were Vegetarian.
6. In the number of children a majority of participants 64 (64%) had 2 children and a minimum of 7 (7%) had 1 Child.
7. In family monthly income majority of participants of 46 (46%) have >Rs. 30,000 and a minimum 14 (14%) have both Rs. 10,000 – Rs. 20,000 and Rs.20,000 – Rs.30,000

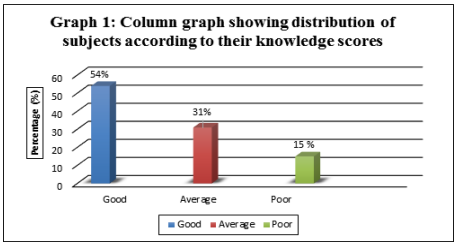
Result: The present study was designed to identify the knowledge about iron deficiency anemia from 100 adolescent school-going students in a rural area, Kolhapur. Collected data were recorded, organized, analyzed, and interpreted by using descriptive and inferential statistics.

SECTION I: Finding the knowledge scores among adolescent school-going students in a rural area, Kolhapur.

Table 1: Frequency (*f*) and Percentage (%) distribution of knowledge scores among adolescent school-going students in a rural area, Kolhapur

Demographic variables	Frequency (f)	Percentage %
1) Age (In years) a) 12-13 b) 14-15	 0 100	 0% 100%
2) Gender a) Male b) Female	 63 37	 63% 37%
3) Education status of parentsa) Uneducatedb)Primary Educationc)Secondary Educationd)Higher Secondary 2156320 2%15%63%20%4)Religiona)Hindub)Muslimc)Christiand)Other 99100 99%1%0%0%5)Geographical areaa)Ruralb)Urban 1000% 100%0%6)Type of diet a)Vegetarianb)Non-vegetarianc)Mixed Diet 15085 15%0%85%7)Monthly family income a)Rs.10,000b)Rs.10,000 – 20,000c)Rs.20,000 – 30,000d)Rs.30,000 and Above 26141446 26%14%14%46%		

n = 100 Sr. No.	Level of knowledge	Score	Frequency	Percentage
1.	Good	>17	54	54%
2.	Average	9 – 16	31	31%
3.	Poor	< 8	15	15%



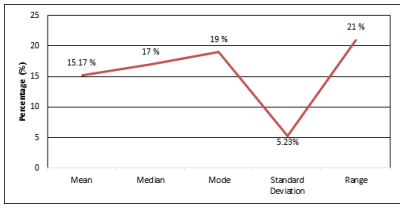
Graph 1:

Reveals the distribution of subjects according to their knowledge scores among the 100 subjects, 54 (54%) were good and 31 (31%) were average and 15 (15%) were poor.

Table 2: Findings related to Mean, Median, Mode, Standard deviation, and range of knowledge scores of subjects regarding iron deficiency anemia among school-going adolescent students in a rural area, Kolhapur.

Table 2: Indicated that,
Mean was 15.17, Median was 17, Mode was 19, Standard deviation was 5.23 and Range was 21.

Graph 2: Line diagram showing distribution of subjects according to their mean, median, mode, standard deviation and range of knowledge scores



DISCUSSION

The chapter deals with the summary and discussion of the findings. In addition to this it also deals with conclusion recommendation for further research and implication. The present study has been undertaken to assess the knowledge regarding anemia among adolescent school going students in rural school at Kolhapur.

OBJECTIVE

1) To assess the knowledge about iron deficiency anemia among the school going adolescent students.
2) To find out the association between knowledge about anemia with their selected socio - demographic variables.

The discussion has been presented under following headings.
1. Findings related to selected socio- demographic variable.
2. Findings related to distribution of samples according to the knowledge scores
3. Findings related to association between knowledge scores with their selected socio - demographic variable among adolescents.

Finding related to selected socio-demographic variables.
In present study majority of participants are 100 (100%) of all students were age group of 14 years to 15 years.

In gender majority of 63 (63%) were Male students and the remaining 37 (37%) were Female students.

In education majority of 63 (63%) parents were Primary education and a minimum of 2 (2%) parents were Uneducated.

In religion maximum of 99 (99%) students belonged to the Hindu religion and a minimum of 1 (1%) Students were Muslim.

Maximum of 100 (100%) of all students were belongs to Rural areas.

In a type of diet of a maximum 85 (85%) had a Mixed type of diet and a minimum of 15 (15%) were Vegetarian.

In the number of children a maximum of 64 (64%) had 2 children and a minimum of 7 (7%) had 1 Child.

In family monthly income maximum of 46 (46%) have >Rs. 30,000 and a minimum 14 (14%) have both Rs.10,000 – Rs.20,000 and Rs.20,000 – Rs.30,000

Findings related to assess the knowledge regarding iron deficiency anemia.
In the present study researcher found that 54 (54%) were having good knowledge and 31 (31%) were having average knowledge and 15 (15%) were having poor knowledge about iron deficiency anemia

SECTION II: **Finding related to selected socio-demographic variables.**

Table 3: Frequency and Percentage Distribution of Socio-Demographic Variables among adolescent school-going students in rural areas

The data presented in Table No. 3 indicate that,
Maximum of 100 (100%) of all students were age group of 14 years to 15 years.

In gender majority of 63 (63%) were Male students and the remaining 37 (37%) were Female students.

In education majority of 63 (63%) parents were Primary education and a minimum of 2 (2%) parents were Uneducated.

In religion maximum of 99 (99%) students belonged to the Hindu religion and a minimum of 1 (1%) Students were Muslim.

Maximum of 100 (100%) of all students were belongs to Rural areas.

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In the number of children a maximum of 64 (64%) had 2 children and a minimum of 7 (7%) had Child.

In family monthly income maximum of 46 (46%) have >Rs. 30,000 and a minimum 14 (14%) have both Rs. 10,000 – Rs. 20,000 and Rs.20,000 – Rs.30,000

Findings related to association between the level of knowledge score regarding iron deficiency anemia and selected socio-demographic variables among adolescent student.

There was significant association with their selected socio-demographic variables, like Number of siblings in a family [x^2cal =15.71; x^2tab =12.59], Monthly family income [x^2cal = 13.46; x^2tab = 12.59] the calculated chi-square value was higher than tabulated value at 0.05 level of significance. This indicate that there is significant association with their selected socio-demographic variables like Number of siblings in a family and Monthly family income, Hence H_1 is accepted. In the present study knowledge score among 100 subjects, Majority of 54 (54%) were in good category and 31 (31%) were in average category and 15 (15%) were poor category. There is need to provide information booklet on iron deficiency anemia for to improve knowledge regarding anemia.

CONCLUSION

The research approach used for the study was descriptive survey research design, by using non-probability purposive sampling technique,100 adolescents were selected for the study, Majority of sample 54 (54%) having good knowledge and 15 (15%) were having poor knowledge. There was significant association between scores regarding knowledge on iron deficiency anemia with their selected socio-demographic variables like Number of siblings in a family the calculated Chi-square value [x^2cal =15.71; x^2tab =12.59], and Monthly family income [x^2cal = 13.46; x^2tab = 12.59] value was higher than tabulated value.

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