A STUDY TO ASSESS THE LEVEL OF KNOWLEDGE ON IRON DEFICIENCY ANAEMIA AMONG ADOLESCENT GIRLS 1ST YR B.SC (N) STUDENT AT SELECTED COLLEGE OF NURSING, KELAMBAKKAM, KANCHIPURAM DISTRICT, TAMILNADU, INDIA

D. DHANALAKSHMI1, R. BASHMATH LIMCY2 & KOGILA. P3

1,2 Final year B.Sc (N) student, Chettinad College of Nursing, Tamil Nadu, India
3 Associate Professor, Chettinad College of Nursing, Tamil Nadu, India

ABSTRACT

A descriptive study to assess the level of knowledge on iron deficiency anaemia among adolescent girls at Chettinad college of nursing. The objectives are to assess the existing knowledge regarding iron deficiency anaemia among adolescent girls 1st yr B.sc (N). To find out the association between the level of knowledge on iron deficiency anaemia among adolescent girls 1st yr B.sc (N) with selected demographic variables. The sampling technique was non-probability, convenient sampling technique with the sample of 30 adolescent and questionnaires were formulated, structured questionnaire schedule were used to assess the knowledge. Hypotheses were formulated. The level of significance selected was p<0.05. The mean value is 14.76 and the standard deviation is 2.28. The study shows that 10% of the students are having inadequate knowledge. 50% of the students are having moderate knowledge and 40% of the students are having adequate knowledge. So this study shows that the adolescent girls are having a knowledge regarding iron deficiency anaemia.

KEYWORDS: Knowledge on Iron Deficiency Anaemia, Adolescent Girls

INTRODUCTION

Blood is a complex fluid in which a variety of cells RBCs (red blood cells or erythrocytes), WBCs (white blood cells or leukocytes) and platelets (thrombocytes) are suspended in plasma. Blood circulates continuously through the heart and vascular system. Mature RBCs consist primarily of haemoglobin, which contains iron and makes up to 95% of the cell mass. Haemoglobin, a complex protein-iron compound composed of heme (an iron compound) and globing (a simple protein), functions to bind with oxygen and carbon dioxide. The normal value of haemoglobin in men is 13.5-18g/dl and in females 12-16g/dl. Iron is obtained from food and dietary supplements. Approximately 1mg of every 10 to 20 mg of ingested iron is absorbed in the duodenum and upper jejunum. Therefore only 5% to 10% of ingested iron is absorbed. When the stored iron is not replaced, haemoglobin production is reduced. Iron is of great importance in human nutrition. The adult human body contains between 3-4 g of iron, of which about 60-70 percent is present in the blood (Hb iron) as circulating iron, and the rest (1 to 1.5g) as stored iron in liver, spleen, bone marrow and kidney. Each gram of haemoglobin contains about 3.34 mg of iron.

Prevalence of anaemia among adolescents is more than 25% in developing countries and 7-12% in...
developed countries. In India this age group forms 21.4 per cent of total population.

Title

A study to assess the level of knowledge on iron deficiency anaemia among the adolescent girls 1st yr B.sc(N) student at selected college of nursing, kelambakkam, kanchipuram district.

Objectives

- To assess the existing knowledge regarding iron deficiency anaemia among Adolescent girls 1st yr B.sc (N)
- To find out the association between the knowledge of iron deficiency anaemia among adolescent girls 1st yr B.sc (N) with selected demographic variables

Research hypothesis

H1- There is a significant association between the levels of knowledge on iron deficiency anaemia among adolescent girls 1st yr B.sc (N) with selected demographic variables

METHODOLOGY

This study had used non experimental-descriptive design with quantitative approach and was conducted among adolescent girls who are studying 1st yr B.sc (N) Chettinad College of nursing. Who fulfills the given criteria. The sample size was 30 and the sampling technique used was simple random sampling

- Inclusion Criteria
  - Age group between 17 to 18 years
  - Those who are willing to participate in this Study

- Exclusion criteria
  - Adolescent boys who are studying 1st year in Chettinad College.
  - Adolescent girls who are absent at the time of study.
  - Adolescent girls who are under age of 19 yrs and above.

Selection and Development of Study Instruments

In present study the researcher plan to prepare the demographic variables Performa and structured Questionnaire to assess the knowledge on iron deficiency anaemia among the adolescent girls 1st yr B.sc (N) student.

Scoring and Interpretation

<table>
<thead>
<tr>
<th>S. No</th>
<th>Level of Knowledge</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Inadequate knowledge</td>
<td>0-10</td>
</tr>
<tr>
<td>2</td>
<td>Moderate knowledge</td>
<td>11-15</td>
</tr>
<tr>
<td>3</td>
<td>Adequate Knowledge</td>
<td>16-20</td>
</tr>
</tbody>
</table>
In this present study the researcher assessed the knowledge of 1st yr B.sc(N) adolescent girls on iron deficiency anaemia distribute the demographic variable Performa and structured questionnaires to the sample. The samples are instructed to be fill it and filled data sheets are collected from the sample.

RESULTS

The shows that maximum of adolescent girls were 18 years it was (70%). Majority of the students living as a nuclear family and it 26 (86.66%) and family income is between Rs. 5001-10000 which was (40%) each. Majority of adolescent students are Hindu and on it 21 (70%) & dietary pattern is non-vegetarian and on it 29 (96.66%). Majority of family history on iron deficiency anaemia is absent and on it 30 (100%).

Figure 1: This diagram showing the dietary pattern of adolescent girls were having highest frequency 29 (97%) and mothers completed their 12th were having lowest frequency 1 (3%).

Table 2: Mean and Standard Deviation of Knowledge of Iron Deficiency Adolescent Girls

<table>
<thead>
<tr>
<th>S. No</th>
<th>Level of Knowledge</th>
<th>No of Adolescents Girls</th>
<th>Total Number of Questions</th>
<th>Score Range</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>Knowledge Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Adequate knowledge</td>
<td>30</td>
<td>20</td>
<td>12</td>
<td>14.76</td>
<td>2.285</td>
<td>40%</td>
</tr>
<tr>
<td>2.</td>
<td>Moderate knowledge</td>
<td>15</td>
<td>15</td>
<td>15</td>
<td>14.76</td>
<td>2.285</td>
<td>50%</td>
</tr>
<tr>
<td>3.</td>
<td>Inadequate knowledge</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>14.76</td>
<td>2.285</td>
<td>10%</td>
</tr>
</tbody>
</table>

Table: 2 shows that there were 30 samples and there were 20 questions and the total score of the adolescent girls were 422. among them 12(40%) adolescent girls have scored between 16-20, 15 (50%) adolescent girls have scored between 11-15 and 3 (10%) of the adolescent girl have scored below 10. The mean score is 14.76 and the standard
deviation is 2.28.

There was no significant association between levels of knowledge with selected demographic variables of the adolescent girls like age, education, type of family, area of living, monthly income, religion, dietary pattern, family history.

DISCUSSIONS

In assessing the knowledge of adolescent girls regarding iron deficiency anaemia 40% of the adolescent girls are having adequate knowledge, 50% of the adolescent girls are having moderately adequate knowledge and 10% of adolescent girls are having inadequate knowledge.

From the above discussion, it showed that the aspect wise mean scores of adolescent girl’s knowledge is 14.76 and the standard deviation of the mother of under five children is 2.34.

The hypothesis $H_1$ was accepted suggesting that there was no significant association between levels of knowledge with selected demographic variables of the adolescent girls like age, education, type of family, area of living, monthly income, religion, dietary pattern, family history. It is evident from the statistical $X^2$ test that the association found no significant between knowledge aspects with the selected demographic variables regard to the hypothesis $H_1$ stated was accepted ($P>0.05$).

CONCLUSIONS

Thus the adolescent girls must be aware of iron deficiency anaemia, just because the anaemia causes many major problems among the adolescent girls.

REFERENCES