Effectiveness of the Planned Teaching Programme regarding Anemia on Knowledge among Adolescent in Selected Schools of Sangli Miraj Kupwad Corporation Area

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Abstract: The study aim to assess the effect of the planned teaching programme regarding anaemia on knowledge among adolescent in selected schools of Sangli, Miraj, kupwad corporation area. Research methodology: In this study the quantitative research approach with quasi experimental one group pre - test, post – test design was used in selected schools, 60 samples were included comprised with 11 to 16 age group of adolescents with simple random sampling technique. The data was analysed according to objectives of study, which were 1.To assess the existing knowledge and practice regarding anaemia among adolescent.2) To evaluate the effectiveness of planned teaching programme regarding anaemia.. The findings of the study revealed that In age 1.66% (1) of student were in age group of 12 years, 31.66% (19) students in age group of 13 years, 13.66% (19) students in age group of 14 years, 35% (21) students in age group of 15 years. In gender 65% (39) male students were present and 35% (21) female students were present. In type of family 65% (38) are live as Nuclear family and 35% (21) are live as Joint family. In residence95% (57) are living in urban area 5% (3) are living in rural area. In family income 11.66% (7) are having 5000-10000 per month family income and 88.33% (53) are having above 10000 per month family income. In mothers education 13.33 % (8) mothers having secondary education.20% (12) mothers having HSC education 66.66% (40) mothers having graduated. In fathers education 8.33% (5) fathers having secondary qualification, 26.66% (16) fathers having HSC qualification, 65% (39) fathers having graduated. In dietary pattern 71.66% (47) students were Vegetarian and 21.66% (13) were Non-vegetarian. Pre-test was given with administration of planned teaching and after 7 days post test was administered. The finding of the study shows the significant change in pre-test and post-test (mean = 9, sd =2.75) and (mean=13.3 sd=1.67) respectively. H₀ hypothesis is rejected and study found effective.

Keywords: Effectiveness Planned teaching programme, Anaemia, Adolescent

1. Introduction

Anaemia is a condition in which the number of red blood cells or the amount of haemoglobin is low. Even though there are many blood disorders; iron deficiency anaemia is most prevalent nutritional disorder in the world today. Iron is a necessary mineral for body function and good health. Every red blood cell in the body contains in its haemoglobin, the pigment that carries oxygen to the tissue from the lungs. But a lack of iron in the blood can lead to iron deficiency anaemia, which is a very common nutritional deficiency in children and adolescent. [1]

The statistical data of anaemia in world-wide affects 1.62 billion people ( 95% CI : 1.50 – 1.74 billion ) which correspond to 24.8% of the population ( 95% CI : 22.9 – 26.7.) the highest prevalence is in preschool –age children ( 47.4%,95% CI : 45.7-49.1 ) ,and the lowest prevalence is in men ( 12.7%,95% CI 8.6-16.9%) however ,the population group within the greatest number individual affected is non-pregnant women (468.41S) Iron deficiency anaemia is most prevalent among females with the age group of 15-22 years. Survey form a decade ago report 40% of pregnant women (a severe level) and 20% of non-pregnant women (a moderate level) are anaemic due to iron deficiency inability. [2]

Iron deficiency anaemia doesn’t develop immediately. Symptoms of iron deficiency ANAEMIA include fatigue, weakness, shortness of breath, and the inability to concentrate. Iron-deficiency ANAEMIA can be the consequence of several factors, including, insufficient iron in the diet, poor absorption of iron by the body ongoing blood loss, most commonly from menstruation or from gradual blood loss in the intestinal tract, periods of rapid growth. Iron deficiency ANAEMIA may result from : inadequate dietary intake of iron ( less than 1 to 2mg/day, during rapid growth in adolescents . iron malabsorption , such as in chronic diarrhoea , partial or total gastrostomy, chronic diverticulitis , and malabsorption syndromes , such as celiac disease and pernicious ANAEMIA . blood loss secondary to drug- induced ( from anticoagulant, aspirin ,and steroids) or due to heavy menses , haemorrhage from trauma, GI ulcers, oesophageal varies ,or cancer, intravascular haemolysis- induced hemoglobinuria or paroxysmal nocturnal hemoglobinuria. Poverty is a contributing factors to iron deficiency ANAEMIA because families. Iron continuous to remain the most neglected micronutrient inspite of its greater burden on health.[3]

2. Literature Survey

In many populations, the amount of iron absorbed from the diet is not sufficient to meet many individuals’ requirements. The dosage for iron supplementation in mass programs is unchanged from previous recommendations, except that the pregnancy dose has been reduced to 60 mg/day. Because the efficiency of absorption of iron increases as iron deficiency anaemia becomes more severe, this dose should provide adequate supplemental iron to women who do not have clinically severe anaemia if it is given for an adequate
duration. If iron supplement containing 400mg folic acid is available, their use in supplementation programs is recommended. If such supplement containing 250mg folic acid should be used until higher foliate formulations can be obtained. [4] The health care and research association for adolescents, Naiad and the nutrition foundation of India, new Delhi studied women in the same district and villages studied in NFHS-II and concluded that the prevalence and severity of anemia in rural adolescents and girls was much higher than that reflected in NFHS-II:84% PREVALENCE of which 9.2% fell into the severe anemia category 15. The Indian council for medical research(ICMR)/SDESTRICT NUTRITION survey data also reported similar anemia prevalence of 84.2% with 13.1% being in the same severe anemia. [5]

The diet of commend man in Maldives is not optimal: resulting in poor growth of adolescents. Anemia is wide spread especially in adolescent’s girls. Studies of “nutritional status and child feeding practice” and “iodine deficiency disorder” have been carried out recently. Result of survey of iron deficiency disorder demonstrated the existence of iron deficiency anemia public health problem in Maldives. [6]

The researcher, who is in clinical area met with case an adolescent girl she was suffering from severe anemic because of her stressful life style ,she doesn’t had the proper food habits and she also had the obsession to thin .so that she stops eating. She does not believe that she is thin. Finally the girls develop amenorrhea and respiratory arrest which leads to death. Hence education regarding prevention and management of iron deficiency anemia most important among adolescent and girls. Hence the investigator selected the adolescent girls and wants to assess and pour the knowledge regarding prevention and management of iron deficiency anaemia.[6]

Problem Definition
A study to evaluate the effectiveness of the planned teaching programme on knowledge regarding Anaemia among Adolescent in selected schools of Sangli Miraj Kupwad Corporation Area Maharashtra, India.

3. Methodology/Approach
The present Pre-Experimental one group pre-test, post-test design study aims to evaluate the effectiveness of planned teaching, the study conducted with 60 samples from Shri. Parshwanath English medium school, Kupwad among adolescents of 11 to 16 years. Non probability convenient sampling techniques method was used for sample collection. Data collection method includes demographic data and structured interview questionnaires. The section included the items seeking information on demographic profile of sample such as age in years, gender, standard, type of family, residence, family income, education of mother and father have any information regarding Anaemia, dietary pattern, number of meal per day. To ensure the content validity, the tool was submitted to 12 experts along with blue print. Few items were reduced from the questionnaires and modified the tool containing 18 items after incorporation the suggestions. Reliability was gained tested by use of kapparson coefficient correlation method, r value was obtained as r=0.8 it shows that tool was found to be highly reliable. Pilot study was conducted from 2/10/2015 to 8/10/2015. This was done to assess the feasibility of the study and permission was obtained from principal of Cambridge English school, Miraj. The study was conducted on 10 adolescents. The sample was selected by simple random sampling technique. Data was collected through structured questionnaire; pre-test was given on 2 oct.2015, planned teaching administered and post – test was done on using the same tool. After post- test the data was analyzed with help paired t- test. The findings indicated that planned teaching was effective for the adolescents to improve. Prior to data collection inform consent from the samples will be taken and the data will be collected. Formal written permission was obtained from the principal of SHRI. Parshwanath English School, Kupawad. Data was collected from 29/10/2015 to 5/11/2015. Data collection technique used was paper and pen test on 29/10/2015(pre- test day). The purpose of study was explained to each adolescent and the confidentiality of their response was assured. Further data analysis was done based on the objectives of study by descriptive and inferential statistics.

4. Results / Discussion
Presentation of the data was organized in three parts.
Section 1: Description of samples according to demographic variables/ characterististics by frequency and percentage.
Section 2: Analysis of data related to knowledge regarding knowledge about anemia in adolescent before and after planned teaching programme.
Section 3: Analysis of data related to the effect of planned teaching programme on knowledge score based on correct answer of adolescent students.

Section 1:
Description of sample characteristics
This section deals with selected variables such as age, gender, standard, type of family, residence, family income / month, education of mother and father. any information regarding anemia , dietary pattern, number of meal per day.

![Figure 1: Bar diagram representing Frequency distribution of age](image)

The above bar diagram shows that 1.66% (1) of student were in age group of 12 years, 31.66% (19) students in age group of 13 years, 13.66% (19) students in age group of 14 years, 35% (21) students in age group of 15 years.
The bar diagramme shows that 65% (39) male students were present and 35% (21) female students were present.

The above diagram shows that 65% (38) are live as Nuclear family and 35% (21) live as Joint family i.e category 2.

The above bar diagramme shows that 95% (57) are living in urban area 5% (3) are living in rural area.

The above cylindrical diagram shows that 11.66% (7) are having 5000-10000 per month family income and 88.33% (53) are having above 10000 per month family income.

The above diagram shows that 13.33% (8) mothers having secondary education 20% (12) mothers having HSC education 66.67% (40) mothers having graduated.

The above bar diagram shows that 8.33% (5) fathers having secondary qualification, 26.66% (16) fathers having HSC qualification, 65% (39) fathers having graduated.

This bar diagram shows that 71.66% (47) students were Vegetarian and 21.66% (13) were Non-vegetarian.

### Table 1: Distribution according to their mean, medium, standard deviation of pre-test knowledge score of adolescent, n=60

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9</td>
<td>9</td>
<td>12</td>
<td>2.75</td>
<td>11</td>
</tr>
</tbody>
</table>

**Section 2**
The above table indicates pre-test mean as 9, median as 9 and mode as 12, where standard deviation seems to be 2.75.

**Table 2:** Distribution according to their mean, medium, standard deviation of post-test knowledge score of adolescent, n=60

<table>
<thead>
<tr>
<th>Knowledge</th>
<th>Mean</th>
<th>Median</th>
<th>Mode</th>
<th>Range</th>
<th>S.D.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Knowledge</td>
<td>13.03</td>
<td>13</td>
<td>13</td>
<td>10</td>
<td>1.61</td>
</tr>
</tbody>
</table>

The above table indicates pre-test mean as 13.03, median as 139 and mode as 10, where standard deviation seems to be 1.61.

**Section 3:** Table no.5 Effectiveness of planned teaching programme on knowledge regarding anaemia among adolescent.

**Figure 8:** Cone diagram representing Comparison between Pre-test and Post-test mean Knowledge score

The fig no 8 indicates increase in knowledge score as pre-test mean was 9 and after giving planned teaching programme the mean post test score was 13.03, which also indicates that planned teaching programme was effective.

5. **Conclusion**

The finding of the study shows the significant change in pre-test and post-test (mean =9, sd =2.75) and (mean-13.3 sd=1.67) respectively and Ho hypothesis is rejected and study found effective.

6. **Future Scope**

- A similar study can be conducted on large population for better generalization of findings.
- A similar study can be done in different settings.
- A similar study can be implemented by using planned health teaching programme.

**References**


**Author Profile**

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