Effectiveness of Nursing Care for Antenatal Mothers with Iron Deficiency Anaemia

M. P. Ugin Juliyet¹, N. S. Sunitha Mercy²

¹Associate Professor, Dept. of Community Health Nursing, Bon Secours College of Nursing, Molasur, India  
²Vice Principal, Dept. of Obstetrics & Gynecological Nursing, Bon Secours College of Nursing, Molasur, India

Abstract: Iron deficiency anemia in women is usually due to blood loss resulting from excessive menses, postpartum hemorrhage or iron deprivation from previous pregnancies. Anemia aggravates many obstetric problems, such as concomitant heart disease. Anemic patients have an increased incidence of abortion, premature labour, infection and foremnia of pregnancy maternal anemia may affect the fetus deleteriously resulting in intrauterine growth retardation and elevated prenatal mortality and morbidity rates.

Because of increased maternal and fetal demand, for iron, iron deficiency anemia is the most frequent cause of anemia in pregnancy. It is encountered more often in multiparous than primigravidous patients particularly when repeated pregnancies have followed in rapid succession the anemia usually becomes manifest during the last trimester of pregnancies.

All gravid patients should receive iron supplementation therapy throughout pregnancy or at least from the beginning of the second trimester. The daily dose of iron for treating anemia is between 120 to 180mg in divided doses. The primary prevention of iron deficiency is through optimum nutrition.

Keywords: Antenatal Mothers, Iron Deficiency Anaemia

1. Introduction

Iron deficiency anemia in women is usually due to blood loss resulting from excessive menses, postpartum hemorrhage or iron deprivation from previous pregnancies. Anemia aggravates many obstetric problems, such as concomitant heart disease. Anemic patients have an increased incidence of abortion, premature labour, infection and foremnia of pregnancy maternal anemia may affect the fetus deleteriously resulting in intrauterine growth retardation and elevated prenatal mortality and morbidity rates.

Because of increased maternal and fetal demand, for iron, iron deficiency anemia is the most frequent cause of anemia in pregnancy. It is encountered more often in multiparous than primigravidous patients particularly when repeated pregnancies have followed in rapid succession the anemia usually becomes manifest during the last trimester of pregnancies.

All gravid patients should receive iron supplementation therapy throughout pregnancy or at least from the beginning of the second trimester. The daily dose of iron for treating anemia is between 120 to 180mg in divided doses. The primary prevention of iron deficiency is through optimum nutrition.

A. Problem statement

A study to assess the effectiveness of nursing care for antenatal mothers with iron deficiency anemia.

B. Methodology

1) Research design

The descriptive evaluative care study involves an intensive exploration of a person and very small number of subjects are examined for preventing and complications of iron deficiency anemia in pregnant women.

2) Setting

The area selected for the study was antenatal ward of government head quarters hospital, kancheepuram.

3) Population

The population of the study comprised of all the mothers with iron deficiency anemia admitted in antenatal ward at government head quarters hospital kancheepuram, during the time of data collection.

4) Sample size

Only 10 patients fulfilled the criteria for selection of sample during the stipulated time data collectors. All the antenatal mothers who had admitted in antenatal ward with iron deficiency anemia were included in the study.

5) Sampling technique

Convenient sampling technique is used.

6) Inclusion criteria

- Antenatal mothers with HB level less than (hemoglobin) 10%.
- Antenatal mothers with signs and symptoms of iron deficiency anemia (anorexia, lassitude, giddiness, palpitation).
- Co-operative antenatal mothers.

7) Exclusion criteria

- Antenatal mothers who is not willing to involve in this project work.
- Mentally depressed mother who is not in a good mood to get the care and health education.

C. Description of the tools

1) Part-I

In part I consists of the information on demographic
variables such as age, sex, education, religion, monthly family income, age at marriage, age at first pregnancy, gravid, hemoglobin concentration.

2) Part-II
In part II it consists of the rating scale was used to monitor the health condition of the mothers. The total number of variables were 15.

3) Part-III
In part III it consists of the observational check list was used to find out the effectiveness of nursing care for the mothers with iron deficiency anemia. The total number of variables is 6.

2. Data collection procedure
Data collection was done based on the topic of purpose of the study. This data collection was based on observational checklist. The data collection period was 1 week with different period of a day. A total number of 7 observation were mode on each patient.

A. Data Analysis
Data was analyzed by using descriptive and inferential statistics.

Descriptive statistics: Frequency, percentage, mean and standard deviation were used to describe the baseline variables, health condition of antenatal mothers with iron deficiency anemia.

Inferential Statistics: Paired ‘t’ test was used to determine the effectiveness of intervention.

3. Results

![Graph showing progress in health condition of antenatal mothers](image)

Fig. 1. Frequency and percentage distribution of rating scale of adult antenatal mothers iron deficiency anemia

The Fig. 1 depicts that level of progress of the antenatal mothers with iron deficiency anemia, on assessment day six (60%) of antenatal mothers are with severe health condition and four (40%) of antenatal mothers with moderate health condition no one with good health condition.

<table>
<thead>
<tr>
<th>S. No</th>
<th>Days</th>
<th>Mean</th>
<th>S.D</th>
<th>‘t’ – value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Assessment</td>
<td>18.2</td>
<td>3.11</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Evaluation</td>
<td>27.2</td>
<td>3.18</td>
<td>11.39</td>
</tr>
</tbody>
</table>

The Table-1 it is reveals that overall mean of condition of antenatal mothers with iron deficiency anemia was 18.2 with standard deviation 3.11 in first day and the mean is seventh day was 27.2 with standard deviation 3.18 statistically there is significance in health condition of antenatal mother with iron deficiency anemia in first and seventh day of nursing intervention.

A. Discussion
The results of study have been discussed in relation to the effectiveness of antenatal mothers with iron deficiency anemia. A total number of 10 antenatal mothers were selected for the study. The health condition of each patient were assessed based on the assessment nursing care were planned complimented.

The first objective was to assess the health condition of antenatal mothers with iron deficiency anemia.

The assessment of health status of antenatal mothers with iron deficiency anemia were carried out in antenatal ward at Government Head Quarters Hospital, Kancheepuram. The who met the inclusion criteria were selected and each of them were assessed with demographic variables vital parameters, each patient observation score rated on assessment scale most of patient 6 (60%) were in delayed health condition, 4 (40%) were is moderate health condition of none of them is good health condition.

The second objective was to provide the nursing care for antenatal mothers with iron deficiency anemia.

The health condition of antenatal mothers from deficiency anemia were assessed and intervention implemented based on comprehensive nursing intervention protocol. The observations were made done through check list.

Nursing care was given in following aspects such as, monitoring vital signs, promoting comfort measures, administration of drugs, maintain the nutritional status of the antenatal mothers , provide antenatal exercise, health education is given regarding dietary.

The third objective was to evaluate the effectiveness of nursing care were provided to antenatal mothers with iron deficiency anemia.

Effectiveness of nursing care were evaluated by comparing the assessment and evaluation score of 10 antenatal mothers which showed the difference between before and after nursing care.

The overall mean of health condition of antenatal mothers with iron deficiency anemia on assessment day was 18.2 and with standard deviation 3.11 and on evaluation day mean was 27.2 and standard deviation 3.18.

Statistically there was a significant improvement in the health condition of the antenatal mothers with iron deficiency anemia on evaluation score after comprehensive nursing management.
B. Nursing implication

1) Nursing education
The nursing curriculum can be modified with more emphasis on family centered maternity care. Such a curriculum well helps the students to get a comprehensive view of the expectant family in which help them to plan the care. Efforts should be made to improved and expand nursing curriculum of provide during antenatal period.

2) Nursing Administration
People who are at administrational position can make necessary policies to implement the concept of family centered maternity care. The ideal set up of antenatal ward would be beneficial for better nursing care. There administrator should organize the health personal to provide comprehensive nursing care.

3) Nursing Research
The study findings well serve as a background for further study regarding the care of antenatal mothers with iron deficiency anemia. Bases on this study finding the nursing administrator can conduct retrospective study to assess the quality of care and improve quality of nursing care.

4. Conclusion
The present study was conducted to find out the effectiveness of nursing care for antenatal mothers with iron deficiency anaemia. The study was descriptive care study design and total number 10 antenatal mothers with iron deficiency anemia were selected as per inclusion criteria from a antenatal mothers.

Acknowledgement
The author would like to thank the management of Adhiparasakthi College of Nursing and Bon Secours College of Nursing and faculty of nursing for their support.

Funding
This research was a self-funded one and no grant was received for the same.

References