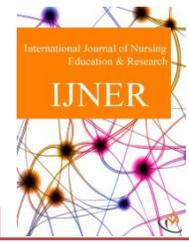




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A STUDY TO ASSESS THE EFFECTIVENESS OF BEETROOT JUICE TO IMPROVE THE HAEMOGLOBIN LEVEL AMONG THE ANTENATAL MOTHERS WITH ANAEMIA AT SELECTED HOSPITAL

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ABSTRACT

Prenatal care also known as antenatal care, is a type of preventive healthcare. Its goal is to provide regular check-up that allow doctors or midwives to treat and prevent potential health problems throughout the course of the pregnancy and to promote healthy lifestyles that benefit both mother and child. Maternal health is the nation's wealth. A woman is more affected with some health disorders. Nutritional adequacy is one of the key determinants of the quality of human resources for women. Most preventable but yet more prevalent. Anemia can be defined as a reduction in the circulation of either hemoglobin or RBC. Bobak (2015) mentioned that Iron is an important factor in anemia because iron is used to make hemoglobin, which is the component of red blood cells that attaches to oxygen and transports it. Iron deficiency can be caused by insufficient dietary iron intake and or absorption, or by significant blood loss during the menstruation and delivery. Pregnant women and lactating women are amongst the highest groups at risk for iron deficiency anaemia. A quantitative research approach with quasi experimental design was considered. After getting permission from the concerned authority the researcher started data collection. 40 samples were selected by adopting. Non probability - purposive sampling on the basis of selection criteria. Among 40 samples, 20 samples were considered as experimental group and 20 samples were considered as control group. After the investigator collected the demographic data from samples. Then the investigator assessed the hemoglobin level (pretest) in experimental group and control group by using Sahli's haemoglobinometer. Then 150ml of beetroot juice was given to the experimental group for continuous up to 20 days. In posttest on 20th day, hemoglobin level was assessed for experimental and control group by using the same Sahli's haemoglobinometer. It was proven that the beetroot juice is effective for improving the hemoglobin level among antenatal mothers with anaemia.

INTRODUCTION

Anemia can be treated with early diagnosis and proper management. It has significant that consumption of

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beetroot juice which effect human blood and blood forming qualities due to its higher iron content. Prevention is the better than cure early registration of antenatal women and proper intakeof iron and dietary supplement reduces the risk of anemia in pregnancy. The root of the beetroot contains a large amount of sugar, a small amount of fibre, and fat, large amount of cellulose, pectin, pantothenic, and folic



acids. Microelements (iron, calcium, potassium, cobalt, magnesium, copper, Florine, manganese and Zinc), Vitamins A, Vitamin C, niacin, folic acid, biotin pigments and many others substances.

Objectives of the Study

- To assess the pre and posttest level of haemoglobin among the antenatal mothers with anaemia in the experimental and control group.
- To assess the effectiveness of beetroot juice on haemoglobin level among antenatal Mothers with anaemia along with iron supplement.
- To find out the association between pretest level of hemoglobin with demographic variables in age, education, occupation, income of the family, type of family, diet pattern, number of parity, gestational weeks, birth space number of abortion among antenatal mothers with anaemia.

Hypothesis

H1: There will be significant difference between the level of Hemoglobin among antenatal Mothers with anaemia in experimental and control group.

H2: There will be significant association between pretest level of haemoglobin and their selected demographic variables of antenatal mothers with anaemia.

Assumptions

- The antenatal mother may consume fewer amounts of iron and vitamin c in their daily dietary intake.
- Degree of anemia will vary from one mother to another.
- Dietary intake of iron supplement in the form of beetroot juice will improve the level of Haemoglobin among antenatal mothers with anaemia.

RESULTS AND DISCUSSION

Table : 1 Comparison of pre and post test score of mean and standard deviation for the haemoglobin level among the antenatal mothers with experimental and control group (n=40)

| Group | Pre test | | | | Post test | | | | | |
|--------------------|----------|------|---------|-----------------------|-----------|------|---------|-----------------------|----|-------------|
| | Mean | SD | t value | Level of significance | Mean | SD | t value | Level of significance | df | Table value |
| Experimental group | 7.485 | 0.78 | 1.14 | 0.05 | 8.085 | 0.74 | 6.18* | 0.05 | 38 | 2.02 |
| Control group | 7.62 | 0.88 | | | 9.075 | 0.95 | | | | |

The table shows in pretest values of control group mean (7.485), standard deviation (0.78). In the experimental group pretest values mean (7.62), standard deviation (0.88) the calculated value is “t” (1.14) less than table value (2.02) and degree of freedom is 38 degrees and level of significance was 0.05. Hence there is no significant.

In control group posttest values of mean (8.085), standard deviation (0.74) and experimental group posttest

Development and Description the Tool

The researcher had developed a tool after reviewing the literature to assess the level of hemoglobin. It has the following sections.

Section - A Distribution of Demographic Variables

It consists of demographic data seeking information about age, education, occupation, family income, type of family, diet pattern, number of parity, gestational weeks, birth space and number of abortion.

Section - B Sahli's Haemoglobinometer

It is proposed in 1902 by Swiss Scientist H. Sahil. It's an instrument used to determine the quantity of hemoglobin in blood. It's based on comparison of color of tested blood, which is treated with HCL solution and add distal water until it matches the color of standard tube.

DATA COLLECTION PROCEDURE:

Formal permission was obtained from the concern authority. Nature, purpose and duration of the study was explained to the samples and obtained their oral and written consent. Necessary precautions were taken to provide privacy and confidentiality. The study was conducted for a period of 20 days. The samples 40 were inclusive by using purposive sampling technique on the basis of selection criteria. Among 40 samples, 20 samples were considered as experimental group and 20 samples were considered as control group.

After the investigator collected the demographic data from samples. Then the investigator assessed the hemoglobin level (pretest) in experimental group and control group by using Sahli's haemoglobinometer. Then 150ml of beetroot juice was given to the experimental group for continuous up to 20 days. In post test on 20 th day, hemoglobin level was assessed for experimental and control group by using the same Sahli's haemoglobinometer.

values of mean (9.075), and standard deviation (0.95) the calculated table value “t” (6.18) has greater than table value (2.02) in degree of freedom is 38 and level of significance is 0.05. Hence the research hypothesis was accepted and its effective for reducing anaemia among antenatal mothers.

CONCLUSION

The life style modification programme was effective



among hypertensive patients. As by concluded that, the stated research hypothesis was accepted.

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