EFFECTIVENESS OF DRUM STICK LEAVES JUICE IN INCREASING HAEMOGLOBIN LEVEL AMONG ANAEMIC WOMEN OF REPRODUCTIVE AGE

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ABSTRACT

Among this drumstick leaf which is scientifically known as Moringa olifera is a green leafy vegetable which is rich and natural source of iron. Drumstick leaves are capable of curing Iron deficit in human beings. Iron is an important mineral required by an human body to perform some of the essential functions. The basic and important function of iron (as a part of hemoglobin) is to carry oxygen from lungs to cells in our body and is an essential requirement of the body. Iron is responsible for the production of hemoglobin by erythroblasts. If iron count is not adequate, the HB production does not succeed and the number of RBC decreases. The present observation is aimed at evaluate usefulness of drumstick leaves juice to increasing hemoglobin level among anemic women in reproductive age group. In this study quantitative evaluative research approach will be applied to value of drumstick leaves juice to increase hemoglobin level in anemic women in reproductive age group. Subjects are in selected rural areas of Bagalkot district Karnataka. Variables under study Independent variable: use of drumstick leaves juice. The present study is anemic women in reproductive age group who are residing at selected rural areas.

Inferential statistics: Paired t Test will be used to evaluate the pretest and post test hemoglobin levels of anemic women in reproductive age group. Chi-square test will be used to find out the connection between post- test hemoglobin levels. India has the world's highest prevalence of iron deficiency anemia among women, with 60 to 70 percent of the adolescent girls being anemic. Adolescence is considered as a nutritionally critical period of life. Drum stick leaves juice preparation helps the women to improve the hemoglobin level.

Key word: *drumstick leaves, iron deficit in human being, haemoglobin level.*

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INTRODUCTION

In girls, adolescence is a stage which she entering into the opened world with lots of dreams and goals of achievement. A major problem of an adolescent girl is a menstrual period. During this period a girl used to lose 45 ml of blood (i.e.) twenty two mg of iron which leads most of the girls to get affect with anemia (Coad J, Conlon C, 2011).

Regular hemoglobin check will detect the low iron anemia in early stage. Education about meal skipping , Jung foods and fast foods will prevent the iron deficit anemia and encourage the intake of low cost iron rich foods such as drumstick leaves, dates, jaggary, ragi, green leaves, Chico to the rural areas.

Among this drumstick leaf which is scientifically known as Moringa olifera is a green leafy vegetable which is rich and natural source of iron. Drumstick leaves are capable of curing approximately 300 types of diseases. Iron deficit is a major cause of anemia and is more seen in developing countries, posing additional burden on health care systems, in the presence of limited resources. The high-risk group is comprised of females and children but relatively it is higher in females due to physiological reasons. Multiple factors can result anaemia, which in turn leads to various unpleasant outcomes. Iron is an important mineral required by an human body to perform some of the essential functions. The basic and important function of iron (as a part of hemoglobin) is to carry oxygen from lungs to cells in our body and is an essential requirement of the body. Iron is responsible for the production of hemoglobin by erythroblasts. If iron count is not adequate, the HB production does not succeed and the number of RBC decreases. It has approximately 90 nutrients and 46 antioxidants. Nutrients and medicinal properties are more in drumstick leaves Drumstick leaves equal to 7 times Vitamin C in oranges, 4 times Vitamin A in carrots, 4 times Calcium in milk, 3 times Potassium in banana, 2 times Protein in yoghurt, 4 times Fiber of oats, 9 times Iron of spinach. Eating drumstick leaves curry, or taking juice regularly can cure anemia. Drumstick leaves with its high beta carotene content (19690 mcg/100g) with vitamin C from lemon juice may have a optimistic impact in the mobilization of stored iron and increase hemoglobin levels of anemia. (Vira Junam, January 20, 2013) As a part of preventing anemia, India is the first country to launch National Nutritional Anemia Prophylaxis Program me in 1970 and also included in 4th five year plan. In 2013 the minister of health and family welfare, Mr. Gulam Nabi Azad and the honorable chief minister Mr. Siddaramaiah launched a Weekly Iron and Folic acid appendage Program (WIFS) for adolescents at Koramangala indoor stadium in Bangalore (http://repository-tnmgrmu.ac.in).

Anemia exists as a common health problem among the women of generative age group and leads to high morbidity and mortality rates among females. Most of the women have poor knowledge regarding anemia, its cause, prevention and management. Freshly blanched drumstick leaves showed a mild positive relationship in the improvement of anemia. The present study shows that the hemoglobin l7.evels of the women in reproductive age group showed a significant improvement post intervention with drumstick leaves poriyal. This may be promoted in the community as a prophylactic and a dietary supplementation in anemic women (T.Chandra, Mrs. Karaline K. 2015).

Iron deficit anemia can be avoided by adequate dietary intake or iron such as green leafy vegetables such as amaranth, spinach, coriander leaves, drumstick leaves, radish leaves, vegetables such as beet root, drumstick, cereals like ragi, barley, Cholam (Sorghum), rice (raw milled), legumes like Bengal gram dhal, Black gram dhal, soya bean, Nuts and oil 8seeds like dates, cherry, fruits such as chickoo, pomegranate and Jaggery (Swaminathan.S, 2008).

OBJECTIVES OF THE STUDY

1.) To assess the effectiveness of drumstick juice consumption pretest Hemoglobin levels between anemic age group women of experimental and control group.

2.) To associate post test Hemoglobin levels of anemic women of reproductive age group.

OPERATIONAL DEFINITIONS:

1. Evaluate: It points out to the statistical estimation of outcome of effectiveness of drum stick leaves juice on hemoglobin levels among anemic women in generative age group.

2. Effectiveness: It refers to determine the extent to which information given through effectiveness of drum stick leaves juice has increased in hemoglobin levels of among anemic women in reproductive age group.

3. Drumstick leaves juice: Drumstick leaves is prepared by boiling 1 kg of drumstick leaves with 4.5 liters of water and make it boils 45 minutes and strain it well. It will give 4 liter of drumstick leaves juice then add 2 drop of lemon juice in it for every 100 ml of drumstick leaves juice.

4. Hemoglobin level: WHO/UNICEF/UNU graded the hemoglobin level 10-11.9g/dl is considered as mild anemia. 7g/dl to 9.9g/dl is considered as moderate anemia and Less than 7g/dl is considered as severe anemia. 12g/dl is considered as Non anemic

5. Anemic women: Anemic women refer to child bearing year are particularly susceptible to iron – deficiency anemia because of the blood loss from menstruation and increased blood supply demand during pregnancy.

RESEARCH METHODOLOGY

The present observation is aimed at evaluate usefulness of drumstick leaves juice to increasing hemoglobin level among anemic women in reproductive age group.

Research Approach: In this study quantitative evaluative research approach will be applied to value of drumstick leaves juice to increase hemoglobin level in anemic women in reproductive age group.

Research Design: This study will carry out through the use of pre experimental study (one group pre-test and post –test) research design. In this study there is one group. Subjects are in selected rural areas of Bagalkot district Karnataka. Variables under study Independent variable: use of drumstick leaves juice.

POPLUTION:

Target population:

The target population: The present study is anemic women in reproductive age group who are residing at selected rural areas.

Accessible population: The handy population of the present study is the anemic women in reproductive age group residing at selected rural areas Bagalkot.

Sample: A sample consists of subject of units that comprise the population for present study. In this study sample consists of anemic women in reproductive age group residing at selected rural areas of Bagalkot district Karnataka. The sample of 200 anemic women in reproductive age group residing at selected rural area of Bagalkot.

Sampling technique: A convenient sampling technique will be used to selected sample for the study.

PLAN FOR ANALYSIS AND INTERPRETATION OF DATA.

The collected data will be investigated by using descriptive and inferential statistics Descriptive statistics: The data collected will be organized and summarized by using descriptive statistic like; frequency distribution, percentage, mean, and standard deviation.

Inferential statistics: Paired t Test will be used to evaluate the pretest and post test hemoglobin levels of anemic women in reproductive age group. Chi-square test will be used to find out the connection between post- test hemoglobin levels.

DISCUSSIONS

India has the world's highest prevalence of iron deficiency anemia among women, with 60 to 70 percent of the adolescent girls being anemic. Adolescence is considered as a nutritionally critical period of life.

Anemia and iron deficiency lead to substantial physical productivity losses in adults. Iron deficiency during pregnancy is associated with maternal mortality, preterm labour, low birth-weight, and infant mortality. In children, iron deficiency affects cognitive and motor development and increases susceptibility to infection. Effectiveness of drumstick leaves juice will have positive impact on hemoglobin level among anemic women in reproductive age group.

CONCLUSIONS

Researcher has been found that the reproductive age group women of Bagalkot district have lack in knowledge regarding drum stick leaves juice preparation. Researchers play a vital role to manage anemia among reproductive age group women. Drum stick leaves juice preparation helps the women to improve the hemoglobin level.

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