



EFFECTIVENESS OF DRUMSTICK LEAVES SYRUP IN IMPROVING HAEMOGLOBIN LEVEL AMONG REPRODUCTIVE AGE GROUP WOMEN WITH ANAEMIA

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ABSTRACT

Anaemia is a global public health problem affecting both developing and developed countries with major consequences for human health as well as social economic development. WHO states in a survey (2004) that, globally anaemia affects 1.62 billion people, which corresponds to 24.8% of the population and among that 40% of women in the reproductive age group was affected with anaemia. The best approach to combat mild anaemia among population of a developing country would be through initiation of food fortification, creating more awareness about benefits of dietary diversification like use of iron rich diet, use of fresh fruits and green leafy vegetables. Iron and folic acid tablets supplementation is recommended to combat moderate and severe anaemia (Mohammad perwaiz, 2010).

KEYWORDS :

OBJECTIVES OF THE STUDY

- Identify the prevalence of anaemia among women.
- Assessment of factors contributing to anaemia among women.
- Evaluate the effectiveness of drumstick leaves syrup on haemoglobin level of reproductive age group women with anaemia.

METHODS:

The research design adopted was one group pre test and post test design a type of quasi experimental design. The sample size included in the study was 30 reproductive age group women with anaemia. The haemoglobin estimation was done with cyanmethaemoglobin method. Then basic demographic profile and details on factors contributing to anaemia like menstrual history, obstetrical history, dietary pattern and history of worm infestation was collected. General examination was also carried on, history was collected on symptoms of anaemia, anthropometric measurements and physical examination rule out to note the signs of anaemia. 10 ml of drumstick leaves syrup was given for four weeks.

Data analysis and interpretation

- The prevalence of anaemia was studied among 63 women, among them 23(26.5%) of women observed to have normal haemoglobin level of above 12gm/dl, 22 (34.9%) women had mild anemia with haemoglobin level of 10.0gm/dl-11.9gm/dl, 18 (28.6%) women had moderate anaemia with a haemoglobin level of 7.0gm/dl-9.9gm/dl and no one had severe anaemia with a haemoglobin level less than 7.0 gm/dl.
- The majority 28 of the anaemic women were Hindus and 2 were Christians.
- Family's monthly income of a major proportion 19 women was between 5000-7500.
- Majority 21 women had regular pattern of menstruation and 9 had irregular menstrual pattern.
- Most of them 17 were multigravida mothers.
- The most consumed iron rich food was the green leafy vegetable whereas, the organ meat and raggi were the least consumed iron rich diet.
- Only 3 women had done de-worming in the past, majority 27 women had not done de-worming in the past.
- History collection on symptoms of anaemia revealed that 11 women had shortness of breath while exercising, 9 women had shortness of breath while walking, 15 had shortness of breath while doing heavy work, 5 women had shortness of breath while doing normal household work, 22 had loss of appetite, 17 had complaints of head ache, 16 had complaints of weight loss
- Physical examination of women with anaemia depicted that, majority women 25 had pale conjunctiva and appearance of tongue was pale for 18 women. Colours of

the nails were pale for 13 women.

- The mean difference in haemoglobin level was 1.2 gm/dl after supplementation of drumstick leaves syrup.
- In pre assessment before supplementation of drumstick leaves syrup 13 women were with mild anaemia and 17 women were with moderate anaemia and after the administration 13 women were with mild anaemia and 9 women were with moderate anaemia and remaining 8 women had no anaemia.
- There was a significant difference in haemoglobin level before and after administration of drumstick leaves syrup at 0.001 level (t=6.6).
- There was a significant association between consumption of beverages and anaemia at 0.001 level of significance.
- Correlation between symptoms of anaemia and hemoglobin level showed a negative correlation which means when there is increase in symptoms of anaemia there will be decrease in haemoglobin level.
- Correlation between signs of anaemia and hemoglobin level showed a negative correlation which means when there is increase in signs of anaemia there will be decrease in haemoglobin level.
- Correlation of consumption of iron rich food and hemoglobin level showed a negative correlation which means when there is decreased intake of iron rich foods there will be decrease in hemoglobin level.

CONCLUSION:

The study highlights the magnitude of the problem of anaemia among reproductive age group women and the need to address the problem. Anaemia among women may appear innocuous but could lead to significant morbidity and mortality. Early detection and adequate dietary supplementation with iron rich diet will minimize the consequences of the condition. Therefore this present study review showed that drumstick leaves was a most effective iron rich supplement to treat mild and moderate anaemia.