



JOURNAL OF PHARMACEUTICAL SCIENCE AND BIOSCIENTIFIC RESEARCH (JPSBR)

(An International Peer Reviewed Pharmaceutical Journal that Encourages Innovation and Creativities)

A Study to assess The Effectiveness of Honey Dates in Improving Haemoglobin Level among Adolescent Girls with Anaemia in a Selected College at Kanyakumari District

Gnana Freeda¹, Jyoti Sharma²

1. Research Scholar, Shri J.J.T University, Rajasthan, India
2. Associate Professor, Shri J.J.T. University, Rajasthan, India

Article History:

Received 25 Feb 2021
Accepted 04 Jun 2021
Available online 10 July 2021

Citation:

Gnana F.G. and Sharma J. A Study to assess The Effectiveness of Honey Dates in Improving Haemoglobin Level among Adolescent Girls with Anaemia in a Selected College at Kanyakumari District. *J Pharm Sci Bioscientific Res.* 2021. 10(6): 319-322

*For Correspondence:

Gnana Freeda G

Research Scholar, Shri J.J.T University, Rajasthan, India, and

Assistant Professor, Community Health Nursing Department, Ellen College of Nursing, Coimbatore, Chennai, India.

www.jpsbr.org

ABSTRACT

Anaemia is an important common disease in India. Adolescent girls are a mainly in the most common vulnerable group. This study was done to assess the effectiveness of honey dates in improving haemoglobin level among adolescent girls with anaemia in Bejan Singh Institute of Ophthalmology, Kanyakumari District. The aim of this study was to increase the haemoglobin level by honey dates intervention. The research design adopted to this study was a pre- experimental design. The study was conducted in Bejan Singh Institute of Ophthalmology, Kanyakumari District and 30 samples was collected by using simple random sampling method. The demographic variables were assessed by using questionnaire method and the haemoglobin level was assessed by using Sahli's method before and after intervention. The intervention of daily 5 seedless dates, 10ml honey was given to adolescent girls daily for 30 days in the morning. The collected data were analysed by using both descriptive and inferential statistical methods. The study findings revealed that Honey Dates is an effective intervention to increase the haemoglobin level among adolescent girls with anaemia.

KEY WORDS: Effectiveness, Honey Dates, Adolescent Girls, Anaemia, Institute

INTRODUCTION

Adolescence is derived from the Latin word 'adolescere' meaning "to grow up". It is the main period in the child to adult. It is a significant period of the person growth and the development. Adolescence is mainly called in the starting to the end stages is the teenage stage. The world health organization defines an adolescent as any person between ages 10 and 19 this age group is called young people. The period of adolescence is the best time of life. Most physical and mental functions, such as speed, strength, reaction time and memory are more developed during the teenage years. Adolescents generally find that activities involving physical movement sports, dance and drama. During adolescence, issues of emotional separation from parents

arise. Some specialists find that the difficulties of adolescence have been exaggerated and that for many adolescences the process of maturation is largely peaceful and untroubled.

Anaemia is a blood disorder in which the blood has a reduced ability to carry oxygen due to a lower than normal of red blood cells, or a reduction in the amount of haemoglobin. When anaemia comes on slowly, the symptoms are often vague, such as tiredness, weakness, shortness of breath, headaches and a poor ability to exercise. Anaemia is caused by mostly in blood loss the red blood cells count was reduced, and the red blood cell was breakdown. It was caused by the trauma and the gastrointestinal bleeding problems were raised. Anaemia

was mainly classified based on the size of red blood cells and the amount of blood cells. Anaemia is the common biggest problem it was mainly affected the third of the global population. The blood transfusion is the main relief of the disorder.

Red blood cells carry haemoglobin, an iron-rich protein that attaches to oxygen in the lungs and carries it to tissues throughout the body. When the red blood cells are not functioning, the disease will occur. This was diagnosed when a blood test shows a haemoglobin value is less than 13.5 gm/dl in a man or less than 12 gm/dl in a woman. Normal value was children vary with age group. Many people are at risk for anaemia because of poor diet, intestinal diseases, and some infections and other conditions. It was affected to all age group not only in the particular age.

STATEMENT OF THE PROBLEM

A Study to assess The Effectiveness of Honey Dates in Improving Haemoglobin Level among Adolescent Girls with Anaemia in a Selected College at Kanyakumari District.

OBJECTIVES

To assess the haemoglobin level among adolescent girls with anaemia.

To evaluate the effectiveness of honey dates in improving haemoglobin level among adolescent girls with anaemia.

To determine the association between the haemoglobin level with their selected demographic variables.

METHODS AND MATERIALS:

Quantitative approach was adopted to this study. A pre-experimental design (one group pre-test post-test) is used to analyse the Effectiveness of honey dates in improving the haemoglobin level among Adolescent girls with anaemia. Assessment of Haemoglobin was done by using Sahli’s Method.

Variables

In this study haemoglobin level of adolescent girls was the dependent Variable in the study. In the present study honey dates was the independent variable. Age, religion, family income, type of family, no. of children, educational status, type of diet, habit of consuming tea, onset of menarche, menstrual cycle, days of menstrual flow, amount of blood loss, other bleeding diathesis, habit of

barefoot walking, deworming, previous treatment for improving haemoglobin level.

Setting of the study

The study was conducted in Bejan Singh Institute of Ophthalmology Nagercoil, at Kanyakumari District. The target population selected for study includes adolescent girls with anaemia. The accessible population includes adolescent girls with anaemia studying II- and III-year B optom Students in Bejan Singh Institute of Ophthalmology. Totally 60 adolescent girls are studying in II- and III-year students in which adolescent girls with anaemia were 40.

Sample

The sample selected for the present study is 30. The subjects was selected by the simple random sampling method. The investigator selected the samples by using the inclusion and exclusion criteria and identified 40 adolescent girls with anaemia. 30 samples were selected from the accessible population by using lottery method.

RESULTS:

Demographic variables were assessed by using descriptive measures (frequency and percentage). The Haemoglobin level was analysed by using Descriptive statistics (mean, standard deviation). The effect of Honey Dates on improving haemoglobin level was analysed by using paired ‘t’ test. The association between the haemoglobin level and their selected demographic variables were analysed by using Chi-square test.

Table 1 Frequency and Percentage Distribution of Pre-test Haemoglobin Level among Adolescent Girls with Anaemia

S.No	Haemoglobin level	Classification Respondents	
		n	%
1	Normal	0	0
2	Mild	22	73
3	Moderate	8	27

Table shows that among 30 adolescent girls with anemia in pre- test, none of them had normal hemoglobin level, 22(73%) had mild hemoglobin level and 8(27%) had moderate hemoglobin level.

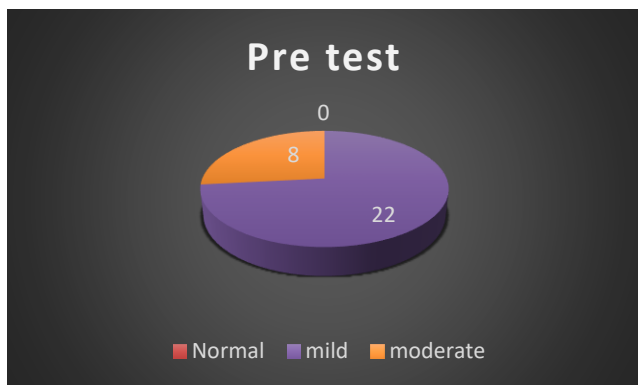


Figure 1 Distribution of Pre-test Haemoglobin Level among Adolescent Girls with Anaemia

Table 2 Frequency and Percentage Distribution of Pre-test and Post-test Haemoglobin Level among Adolescent Girls with Anaemia. N = 30

S. No	Haemoglobin level	Classification of Respondents			
		Pre test		Post Test	
		n	%	n	%
1	Normal	0	0	7	23
2	Mild	22	73	23	77
3	Moderate	8	27	0	0

The table shows that among 30 adolescent girls with anemia in pre-test, none of them had normal hemoglobin level, 22(73%) had mild hemoglobin level and 8(27%) had moderate hemoglobin level. In posttest 7(23%) of them had normal hemoglobin level, 23(77%) had mild hemoglobin level and none of them had moderate hemoglobin level.

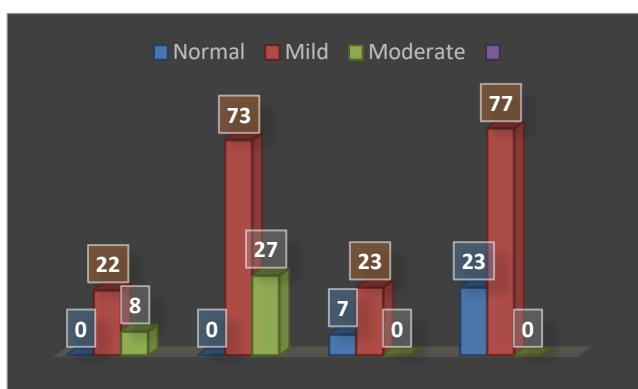


Figure 2 Pre-test and Post-test Haemoglobin Level among Adolescent Girls with Anaemia

Table 3 reveals that among 30 adolescent girls with anemia, the mean pre- test 13.81 with standard deviation of 3.58 was more than the mean post-test 13.5 with standard deviation of 0.69. The calculated mean difference

was 1.1. The obtained 't' value 13.58 which was highly significant at p<0.05 level.

Table 3 Mean, Standard deviation, Mean difference and 't' Value of Pre-test and Post-test Haemoglobin Level among Adolescent Girls with Anaemia. N = 30

S. No	Aspects	Respondents		MD	't' value
		Mean	SD		
1	Pre test	13.81	3.58	1.1	13.58*
2	Post test	13.5	0.69		

*Significant at p<0.05 level

Table reveals that among 30 adolescent girls with anemia, the mean pre- test 13.81with standard deviation of 3.58 was more than the mean post-test 13.5 with standard deviation of 0.69. The calculated mean difference was 1.1. The obtained 't' value 13.58 which was highly significant at p<0.05 level.

DISCUSSION

The responses were analyzed by using descriptive statistics (Mean, Standard Deviation, Frequency and Percentage) and inferential statistics (Paired 't' test and chi-square). Discussion on the findings was arranged based on the objective of the study. The first objective of the study was to assess the hemoglobin level among adolescent girls with anemia. The study findings revealed that in pre-test 22(73%) were having mild anemia and 8(27%) were having moderate anemia. Whereas in post-test 7(23%) were having normal hemoglobin level, 23(77%) were having mild anemia and none of them had moderate anemia. The second objective of the study was to evaluate the effectiveness of honey dates in improving hemoglobin level among adolescent girls with anemia. The study findings revealed that, in pre-test 22(73%) were having mild anemia and 8(27%) were having moderate anemia. Whereas in post-test 7(23%) were having normal hemoglobin level, 23(77%) were having mild anemia and none of them had moderate anemia. It also revealed that the mean pre-test was 13.61 with a standard deviation of 3.58. The mean post test score was 13.5 with standard deviation 0.69 and a mean difference of 1.1. The obtained 't' value 13.58 was significant at P<0.05 level. The third objective of the study was to determine the association between hemoglobin levels with their selected demographic variables. The study findings revealed that in pre-test, the obtained χ^2 value 6.06 for the habit of consuming tea and coffee along with food and the obtained χ^2 value 19.33 for onset of

menarche were significant at $p < 0.05$ level. It was inferred that the habit of consuming tea and coffee along with food and onset of menarche had statistically significant association with hemoglobin level. Whereas in post-test, the obtained χ^2 value 22.23 for family income, 16.53 for amount of blood loss during menstruation and 5 for habit of barefoot walking were significant at $p < 0.05$ level. It was inferred that family income, amount of blood loss during menstruation and habit of barefoot walking had statistically significant association with hemoglobin level. The other variables such as type of family, religion, no. of children in the family, father's educational status, mother's educational status, age, diet, days of menstrual flow and other bleeding diathesis had statistically no significant association with hemoglobin level.

CONCLUSION

The main conclusions drawn from this study was that most of the adolescent girls had anaemia. After honey dates intervention, the student's haemoglobin level was improved. Samples become familiar and easy to collect and cast effective and expressed satisfaction. It is thus concluded that, honey dates were an effective and very easy to improve haemoglobin level among adolescent girls with anaemia and will reduce the incidence and morbidity rate of anaemia among adolescent girls.

REFERENCES

1. Ann Marriner Tomey, and Martha Ralie Alligood. (2006). Nursing Theorists and Their Work. (6th ed.) Missouri: Mosby publications.
2. Black, M. Joyce and Jane Hokanson Hawks. (2011). Textbook of Medical Surgical Nursing. (1st ed.) Philadelphia: W.B. Saunders Company Publications.
3. Gupta, G. S. Kapoor. (1990). Fundamentals of Mathematical Statistics. (1st ed.) New Delhi: Sultan Chand Publications.
4. Verma, A. (2006). Factors Influencing Anemia. Indian Journal of medicine. 173-174.
5. Sidhu. (2005). Prevalence of Anemia among Adolescent Girls. Nepal Medical College Journal. 265-267.
6. Rawat, C.M.S. (2001). Prevalence of Anemia. Indian Journal of Community Medicine. 24: 32-33.
7. Malhotra, P. (2004). Prevalence of Anemia among Young Adult Female Students. JAPI. 52: 18-20.

