

“A STUDY TO ASSESS THE EFFECTIVENESS OF WEEKLY IRON & FOLIC ACID SUPPLEMENTATION PROGRAM AMONG SCHOOL AGE ADOLESCENT GIRLS (AGE GROUP 17 TO 19 YEARS) IN SELECTED RURAL SCHOOL OF BHOPAL”

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- **ABSTRACT-** a experimental research design conducted on 190 clients, among school age adolescent girls between the age group 17 to 19 years old selected by purposive sampling techniques at selected rural school of Bhopal M.P. the main aim of the study was to assess the effectiveness of iron & folic acid supplementation program among school age adolescent girls. The findings of the study revealed that about pre-test score of Hb and post test score of Hb level difference of adolescent girls. In this the mean value of pre-test score is 10.5052 and SD is 1.32897, and the mean value in the post test score is 10.9743 and SD is 1.22321, the overall t test value is 14.356, P value is <0.05 that is statistically significant. The study indicated that the administration of iron and folic acid tablet supplementation improved the haemoglobin level of adolescent's girls.

Introduction

Nutritional anaemia caused by iron deficiency is one of the most common condition in the adolescent girls of India. This result into decreased concentration, weakness, menstrual irregularities affecting this physical and mental health, menstrual loss of blood and helminthic infection. Thus, this deficiency can be prevented by deworming, iron supplementation and proper dietary education. The most efficient way of improving iron status among them is by providing weekly iron and folic acid tablets to all the adolescent girls. This period involves a urgent position in the life of individuals by virtue of major physical, sexual and mental changes. This period is described by an incredibly fast rate of physical and sexual growth. The pinnacle rates of physical development are surpassed just amid the fetal life and early outset. There isn't much individual variety in the development amid the fetal life and early stages. Conversely, there is substantially more individual variety both in timing and in the level of development amid immature period.

There are so many programs have launched by Indian national state government since 2000, for reproductive age girls to control anaemia, with the help of UNICEF. According to these program iron tablets are delivered to reproductive age girls in their schools with the help of anganwadi centres, which is come under ICDS (integrated child development service) program. The implementation or uses of this program is increased from 8.8 million by the end of 2005 to 14.5 million in the end year of 2010. In 2011 this program named as SABLEA program. For implementing of this program average cost is INR 25per girl per year.³

The Ministry of Health and Family Welfare has moved the Weekly Iron and Folic Acid Supplementation (WIFS) Program to address the trouble of high ordinariness and rate of whiteness among energetic young women and young fellows. WIFS is demonstrate based programmed response to the overall shortcoming condition among pre-grown-up young women and young fellows through oversaw week after week ingestion of IFA supplementation and semi-annual helminthic control. The whole deal objective is to break the intergenerational cycle of whiteness, the short-lived points of interest is of a restoratively improved human capital. The program, executed the country over both in nation and urban locales.

Objectives

1. To assess the demographic variables of adolescent girls.
2. To collect the pre-test haemoglobin test level of adolescent girls.
3. To collect the data related supplementation of iron folic acid tab among adolescent girls.
4. To collect the post-test haemoglobin level among adolescent girls.
5. To assess the effectiveness of iron & folic acid supplementation program.

Material and methods

Based on the objective and extensive search of literature was made to determine and develop the conceptual framework and methodology for the study.

One group pre-and post-test group design with true experimental approach was adopted to evaluate the study. The sample consist of 250 adolescent girls studying in selected rural school of Bhopal. But during the time of data collection 190 adolescent girls were available. Remaining 60 adolescent girls were withdrawn from the study. Purposive sampling technique was used for the selection of the participants.

In the view of the nature of problem and to accomplish the objective of the study, the investigator collect data by pre-haemoglobin test (using Sahil's method) of adolescent girls.

After pre-test, iron and folic acid tablet provided to each adolescent girl as per the govt program setup of WIFS, weekly for a period of three months. After three month of supplementation post-test was carried out by the investigator by using Sahil's method.

The data obtained were analysed by using both descriptive and inferential statistics.

Results

Description of demographic variables of adolescent girls.

Among 190 participants, 57.9% of the subjects belonged to age group of 17-18 years, 81% were Hindu, 84% subjects were unmarried, 54.2% were non-vegetarian, 38% were nuclear family, 44.2% subjects have 1 siblings, 51.6% girls have 4-5 days of menstruation period, 70% have regular menstruation cycle, 33.2% of subjects of parents were in private job.

Description of Post test score of Hb level of adolescent girls.

Table 1 Post test score of Hb of adolescent girls.

Post test	Frequency	Percent
Increase	178	93.7
Stable	5	2.6
Decrease	7	3.7
Total	190	100

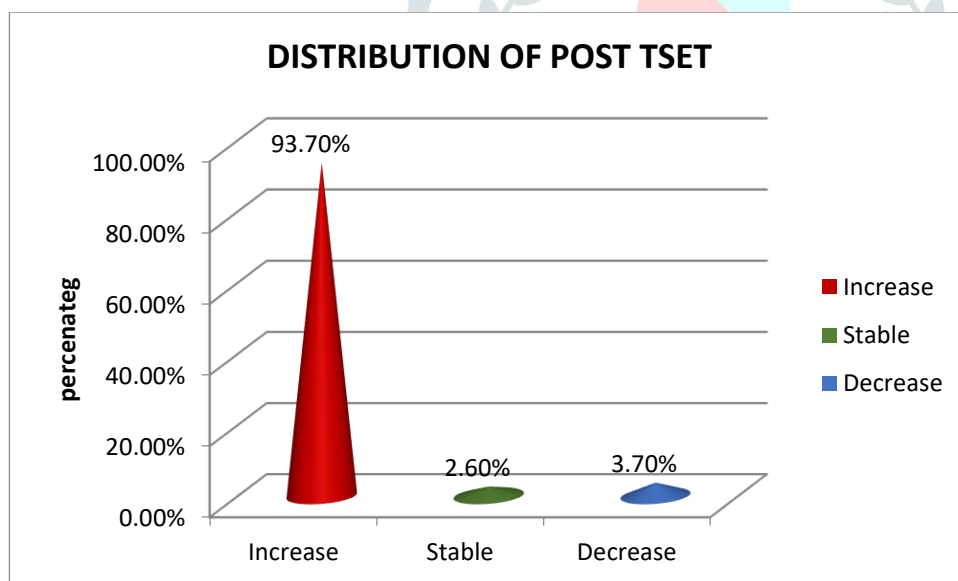


Figure 1.1 indicates the frequency of Hb level of adolescent girls in that 93.7% have increased Hb level, 2.6% have stable Hb and 3.7% have decreased Hb level.

Difference between pre test Hb level and post test Hb level of adolescent girls.

Table 2 indicate the overall difference between pre and post test Hb score of participants.

	Mean	Std. Deviation	t	df	P value
PRE HB TEST	10.5052	1.32897	14.356	189	.000*
POST HB TEST	10.9743	1.22321			

*= significant at $P < 0.05$

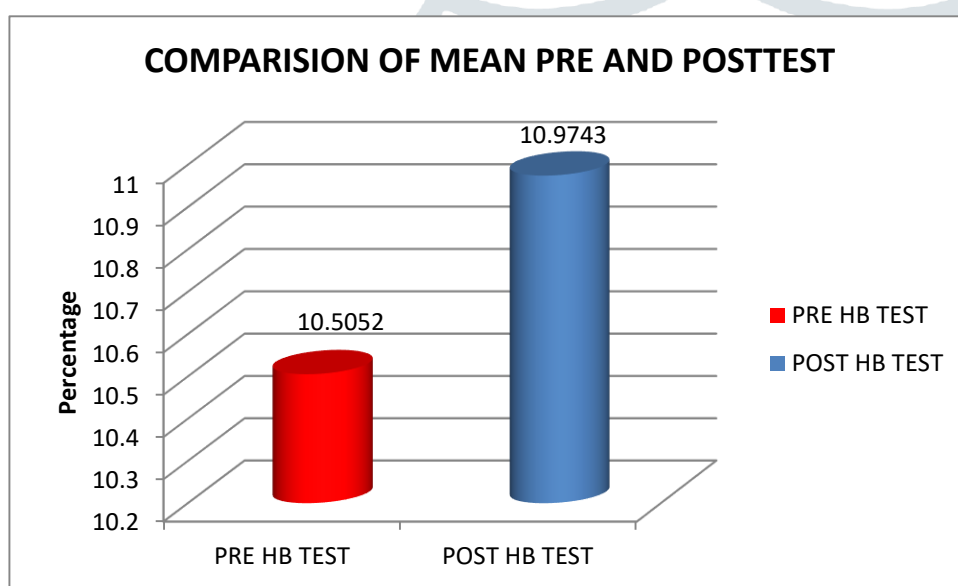


Figure 2.1 Indicate the overall difference between pre and post test score of Hb level of adolescent girls. P value is < 0.05 and significant using paired t test.

Discussion

The present study attempted to assess the effectiveness of weekly iron and folic acid tab supplementation program among school age adolescent girls at selected rural school of Bhopal M.P. this study used experimental research design (One group pre-test and post-test design). By purposive sampling technique select 250 participants in the Government higher secondary school, Intkhedi Bhopal M.P. pre-tested Hb level score given by standardised (Sahil's) method. Iron & folic acid tablet supplementation was administered by government supplementation program for three months. After 3 months of intervention Post Hb level score was done by the same method. The collected data was analysed by descriptive and inferential statistics. The result revealed that the participant has significantly improved haemoglobin level.

On the whole, the study was really an interesting and exciting experience to the investigator. The constant encouragement and the guide, cooperation and interest of the respondent to participate in this study, contributed to the faithful completion of the study.

Conclusion

Assessment of the haemoglobin level among adolescent girls and weekly implementation of iron and folic acid tablet supplementation program, is the main concept of the study.

From the findings of the study, adolescent girls has significantly improved haemoglobin level after implementation of iron folic acid tab supplementation program. Hence paired 't' value was significantly to their P value.

Thus, it is concluded that the administration of iron & folic acid tablet supplementation improved the haemoglobin level of adolescent girls.

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