



Short Case Study

Case Study on Hemoglobin in Girls Students of Jaora College, MP, India

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Abstract

An attempt has been made to analyze the hemoglobin level of girls' students of Bhagat Singh Govt. P. G. College of Jaora. Blood samples of girls students were collected and measured the level of Hemoglobin. One hundred seventy five (175) girls' students were included in this study. During this study it was noted that average 61.52% girls' students were found in anemic conditions. Of these, 75, 72, 70.18, 63.16 and 27.27 percents of girls in the age of 16, 17, 18, 19 and 20 years old were respectively affected by the deficiency of Hemoglobin.

Keywords: Hemoglobin, anemia, girls, students, Jaora, college.

Introduction

Jaora is very big tehsil of Rtlam district of Madhya Pradesh. It is located in Malwa plateau. Jaora is famous for Husain Tekari which is situated at Ujaain-Jaora Road. On the occasion of Muharram, thousands of people from all over the world and India visit the Hussain Tekari. Geographically, it is located on 23°38'15.34" North latitude and 75°07'33.47" East longitude.

Deficiency of Iron causes the serious problem in human being like-Anemia. It is very dangerous ailment of human being. The concentration of hemoglobin becomes decreases in this problem and creates many problems in the human health. The problem of hemoglobin deficit can easily recovers by using the balanced diet. Balanced food provides all nutritive elements as requirement of human body. Therefore, nutrition can play the key role to solve this problem.

United Nation Administrative Committee on Nutrition defined the Anemia as reduction in hemoglobin concentration below 11 gram/dl for women and 12 gram/dl for men¹. All those people will be anemic patients who have below the minimum level of hemoglobin as recommended by the United Nation Administrative Committee. Anemia is a blood related ailment of human being. The accurate level of hemoglobin should be maintained in our body. Balanced diet is only the way to maintain the level of hemoglobin for human health. The main aim of this case study is to alert the public for testing the hemoglobin level time to time.

Materials and methods

The blood testing camp is organized by NSS in charge of B S Govt. P.G. College Jaora with help of Community health Centre (CHC) Jaora. During this camp blood samples of girls' students

were collected by finger stick. Some drops of blood were taken into the cuvettes. After the collection of blood samples, the experiment was done carefully to estimate the hemoglobin. The level of hemoglobin was recorded by the doctors with the help of automated analyzers using CBC method.

Results and discussions

The study was carried out with the help of local hospital staff in the year 2017-18. The whole data regarding the level of hemoglobin was provided to the in charge of NSS. We analyzed the data and presented in the Table-1 and graphically depicted in Figure-1. Total one hundred seventy five (175) girls' students were selected in this study. The study of data reported that the maximum number of girls were under the grip of anemia. In this study 16, 17, 18, 19 and 20 years old age-groups of girls were included. The maximum percentage (75.00%) of girls students in the age of 16 years were affected by anemia, while minimum percentage (27.27%) of anemic girls' was found in the age of 20 years. A trend of gradual decrease was observed in the percentage of anemia from age of 16 to 20 years old of girls' students. Perusal of above data average 61.52% of girls students of Jaora College were badly affected by anemia. In this study, it was noted that the age of anemic girls is very important factor because most of underage girls were maximum affected by Hemoglobin deficiency. In other words we can say that the average 61.52% of girls' students were found with below the minimum level of hemoglobin as defined by United Nation Administrative Committee on Nutrition. Similar results regarding the hemoglobin concentration also found in Ujjain^{2,3}. It was observed that the prevalence of anemia was high among all women^{4,5} World Health Organization (WHO) estimated that prevalence of anemia among women was 10% in developed countries and 42% in developing countries⁶.

Table-1: Showing level of HB among the girls' students.

Age of Girls Students (Yrs)	Number of Girls students			Percentage of Anemic Girls
	Normal	Anemic	Total	
16	02	06	08	75.00%
17	14	36	50	72.00%
18	17	40	57	70.18%
19	14	24	38	63.16%
20	16	06	22	27.27%
	63	112	175	61.52%

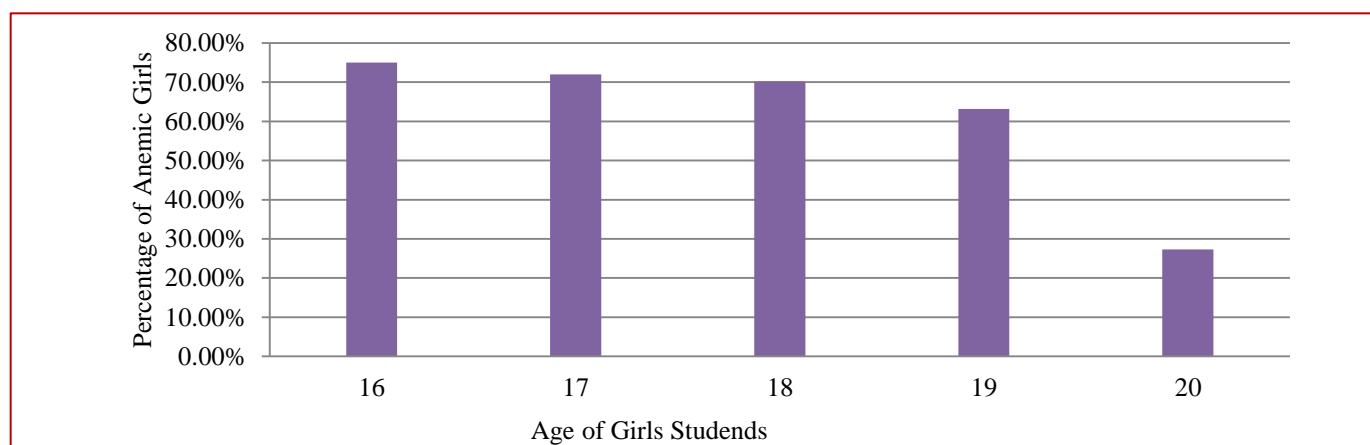


Figure-1: Showing level of HB among the girls' students.

Conclusion

In contrast of above study, it can be concluded that 61.52% of girls' students were found with deficiency of hemoglobin. A trend of gradual decrease in the percentage of anemic girls was recorded from age of 16 to 20 years old. Thus, it is proved that the age of girls greatly influenced the level of hemoglobin. This is a matter of great concern. In this situation, this study provides very important information to find out the solution of this serious problem.

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