Research Article

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ANAEMIA IN CASES PRESENTING AT DHQ BAHAWALNAGAR

Huma Kanwal, Muhammad Luqman Ismail and Zaheer Akhter*

Sheikh Zayed Hospital, Rahim Yar Khan.

*Corresponding Author: Zaheer Akhter

Sheikh Zayed Hospital, Rahim Yar Khan.

ABSTRACT

Objective: The determine the frequency of anemia in population presenting at District head quarter (DHQ) hospital, Bahawalnagar. **Material and methods.** This cross sectional study was carried out at DHQ Bahawalnagar during July 2017 to January 2018. In this study all the cases presenting to the same hospital for any reason irrespective of their gender with age more than 12 years were included. Anaemia was labelled as yes where the Hemoglobin levels was less than 13 g/dl in males and 12 g/dl in females. It was further subdivide into mild if between 10-13 g/dl, moderate if 8-9.9 g/dl and severe if less than 8 g/dl. **Results;** In the present study there were total 1127 cases. out of these 547 (48.54%) were males. The mean age was 46.23±8.57 years. Anemia was seen in 674 (59.8%) of the cases. Anemia was more seen in females affecting 373 (64.3%) of cases with p= 0.12. There were 13.8% cases having mild, 38.9% moderate and 7.1% had severe anemia. **Conclusion;** Anemia is seen in almost 2/3rd of the cases and majority of the cases has moderate degree of anemia.

KEYWORDS: Anemia, Hemoglobin.

INTRODUCTION

Anaemia is defined as the loss of capability of the blood to carry oxygen in the body and this is usually caused by the reduction in the hemoglobin concentration in the blood. More than 2 billion of the cases are found to be anemic across the globe according to world heath organization (WHO) survery.[1-2]

Anemia is labelled according to WHO cut off value for less than 13 g/dl in males and 12 g/dl in female.[3] It can further have classified into mild, moderate and severe form. It can also be divvied into different types on various classification systems i.e. microcytic or macrocytic, blood loss/ hemolytic or aplastic. There are multiple risk factors that can predispose the development of anemia and include poor dietary intake, co morbid conditions, infections, storage disorders, congenital anomalies, increased destruction or loss etc. females are at increased risk as compared to males due to increased loss in the form of menstrual cycle or pregnancy.[4-7]

Clinical presentations include early fatigue ability, shortness of breath, palpitation, pallor etc. iron and folic acid replacement is the mainstay of the treatment if there is no underlying condition like hemoglobinopathies.[8-9]

OBJECTIVE

The determine the frequency of anemia in population presenting at District head quarter (DHQ) hospital Bahawalnagar.

MATERIALS AND METHODS

This cross sectional study was carried out at DHQ Bahawalnagar during July 2017 to January 2018. In this study all the cases presenting to the same hospital for any reason irrespective of their gender with age more than 12 years were included. The cases with know hemoglobinopathies were excluded form this study. Anaemia was labelled as yes where the Hemoglobin levels was less than 13 g/dl in males and 12 g/dl in females. It was further subdivide into mild if between 10-13 g/dl, moderate if 8-9.9 g/dl and severe if less than 8 g/dl.

STATISTICAL ANALYSIS

SPSS-23 was used to analyzed the data and post stratification chi square test was used and p value ≤0.05 was considered as significant.

RESULTS

In the present study there were total 1127 cases. out of these 547 (48.54%) were males. The mean age was 46.23±8.57 years as in table I. Anemia was seen in 674 (59.8%) of the cases. Anemia was more seen in females

affecting 373 (64.3%) of cases with p= 0.12 as in table II. There were 13.8% cases having mild, 38.9% moderate and 7.1% had severe anemia as in table III.

Table I: Demographics of cases.

	Mean	Range
Age	46.23±8.57	12-77 years
Weight	57.97±8.43	21-104 kg
Hemoglobin	9.34±2.67	5-17 g/dl

Table II: Anemia and gender.

Gender	Anemia		Total	p
	Yes	No		
Male	301 (55.1%)	226 (44.9%)	547	
Female	373 (64.3%)	227 (35.7%)		0.12
Total	674 (59.8%%)	453 (40.2%)	1127	

p=0.45

Table III: Degree of anemia.

Type of anemia	Number	Percentage
No anemia	453	40.2%
Mild	155	13.8%
Moderate	438	38.9%
Severe	81	7.1%

DISCUSSION

Anemia is one of the most prevalent diseases in the under developed countries and majority of the population is thought to be affected by this. Its number is on a very high rank in Pakistan and their number is increasing day by day. There are more reported cases of females; though males are also not uncommon.

In the present study anemia was seen in 674 (59.8%) of the cases presenting at DHQ Bahawalnagar. The results of the various studies in the past revealed a wide variable finding, not only at international but also at national level. According to national health survey of Pakistan (NHPS) the prevalence of anemia is around 40% and further more they found that the prevalence in males is around 12-28% of the cases while in females this was seen to be in 38 to 51.5% of the cases. these results were similar to the present study where the anemia in females was seen in 64.3% of the cases while slightly higher results were seen in males affecting 55% of the cases with p= 0.12.[10-11] However, the results were almost similar to the study done by Waheed A et al where the anemia in males was seen in 56% and in females as 64.6% of the cases.[12]

According to another study the prevalence of anemia in cases those were admitted to the hospital due to any reason was seen in 30 to 90% of the cases.[13-14] In another study the majority of the cases approaching almost 2/3rd

of the cases anemia was seen in pregnant females and those with child bearing age.[15-18]

CONCLUSION

Anemia is seen in almost 2/3rd of the cases and majority of the cases has moderate degree of anemia.

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