Journal of Cardiovascular Disease Research
ISSN: 0975-3583, 0976-2833 VOL 12, ISSUE 9, 2021

Original Research Article

STUDY OF KNOWLEDGE AND PREVALENCE OF ANEMIA AMONG THE WOMEN ATTENDING OUT PATIENT DEPARTMENT OF A TERTIARY CARE HOSPITAL

Dr. Amarnath Singh[1*], Dr. Abdul Azad[2]

[1*]Assistant Professor, Dept. of Community Medicine, ICARE Institute of Medical Sciences & Research & Dr. Bidhan Chandra Roy Hospital, Haldia

[2]Assistant Professor, Dept. of Community Medicine, Jagannath Gupta Institute of Medical Sciences & Hospital, Kolkata

***Corresponding author:** Dr. Amarnath Singh

*****Assistant Professor, Dept. of Community Medicine, ICARE Institute of Medical Sciences & Research & Dr. Bidhan Chandra Roy Hospital, Haldia

ABSTRACT

Introduction: Anemia is considered the most common blood disorder which is affecting about one-third of the global population. Women require higher amount of iron than men and the requirement increase during pregnancy period as different physiological changes occur in the maternal red cell mass during that period.

Objectives: The objective of the present study is to assess the level of knowledge about causes, symptom and prevention of iron deficiency anemia among women of reproductive ages attending outpatient department of our tertiary care hospital.

Methodology: Data was collected by conducting face-to-face interview. The questionnaire of this study was pre-tested before starting the data collection and modified as per requirement. Before starting the data collection, permission was obtained from the respondents and verbal informed consent was taken. After collection of data, all interviewed questionnaires were checked for completeness, correctness and internal consistency to exclude missing or inconsistent data. After the collection of demographic data, assessment of knowledge was done using structured questionnaire technique on knowledge about anemia. It had maximum possible score of 20 and minimum was 0. The score 0 to 9 were categorized as inadequate knowledge, 10 to 14 were categorized as average knowledge and 15 to 20 were categorized as adequate knowledge. Corrected data was analysed using Statistical Package for Social Sciences (SPSS) statistical software version 20.

Results: The data presented in the table 1 shows that most the women participated in the study belong to the age group 25-30 years, majority of them belong to Hindu religion, 54% of them are

vegetarian and 46% are mixed diet, 48% of the women were housewife's, 75% of them were married and 40% of them had education up to 10th standard. The data presented in the table 2 shows that 42% of the study subjects had good knowledge, 32% had average knowledge and 26% had below average knowledge about anemia. The data presented in the table 3 shows the correlation of education level and occupation level with the levels of knowledge, there was no significant correlation existed between the levels of knowledge and education levels but Socioeconomic status of women had significant association with their knowledge on anemia.

Discussion & Conclusion: It is evident from our study that though the women had good level of knowledge but lack of healthy iron rich foods in daily food, drinking tea, irregular intake of breakfast, low household monthly income, low socioeconomic status all of those were increasing the prevalence of anemia. However, to ensure adequate practice to fight with anemia, physiological social, demographic and cultural limitations must be addressed proficiently. Also, the findings from this study revealed that there is strong and significant relationship of knowledge and attitude on anemia with the socio-demographic status and level of education of the respondents. As there is a need to strengthen the existing national nutritional anemia control programme, we all should gear up our activities towards solving this problem by the sincere efforts the requirement of developing intensive education curriculum including the detailed information regarding anemia since childhood so that pertinent knowledge can be disseminated to the women since the very beginning of their education and learning process that can impact positively to fight against anemia in their future.

Key-words: anemia, education, knowledge and iron deficiency anemia

INTRODUCTION

Anemia is considered the most common blood disorder which is affecting about one-third of the global population. Women require higher amount of iron than men and the requirement increase during pregnancy period as different physiological changes occur in the maternal red cell mass during that period. Also, the development of fetus needs proper iron supply (WHO, 2014). Not only during pregnancy but also during non-pregnancy, anemia may occur (Noronha JA et al. 2012). Globally 41.8% of women are suffering from Iron deficiency anemia which is the leading cause of maternal morbidity, mortality and poor birth outcome. In India, it affects almost all ages and physiological groups such as preschool children, adolescent girls, pregnant women and lactating mothers because of the increased demand for iron during preschool life and adolescent age and additional demand during pregnancy and lactation [1-5].

Iron deficiency anemia has remained the top cause of disability in India for 10 years now according to an GBD surveys (2016). The main causes of anemia in Indian context such as low iron intake, limited vitamin C intake, lower gastric acidity relative to populations of European descent, among women-repeated child bearing, lactation and poor access to nutritional supplements following menarche and during pregnancy may cause of further exacerbate anemia. Furthermore, hookworm infestation and malaria are also important cause of anemia. Various socio cultural issues that influence anemia status, including poverty, micronutrient deficiencies, Cultural and religious practices, access to health services and poor awareness of the condition and preventive measures.

Thus, the etiology of anemia in India. Anemia more often in women than in men, the main reason is excessive loss of iron or demand of iron associated with menstruation and pregnancy. Nearly half a billion women of reproductive age worldwide are affected by anemia [6-8].

Lack of knowledge, poor socio-economic condition, poor dietary practice and low consumption of iron supplements among women are major contributors to anemia burden in developing countries. The knowledge and household practices of women towards the prevention of iron deficiency anemia differ from region to region and with individual women. Adequate Knowledge of anemia may encourage to take iron supplement to prevent anemia. Lower education will lead to higher rates of anemia. Though there are various programs started by government of India to create awareness and to decrease the prevalence of anemia [9-13].
The present study is undertaken to assess the level of knowledge about causes, symptom and prevention of iron deficiency anemia among women of reproductive ages attending our tertiary care hospital.

AIM & OBJECTIVES

The objective of the present study is to assess the level of knowledge and prevalence of iron deficiency anemia among women of reproductive ages attending outpatient department of our tertiary care hospital.

METHODOLOGY

A descriptive type of cross-sectional study was conducted at our tertiary level hospital. The study population consisted of 100 women of reproductive age in between 20 to 44 years who attended the selected hospital during the data collection period. We included the women who attended the hospital for any kind of Outpatient Consultation purpose and gave their consent, were included in the study. The women who were very sick were excluded. Data was collected by conducting face-to-face interview. The questionnaire of this study was pre-tested before starting the data collection and modified as per requirement. Before starting the data collection, permission was obtained from the respondents and verbal informed consent was taken. After collection of data, all interviewed questionnaires were checked for completeness, correctness and internal consistency to exclude missing or inconsistent data. After the collection of demographic data, assessment of knowledge was done using structured questionnaire technique on knowledge about anemia. It had maximum possible score of 20 and minimum was 0. The score 0 to 9 were categorized as inadequate (Low) knowledge, 10 to 14 were categorized as average knowledge and 15 to 20 were categorized as adequate (Good) knowledge. Corrected data was analysed using Statistical Package for Social Sciences (SPSS) statistical software version 20. Socio economic class of Participants was assessed according to Modified B G Prasad socio economic scale 2014

RESULTS:

We included a total of 100 women in the age group 20 to 44 years based on inclusion and exclusion criteria.

Table 1: Shows demographic data of the study subjects		
Variables	**Frequency**	**Percentage**
Age in years		
18-24 years	10	10
25-30 years	42	42
31-35 years	28	28
36-40 years	14	14
41-44 years	6	6
Dietary pattern		
Vegetarian	54	54
Mixed	46	46
Occupation		
Part-time	16	16
Full time	26	26
House wife	48	48
Self employed	10	10
Marital status		
Married	72	72
Single	21	21
Divorced	4	4
Widow	3	3
Level of Education		
Upto 10^{th} std	40	40
PUC/IT Diploma	28	28
Degree	20	20
Professional	12	12
Socio-economic Status		
High	36	36
Medium	34	34
Low	30	30

Table 2: Shows the assessment of knowledge levels		
Knowledge levels	**Frequency**	**Percentage**
Good (>75%)	42	42
Average (50-74%)	32	32
Low (<49%)	26	26

The data presented in the table 2 shows that 42% of the study subjects had good knowledge, 32% had average knowledge and 26% had below average knowledge about anemia.

Table 3: Association of level of Education, Occupation and Socioeconomic Status with level of knowledge					
	Categories	Good (42)	Average (32)	Low (26)	P value
Education	Upto 10th std	18	12	10	0.9679
	PUC/IT Diploma	10	10	8	
	Degree	8	6	6	
	Professional	6	4	2	
Occupation	Part-time	16	14	10	0.6185
	Full time	13	8	7	
	House wife	7	5	8	
	Self employed	6	5	1	
Socioeconomic Status	High	20	11	3	0.0004
	Medium	16	14	7	
	Low	6	7	16	

DISCUSSION & CONCLUSION

It is evident from our study that though the women had good level of knowledge but lack of healthy iron rich foods in daily food, drinking tea, irregular intake of breakfast, low household monthly income, low socioeconomic status all of those were increasing the prevalence of anemia. However, to ensure adequate practice to fight with anemia, physiological social, demographic and cultural limitations must be addressed proficiently. Also, the findings from this study revealed that there is a need for education to ensure appropriate knowledge towards anemia. It has been found that there is strong and significant relationship of knowledge ~~and attitude~~ on anemia with the socio-demographic status ~~and level of education~~ of the respondents. This association suggests that there is a need to strengthen the existing national nutritional anemia control programme. As a health professional, we all should gear up our activities towards solving this problem by the sincere efforts the requirement of developing intensive education curriculum including the detailed information regarding anemia since the childhood so that pertinent knowledge can be disseminated to the women since the very beginning of their education and learning process that can impact positively to fight against anemia in their future.

REFERENCES

1. Abu-Baker, N. N., Eyadat, A. M., & Khamaiseh, A. M. The impact of nutrition education on knowledge, attitude, and practice regarding iron deficiency anemia among female adolescent students in Jordan. *Heliyon*, 2021; *7*(2), e06348

2. Guedenon KM, Atakouma YD, Macamanzi E, Dossou FC, Gbadoe AD. Knowledge, attitude and practice of the mothers with anemia of children under five years old in the peadiatric department at Sylvanus Olympio teaching hospital in Lome. *Tunis Med*, 2016; 94(1): 46-53.

3. Keneni B, Jayanthigopal D, Bayissa DD. Assessment of knowledge and practice towards prevention of anemia among pregnant women attending antenatal care at government hospitals in West Shoa Zone. *Ethiop J Health Med Nurs*, 2018; 50: 31-40.

4. Maj SS, Laxmipriya P. Study to Assess the Knowledge and Practices Regarding Prevention of Anaemia among Antenatal Women Attending a Tertiary Level Hospital in Pune. *Int J Sci Res*, 2017.

5. Margwe, J. A., & Lupindu, A. M. Knowledge and attitude of pregnant women in rural Tanzania on prevention of Anaemia. *African Journal of Reproductive Health*, 2018; *22*(3): 71-79.

6. Simon, Peter, Donald. Hook worm related anaemia among women: A systematic review: Journal of PLOS neglected tropical disease 2(9):291.

7. https://WWW.indexmundi.com/facts/india/prevalence_of_anaemia(cited on 15/03/2020).

8. https://WWW.ncbi.n/m.nih.gov/pmc/articles/pmc4928413/ (cited on 18/03/2020).

9. https://WWW.hindawi.com/Journals/anaemia/2018/7123976/ (cited on18/03/2020).

10. https://WWW.pragatipublication.com/assets/uploads/doc/69157-113-120.16045.pdf(cited on 14/03/2020).

11. National Micronutrient Survey Final Report. Dhaka, Bangladesh: Institute of Public Health Nutrition, United Nation Children's Fund (UNICEF), icddr,b and Global Allaince for Improved Nutrition (GAIN), 2011; 12.

12. Noronha JA, Khasawneh EA, Raman S, Seshan V. Anemia in pregnancy and challenges. *J South Asian Federation Obs Gynaecol*, 2012; 4(1): 64-70.

13. Oumer, A., & Hussein, A. Knowledge, attitude and practice of pregnant mothers towards preventions of iron deficiency anemia in ethiopia: institutional based cross-sectional study. *Health Care Current Reviews*, 2019; *7*(1): 2381-7.