

ASSESSMENT OF PREGNANT WOMEN KNOWLEDGE REGARDING ANEMIA DURING PREGNANCY AT SELECTED HOSPITALS OF PESHAWAR

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ABSTRACT

OBJECTIVES

The purpose of this study was to assess knowledge of pregnant women regarding anemia during pregnancy.

METHODOLOGY

A descriptive cross-sectional study design was used in this study. The study was conducted during 6 months (15th April-15th September 2022). By using non probability convenience sampling technique, 100 pregnant women admitted in gynecology department of tertiary hospitals of Peshawar were selected for this study. Informed consent was secured from the participants and permission was taken from tertiary hospitals administration. Data were collected by self-administered questionnaire and analyzed through SPSS version 22.0.

RESULTS

In a sample of (n=100), 78% of the participants were within the age limit of 20 -30 years and 21% were within 30-40 age limit. Out of the total respondents 35% had weak knowledge, 61% of the participants had fair knowledge, and 4 % of the participants had good knowledge regarding anemia during Pregnancy.

CONCLUSION

Majority of participants had insufficient knowledge regarding anemia during pregnancy. Health education about foods with a high concentration of Iron is an essential step towards reducing iron deficiency anemia in pregnant women.

KEYWORDS: *Assessment, Anemia, Knowledge, Pregnant Women, Pregnancy*

INTRODUCTION

World Health Organization defined anemia as a low hemoglobin level (less than 11 g/dl), which is classified as mild (Hb, 9-10.9 g/dl), moderate (Hb, 7-8.5 g/dl), and severe (Hb, 9-10.9 g/dl).¹ The mother's body needs increase blood with the growth of the fetus in pregnancy. Inadequate nutrition during pregnancy causes anemia which lead to high-risk pregnancy and low birth weight. Anemia is responsible for one in 5 of maternal deaths.² The causes of anemia include aberrant RBC production, excessive destruction and loss of RBCs, poor diet, poor hygiene, and bad health practices, as well as a lack of adequate healthcare services.³ The frequency of anemia is particularly high in the developing nations (33–75%). In industrialized nations, around 15% of pregnant women are anemic. Anemia is reported to be prevalent in the UK at a rate of 24.4% prenatally and almost 30% of women are anemic postpartum.⁴ In Asia, the average death rate attributable to anemia is estimated to be 7.26%. Africa had a frequency of 57.1%, South East Asia had a prevalence of 48.2%, Europe had a prevalence of 2.1%, and the Western Pacific had a prevalence of 30.7 and 41.8%.⁵ According to an Iraqi research, 30.5% of

pregnant women had anemia. In Pakistan anemia affects 41.7% to 77.0. Anemia is more prevalent in the rural areas of Pakistan, where it is often severe and linked to adverse health consequences such as postpartum hemorrhage, preterm delivery or stillbirth and low birth weight babies.⁶ Maternal mortality is the primary health indicator in any community. The incidence rate of anemia should be lower to improve the health of pregnant women.⁷ Proper antenatal care act as certain preventive measure to control the health related problem during pregnancy which include screening test, counseling, health education and health care services for enhancing and promoting the health of both mother and fetus.⁸ Education of women regarding anemia is very important specially in low and middle income countries to prevent pregnancy and birth related complications.⁹ Hence this study was designed to determine the knowledge of pregnant women regarding anemia.

METHODOLOGY

A cross-sectional descriptive study was carried out in gynecology departments of tertiary care hospitals, Hayatabad Medical Complex (HMC), Khyber teaching

hospital (KTH) and NGO (MSF) Peshawar, Pakistan from 15th April to 15th September. A total of 100 pregnant women admitted in gynecology department of HMC, KTH and MSF hospital were recruited to the study through convenient sampling technique. A previously validated and reliable questionnaire regarding anemia knowledge was utilized which consisted of two parts; socio-demographic information and basic knowledge about anemia. The second part of questionnaire comprised of 13 questions related to knowledge regarding anemia. Informed consent was taken from all the participants after assurance that their information would be kept confidential. The study was ethically approved by the administration of tertiary care hospitals. Data were analyzed through SPSS version 22. Descriptive statistics including frequencies and percentages were measured for the data.

RESULTS

Response rate of the participants was 100%. Out of the total 78% of the participants were within the age limit of 20 -30 years and 21% were within 30-40 age limit. Regarding education 37% Participants were uneducated, 16% primary, 17% middle and 13% were matric. About 67% of the study participants reported marrying between the ages of 25 to 32 and 22% between ages of 18-25 years. According to the type of pregnancy analysis 80% of the participants have experienced single pregnancy and 16% had a twin pregnancy.

Table 1: Socio-Demographic Characteristics of all the Participants of the Study

Characteristics	F	%Age
Age		
20-30 year	78	78.0%
30-40 year	21	21.0%
30-40 year	01	1.0%
Education Level		
Uneducated	37	37.0%
Educated	08	8.0%
Primary	16	16.0%
Middle	17	17.0%
Matric	13	13.0%
Intermediate	09	09.0%
Age of Participants at the Time of Marriage		
Less than 18 year	08	08.0%
18-25 year	22	22.0%
25-32 year	70	70.0%
HB Level of the Subject		
3 to 6 mg/dl	15	15.0%
7 to 11 mg/dl	84	84.0%
More than 11mg/dl	01	1.0%

Table 2: Knowledge Score of the Participant's

Characteristics	F	%Age
Poor knowledge	35	35.0%
Good knowledge	61	61.0%
Fair Knowledge	04	04.0%

Of the total sample, 84% participants had anemia Hb level of 7 to 11 mg/dl and 15% has severe anemia Hb level of 3 to 6 mg/dl. Out of total respondents, 35% of the participants had poor knowledge and 61% had fair knowledge. Regarding awareness about anemia, 78 % of the women had heard about anemia and about 90 % of the women know that anemia is a health problem. The overall finding shows that participants have not enough knowledge regarding preventive measures of anemia.

DISCUSSION

The key aim of this study was to assess the knowledge of pregnant women regarding anemia. The current study shows that majority of the pregnant women do not have enough knowledge regarding anemia in HMC, KTH and MSF hospitals in Peshawar. One study in West Bengal shows that women's who were attending the prenatal health services regularly are often familiar about anemia and iron supplement and other health benefits during pregnancy.² Another study in M kuranga Districts, Tanzania shows that 80% women were anemic due to poor dietary practice.⁵ Findings of the study are consistent with a study from Malaysia which reported that anemia is more common among women which may be due to lack of knowledge regarding anemia.¹⁰ Similarly, another study from Saudi Arabia Tabuk noted that majority of the women have poor knowledge and attitude towards anemia.¹¹ Likewise, another study from Bangladesh found that knowledge of pregnant women regarding anemia and inadequate iron intake is the main cause of anemia during pregnancy.¹² In one study at Bosanko community in Ghana shows the cultural and religious belief prevent to take many iron source. One more study regarding nutritional awareness done between the urban and rural area and this study reports that urban mothers have good knowledge but rural mother has not enough knowledge regarding nutritional care during pregnancy.¹³ Studies from Punjab and other provinces of Pakistan have also reported poor knowledge of women regarding anemia as an associated risk for anemia during pregnancy.¹⁴ Low knowledge of women regarding anemia is reported by studies from other developing countries such as Euthopia, Ghana and Bangladesh etc as one of the main reason of anemia among pregnant women.^{15,16,17,18} The women who eat

double diet during pregnancy have fair knowledge regarding anemia and the female who taking normal diet have poor knowledge regarding anemia.^{19,20} The results of current study shows that the participants who had heard about anemia have good knowledge score and the majority of the participants who do not hear about anemia have poor knowledge regarding anemia. Prevention of anemia during pregnancy and childbearing stage is one the key clinical issues to ensure optimal health of women. Therefore, nurses and midwives should play an active role to educate women regarding anemia and adequate iron intake during to ensure safe pregnancy.

LIMITATIONS

The study might have a small sample size, which may limit the generalizability of the findings to the entire population of pregnant women in Peshawar. It is important to have a diverse and representative sample to ensure the results accurately reflect the population.

CONCLUSIONS

Findings of the current study revealed that majority of pregnant women in Peshawar had insufficient knowledge regarding anemia. Health education programs, in-depth counseling and encouragement of pregnant women to ingest iron and folic acid, as well as ensuring that they receive an appropriate antenatal care and regular Hb monitoring is recommended.

CONFLICT OF INTEREST: None

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REFERENCES

- Nivedita K, Shanthini FN. Knowledge, attitude and practices of pregnant women regarding anemia, iron rich diet and iron supplements and its impact on their hemoglobin levels. *Int J ReprodContraceptObstet Gynecol.* 2016 Feb 1;5(2):425-31.
- Sinha A, Adhikary M, Phukan JP, Kedia S, Sinha T. A study on anemia and its risk factors among pregnant women attending antenatal clinic of a rural medical college of West Bengal. *Journal of Family Medicine and Primary Care.* 2021 Mar;10(3):1327.
- Balasubramanian T, Aravazhi M, Sampath SD. Awareness of anemia among pregnant women and impact of demographic factors on their hemoglobin status. *International Journal of Scientific Study.* 2016;3(12):303-5.
- Kefiyalew F, Zemene E, Asres Y, Gedefaw L. Anemia among pregnant women in Southeast Ethiopia: prevalence, severity and associated risk factors. *BMC research notes.* 2014 Dec;7(1):1-
- Ngimbudzi EB, Massawe SN, Sunguya BF. The Burden of Anemia in Pregnancy Among Women Attending the Antenatal Clinics in Mkuranga District, Tanzania. *Frontiers in Public Health.* 2021;9.
- Habib A, Hussain MA, Gilani SA. Knowledge, Attitude and Practices of Pregnant Women Regarding Iron Deficiency Anemia in A Rural Area of Lahore. *hemoglobin.* 2018;50.
- Ahamed NH, Kotb SA, Hassanen RH. Knowledge and attitude of pregnant women about iron deficiency anemia in Assiut University Women Health Hospital, Egypt. *J Nurs Health Sci.* 2018;7(3):49-58.
- Saepul S, Hermayanti Y, Platini H. Knowledge About Nutritional Intake in Pregnant Women with Anemia. *Jurnal Pendidikan Keperawatan Indonesia.* 2019 Dec 31;5(2):114-23.
- Darmawati D, Siregar TN, Kamil H, Tahlil T. The Effectiveness of Local Wisdom-Based Counseling to Prevent Iron Deficiency Anemia Among Pregnant Women: A Protocol Of A Randomized Controlled Trial. *Belitung Nursing Journal.* 2020 Jun 5;6(3):91-6.
- Zani H, Shahril MR, Rahman WN, Mukhali HB, Ismail R, Yusop YM. Anaemia-Related Knowledge amongst Pregnant Women in Kuala Terengganu, Malaysia. *Asian Journal of Medicine and Biomedicine.* 2020 Oct 20;4(2):1-9.
- About SA, El Sayed HA, Ibrahim HA. Knowledge, Attitude and Practice Regarding Prevention of Iron Deficiency Anemia among Pregnant Women in Tabuk Region. *International Journal of Pharmaceutical Research & Allied Sciences.* 2019 Apr 1;8(2).
- Sultana F, Ara G, Akbar T, Sultana R. Knowledge about Anemia among pregnant women in tertiary hospital. *Medicine Today.* 2019 Jun 26;31(2):105-10.
- Dwumfour-Asare B, Kwapong MA. Anaemia awareness, beliefs and practices among pregnant women: a baseline assessment at Brosankro community in Ghana. *J Nat Sci Res.* 2013;3(15):1-0.
- Qamar S, Azhar S, Mazhar S, Bakht K, Murtaza G. Iron deficiency anemia and associated factors among pregnant women in a tertiary care hospital, in Sargodha District, Pakistan. *Tropical Journal of Pharmaceutical Research.* 2019;18(10):2183-7.
- Serbessa ML, Iffa MT. Pregnant women's knowledge, attitude, and practice regarding the prevention of iron deficiency anemia among Ethiopian pregnant women. *Caspian Journal of Reproductive Medicine.* 2018 Nov 10;4(1):1-7.
- Gebre A, Mulugeta A. Prevalence of anemia and associated factors among pregnant women in North Western zone of Tigray, Northern Ethiopia: a cross-sectional study. *Journal of nutrition and metabolism.* 2015 May 28;2015.
- Adediran A, Oyelese A, Ogbaro D, Wakama T, Gbadegesin A, Awodele I, Adetola A, Ngubo F, Ocheni S. Knowledge and practices regarding prevention of anemia amongst pregnant women in rural communities of South-West Nigeria. *Caspian Journal of Reproductive Medicine.* 2021 Nov 10;7(2):7-14.
- Chowdhury HA, Ahmed KR, Jebunessa F, Akter J, Hossain S, Shahjahan M. Factors associated with maternal anaemia among pregnant women in Dhaka city. *BMC women's health.* 2015 Dec;15(1):1-6.
- Wemakor A. Prevalence and determinants of anaemia in pregnant women receiving antenatal care at a tertiary referral hospital in Northern Ghana. *BMC pregnancy and childbirth.* 2019 Dec;19(1):1-1.
- Payghan BS, Swapna SK, Mayuri R. A comparative study of Nutritional awareness among urban – Rural pregnant mothers, Research and reviews. *Journal of Medical and Health sciences.* 2014;3(4):95-9.

CONTRIBUTORS

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