

To Assess the Knowledge Regarding Anaemia in Pregnancy among the Women of Reproductive Age at Selected Area of Digboi, Tinsukia, Assam

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Abstract: ***Problem statement:** To Assess the Knowledge regarding Anaemia in pregnancy among women of Reproductive age at selected area of Digboi, Tinsukia, Assam. **Methodology:** The research approach selected for the present study was quantitative research approach using non-probability (convenience sampling) technique. The targeted population for the study were females under the age group of 18-45 years who were available during the study. In this study the sample consists of 60 females of Lachit Nagar, Digboi, Tinsukia, Assam. Tools used in this study were Demographic variables and Self-structured interview questionnaire to assess the knowledge on anaemia in pregnancy among women of reproductive age in which 12 items were there in questionnaire. **Results:** The study results showed that the mean knowledge score was 7.17 and standard deviation knowledge score was 1.59. Among 60 women, majority of women 38 (63.33%) had moderate knowledge on anaemia in pregnancy, 14(23.34%) had inadequate knowledge on anaemia in pregnancy and 8(13.33%) had an adequate knowledge on anaemia in pregnancy.*

Keywords: Assess, Knowledge, Anaemia in pregnancy, Reproductive age.

1. Introduction

Background of the Study

Anaemia in pregnancy is identified by the WHO as a haemoglobin (Hb) level less than 11 g/dl and is divided into three levels in terms of severity: mild anaemia (Hb level, 9–10.9 g/dl), moderate anaemia (Hb level, 7–8.9g/dl), and severe anaemia (Hb level 7–4.5 g/dl).¹ Anaemia occurs in up to one third of women during the third trimester, most commonly caused by iron deficiency and folate deficiency. Worldwide, anaemia affects 32 million pregnant women, and its prevalence is highest in South-East Asia, the Eastern Mediterranean, and the African region. The global prevalence of anaemia among pregnant women was 36.5%, and it was 29.6% in non-pregnant women.¹ India is one of the countries with very high prevalence of anaemia in world. Nutritional anaemia is a major public health problem in India and is primarily due to iron deficiency. The National Family Health Survey-3 (NFHS-3) data suggests that anaemia is widely prevalent among all age groups, and is particularly high nearly 55.3% amongst the most vulnerable in all women (15-49 years).²

Need of the Study

Anaemia remains the most common nutritional deficiency worldwide, particularly among pregnant women. It significantly impacts maternal and foetal health, contributing to both morbidity and mortality.² The association between maternal anaemia and adverse pregnancy outcomes, such as low birth weight (LBW), preterm birth (PTB), small-for-gestational-age (SGA), postpartum haemorrhage, and eclampsia, has been widely documented in previous studies.² Furthermore, an additional 0.8 million women are affected by severe maternal anaemia, which has been reported to increase the risk of maternal and perinatal mortality (PNM).¹ Studies have estimated maternal anaemia to account for 60,534 deaths and 3.4% of global disability-adjusted life years. The

importance of reducing and proper management of maternal anaemia has been recognized globally and set in international targets, such as Sustainable Development Goal 3 and Global Nutrition Targets 2025, aiming to reduce anaemia in women of reproductive age by 50%.³ Therefore, the researchers would like to focus on the reproductive age women's knowledge regarding anaemia in pregnancy and no such investigation was done regarding the knowledge among women's of reproductive age in selected area of Digboi.

Problem Statement

“To assess the Knowledge regarding Anaemia in Pregnancy among women of Reproductive age at selected area of Digboi, Tinsukia, Assam”.

Objectives

- 1) To assess the Knowledge about Anaemia in Pregnancy among Women of reproductive age at selected area of Digboi, Tinsukia, Assam.
- 2) To find out the association between knowledge regarding Anaemia in Pregnancy with demographic variables.

Hypothesis:

H₁= There will be an association between the knowledge regarding anaemia in pregnancy with selected demographic variables.

Assumption:

Women of reproductive age will have an adequate level of knowledge regarding anaemia in pregnancy at selected area of Digboi.

2. Review of Literature Related to Anaemia in Pregnancy

Wondu Feyisa Balcha, Tola Eteffa, Azimeraw Arega Tesfu, Bezawit Abeje Alemayehu (2023) conducted a cross-

sectional study at Pawi district, Northwest, Ethiopia with the purpose to assess maternal Knowledge of Anaemia and Adherence to its Prevention Strategies: A Health Facility-Based Cross-Sectional Study Design. The result showed that less than half, 184 (44.9%) [95% CI = 40.0-49.8] and almost half, 216 (52.7%) [95% CI = 47.8-57.5] of the pregnant women had good knowledge of anaemia and good adherence to its prevention strategies respectively. Women who are found in the age group of 15 to 19, 20 to 24, and 25 to 29 years, rural residency, secondary, and above educational level, vaginal bleeding, third trimester of pregnancy, and medium and high minimum dietary diversification score were significantly associated with knowledge of anaemia. On the other hand: women who are found in the age group of 15 to 19 years, secondary above educational level, primigravida women, having ≤ 2 and 3 to 4 family sizes, second and third trimester of pregnancy, high minimum dietary diversification score, and good knowledge of anaemia were significantly associated with adherence to anaemia prevention strategies. Conclusion: Maternal knowledge of anaemia and adherence to its prevention strategies were low. Nutritional counselling on the effects of iron-rich foods and awareness creation on the effects of anaemia in pregnant women must be strengthened to increase the knowledge of anaemia and adherence to its prevention strategies.¹

Zahraa Al-Sattam, Samia Hassan, et.al (2022) conducted “a Cross-Sectional study on knowledge about anaemia in pregnancy among females attending primary health care centres in Baghdad, Iraq”. In this study, overall knowledge score of the participants about anemia in pregnancy showed that 60% had fair knowledge. There were statistically significant associations between knowledge score and age of females, marital status, educational level, occupation, and parity. The majority of Iraqi adult females have fair and acceptable levels of knowledge about anemia in pregnancy. Younger age, being single, low educational level, unemployed, and low parity were associated with worst level of knowledge.⁴

3. Methodology

Research Approach:

The research approach selected for the present study was quantitative research approach.

Research Design:

In present study the researcher has used descriptive research design.

Settings of the Study:

The present study conducted in selected area of Digboi, Tinsukia, Assam.

Variables:

- *Research variables:* In this study research variable is the knowledge regarding anaemia in pregnancy among women of reproductive age in selected area of Digboi, Tinsukia, Assam.
- *Demographic variables:* The demographic variables were age, family type, religion, marital status, educational status, occupational status, dietary pattern and source of health-related information.

Targeted Population

The target populations of the study were females of selected area of Digboi, Tinsukia, Assam.

Sample:

In this research study the sample consist of 60 females of selected area of Digboi.

Sample Techniques:

In this research study, researchers use non- probability convenience sampling technique.

Sample Size:

In this study, sample was 60 females at selected area of Digboi.

Inclusion Criteria:

- All the women who were at the age group 18-45 year.
- All the women who were accessible during the study period.
- All the women of reproductive age residing at Lachit Nagar, Digboi, Tinsukia, Assam.

Exclusion Criteria:

- All the women who were not willing to participate of the age group 18-45 year.

Validity:

The content and language validity of the tools were reviewed by experts, and their suggestions were incorporated.

Description of the Tool:

The tool consists of two sections.

- *Section A:* It consists of demographic variables of female under the years that include age, family type, religion, marital status, educational status, occupational status, dietary pattern and source of health-related information.
- *Section B:* This section consists of self - structured questionnaire to assess the knowledge regarding anaemia among female of reproductive age in selected area of Digboi.

Method of Data Collection:

After critical evaluation from the experts and obtaining written informed consent from the participants, the data were collected using Interview method where self-structured questionnaires were used for collection of data on knowledge regarding anaemia in pregnancy among females with age group 18-45 years.

4. Analysis and Interpretation of Data

Section I: Description of Socio-Demographic Variables of the Women of Reproductive Age

Table-1.1: Frequency and Percentage Distribution of Socio-Demographic Variables (n=60)

S No.	Demographic Variables	Samples	Frequency	Percentage (%)
1	Age	18-24 Years	12	20
		25-31 Years	6	10
		32-38 Years	13	21.67
		39-45 Years	29	48.33

2	Type of family	Nuclear	37	61.67
		Joint	17	28.33
		Extended	6	10
3	Religion	Hinduism	59	98.33
		Islam	1	1.67
		Christianity	0	-
4	Marital status	Others	0	-
		Married	44	75
		Unmarried	11	18.33
		Divorced	0	-
5	Educational qualification	Widow	4	6.67
		No formal education	0	-
		Primary	20	33.33
		HSLC	8	13.33
6	Occupation	HS and above	32	53.44
		Student	7	11.67
		Service holder	2	3.33
		Homemaker	39	65
7	Dietary pattern	Others	12	20
		Vegetarian	2	3.33
		Non-Vegetarian	58	96.66
		Others	0	-

8	Source of health-related information	Newspaper	6	10
		Radio	1	1.67
		Television	21	35
		Social media	32	53.33
9	Participation in community programs	Yes	10	16.67
		No	50	83.33

Section-II: Assess the Level of Knowledge of Women Regarding Anaemia in Pregnancy

Table 1.2: Percentage Distribution of Response Regarding Anemia in Pregnancy (n=60)

Score	Response	Percentage (%)	Mean	Standard deviation
<6	Inadequate	23.34	7.17	1.59
6-9	Moderate	63.33		
>9	Adequate	13.33		
	Total	100		

Section III: Association between the Level of Knowledge Regarding Anaemia in Pregnancy with the Selected Socio-Demographic Variables

Table 1.3: Chi-Square Value to Test Association between the Level of Knowledge Regarding Anemia in Pregnancy with Selected Socio-Demographic Variables, (n=60)

Demographic Variables	Samples	Chi-Square	Df	P-Value	Remarks
Age	18-24 Years	6.73	6	0.34	NS
	25-31 Years				
	32-38 Years				
	39-45 Years				
Type Of Family	Nuclear	5.71	4	0.22	NS
	Joint				
	Extended				
Religion	Hinduism	3.34	6	0.76	NS
	Islam				
	Christianity				
	Others				
Marital Status	Married	2.05	6	0.91	NS
	Unmarried				
	Divorced				
	Widow				
Educational Qualification	No Formal Education	5.62	6	0.46	NS
	Primary				
	HSLC				
	HS and above				
Occupation	Student	3.19	6	0.78	NS
	Service holder				
	Homemaker				
	Others				
Dietary Pattern	Vegetarian	1.19	4	0.87	NS
	Non-Vegetarian				
	Others				
Source Of Health-Related Information	Newspaper	5.02	6	0.51	NS
	Radio				
	Television				
	Social media				
Participation In Community Programs	Yes	0.34	2	0.83	NS
	No				

The Table 3.1 shows that the calculated p-value is greater than the level of 0.05, so it was evident that there was no significant association between level of knowledge with demographic variables.

5. Conclusion

From the study it is concluded that the majority of women i.e. 63.33% have moderate knowledge, 23.34% have inadequate knowledge and 13.33% women with adequate knowledge

regarding anemia in pregnancy. Level of knowledge regarding anemia in pregnancy is not associated with the demographic variables. The study focused that every woman of reproductive age should be provided accurate knowledge and information about anemia in pregnancy by various means such as health awareness programs, community health camps which help to prevent anemia and treat anemia if detected early to prevent maternal and fetal morbidity and mortality.

References

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