



A STUDY TO ASSESS THE KNOWLEDGE AND RISK FACTORS OF ANAEMIA AMONG THE PREGNANT WOMEN ATTENDING SELECTED HEALTH CARE FACILITIES IN SEBHA, LIBYA

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ABSTRACT

Anaemia is the most common disorder of blood in the world. About 20 % of maternal deaths occur due to anaemia. The WHO report in 2006, the prevalence of anaemia is highest in Africa. The aim of the study were to determine the knowledge and risk factors of anaemia and find out the association between the knowledge and selected demographic variables among pregnant women. A descriptive study was conducted to assess the knowledge and risk factors of anaemia among the pregnant women attending selected health care facilities in Sebha, Libya. Purposive sampling technique was employed to select sample and it consisted of 60 pregnant women. Data was collected using structured interview schedule. Findings of the study showed that all the subjects (60) had moderate knowledge 100% regarding anaemia and no samples come under the category of adequate and inadequate. Regarding the risk factors majority of the subjects 50(83.3%) were exposed to moderate risk and 10 (16.7%) were exposed to high risk and none were exposed to mild risk. There was significant association between occupation of pregnant women and level of knowledge at $p < 0.05$. Findings of the study indicated the need to conduct frequent assessment of knowledge and risk factors of anaemia among the pregnant women. Awareness programmes should be conducted among the pregnant women for their promotion of health.

Keywords: Knowledge, Pregnant women, Anaemia, Risk factors.

INTRODUCTION

Anaemia in pregnancy remains one of the most intractable public health problem in developing countries. Worldwide it is estimated that 58.27 million women are anaemic during pregnancy, of whom 55.75 million (95.7%) live in developing countries [1]. Recent estimates suggest that up to 60% pregnant women in developing countries including Nigeria may be anaemic and nearly 7% of pregnant women are severely anaemic [2]. The deleterious effects of anaemia in pregnancy include increased risk of maternal and foetal morbidity and mortality [1,3,4].

The reported principal causes of anaemia in Sub-Saharan Africa include nutritional deficiencies, malaria, other parasitic infestation and recently

infection with human immunodeficiency virus. Studies have shown that malaria is still a major problem among pregnant women in Nigeria and in other endemic areas. Knowledge of the different causes of anaemia is essential for effective control of anaemia [5]. Studies estimated that anaemia may be responsible for as much as 20% of all maternal deaths in Sub-Saharan Africa through three main mechanisms. Firstly anaemia makes women more susceptible to deaths from haemorrhage by lowering their haematological reserves for blood loss especially at birth. Severe anaemia is associated with increased susceptibility to infection due to lowered resistance to disease, and $Hb < 4g/dl$ is also associated high risk of cardiac failure, particularly during delivery or soon

after, making the women likely to die if unable to reach good health facilities immediately [6].

National institute of informatics report, specify that Africa and South Asia have the highest overall incidence of anaemia followed by Latin America and East Asia. The global burden of maternal deaths due to anaemia is over five lakh every year [7].

The impact of anaemia among pregnant women can be drastically reduced through simple interventions, including iron supplementation for pregnant women, malaria, and hookworm control and efforts to ensure optimal birth spacing. It is hoped that the outcome of this study will help to improve the quality of antenatal care in developing countries.

Objectives of this study were to

1. Determine the knowledge regarding anaemia among pregnant mothers attending healthcare facilities.
2. Identify the risk factors of anaemia among pregnant mothers attending healthcare facilities.
3. Find out the association between the knowledge and selected demographic variables.

MATERIALS AND METHODS

To achieve the objectives a descriptive research design was adopted. The population of the study included the pregnant women came to the selected health care facilities. Thus 60 pregnant women were selected using purposive sampling technique. The study was conducted at selected health care facilities in Sebha, Libya. A structured interview schedule was used to collect the data. It consisted of three parts, viz. Part –I that helped to collect the demographic data of pregnant women; Part – II that was aimed at assessing the pregnant women’s knowledge about anaemia through 16 questions. Each item was multiple choices in nature with 3, 4, 5 and 6 responses in each question. There were 1, 3 and four correct responses that carried ‘1’ mark and the wrong responses carried ‘0’ . The total score was 48 for 16 items. The pregnant women were expected to choose the correct responses. The knowledge level were classified based on score obtained as inadequate <16 (34%), moderately adequate 17 – 32(35% - 67%) and adequate 33 - 48(68% - 100%); Part – III helped ascertain risk factors of pregnant women. The risk factor assessment tool contains ‘Yes and No answers. Each correct answer carries a score of 1. The maximum score 26. The risk factors were classified based on score obtained as Mild

risk 1–7(1% - 25%), Moderate risk 8–17(26% - 60%) and High risk 18–27 (61% - 100%). The prepared tool was validated by experts. The reliability of the tool was found to be r =0.98. Interview schedule was used to collect the data.

RESULTS

The study sample consisted of 60 pregnant women. Majority 35(58.3%) of pregnant women belonged to the age group of ≤ 20 years, 21(35%) were in the age group of 21-25 years, 3(5%) were of the age group of 26 – 30 years and only one was belonged to 31 -35 years old. Regarding education most of the pregnant women 44(73.3%) had primary education, 15 (25%) had secondary education and only one pregnant woman was illiterate.

Majority of the pregnant women 47 (78.3%) were employed; 13(21.7%) were unemployed. About the family monthly income 44(73.3%) pregnant women were belongs to ≤ 200 dinars; 11(18.3%) were under 201–400 dinars and 5(8.3%) had income above 401 dinars. Most 36(60%) of the number in the family had 7-10 members; 4 – 6 members in22(36.7%) families and ≤ 3 in 2(3.3%) families. Majority of 58 (96.7%)pregnant women married when they were ≤20 years and only 2 (3.3%) married between the age of 21 – 25. Higher number 58(96.7%) of pregnant women conceived at the age of ≤ 20 years while only 2(3.3%) conceived between the age of 21-25 years. Regarding the gestational weeks majority of 41(68.3%) pregnant women were belongs to second trimester; 15(25%) belongs to third trimester and 4(6.7) were in first trimester. Majority of the pregnant women 42(70%) were more than fourth parity. Majority of them 59(98.3%) were non- vegetarians. About 28(46.7%) pregnant women were got source of information from health personal.

Table 2 shows that all pregnant women got 100% moderately adequate knowledge; no pregnant woman had adequate or inadequate knowledge level. The knowledge score was 24.48 with SD2.361. Area wise analysis of knowledge score in the area related to signs and symptoms with a mean percentage 55.42 %; mean and SD of 4.43 ± 0.647 was highest. Area wise analysis of risk factors scores shows the maximum mean percentage of 71.11% of the in the area related to diet with the mean and SD of2.13±0.747. There was significant association between occupation of pregnant women and level of knowledge at p<0.05.

Section I. Description of baseline Proforma

Table 1. Frequency and percentage distribution of demographic variables N=60

Demographic variables	Frequency (f)	Percentage (%)
1. Age (in years) ≤20	35	58.3

21-25	21	35
26 - 30	3	5
31 – 35	1	1.7
2. Educational status		
Illiterate	1	1.7
Primary	44	73.3
Secondary	15	25
3. Occupation		
Employed	47	78.3
Unemployed	13	21.7
4.Monthlyfamily income(dinar)		
≤200	44	73.3
201- 400	11	18.3
Above 401	5	8.3
5.No. of members in family		
≤3	2	3.3
4- 6	22	36.7
7 - 10	36	60
6.Age at marriage(in years)		
≤20	58	96.7
21 - 25	2	3.3
7.Age first conceived(in years)		
≤20	58	96.7
21 - 25	2	3.3
8.Gestational age		
First trimester	4	6.7
Second trimester	41	68.3
Third trimester	15	25
9.Parity		
Primi	4	6.7
≤ 3	14	23.3
≥ 4	42	70
10.Type of diet		
Vegetarian	1	1.7
Non- vegetarian	59	98.3
11.Source of information		
Health personals	28	46.7
Media / news paper	20	33.3
No information	12	20

Section II. Knowledge of pregnant women regarding anaemia

Table 2A. Frequency and Percentage distribution of overall level of knowledge of pregnant women N=60

Sl.No	Knowledge level	Frequency (f)	Percentage (%)
1	Inadequate	-	-
2	Moderately adequate	60	100
3	Adequate	-	-

Area wise analysis of knowledge score:

Table 2B. Area wise mean, standard deviation (SD) and mean percentage score of anaemia

Sl.no	Contents	Max	Mean	SD	Mean %
1	Meaning, causes & contributing factors	9	4.27	0.58	47.41
2	Related to signs & symptoms	8	4.43	0.65	55.42
3	Treatment & prevention	23	11.57	1.67	50.29
4	Complication / effects	8	4.22	0.415	52.71
	Total	48	24.48	2.36	51.01

Section III. Data on risk factors

Table 3. Frequency and Percentage distribution of risk factors of anaemia N=60

Risk factors	Frequency (F)	Percentage (%)
1.problems 6months before this pregnancy		
Worm infestation	20	33.3
History of malaria	36	60
Bleeding in stool	23	38.3
Excessive menstrual flow	27	45
2.past surgical history	0	0
3.Irregular menstrual period	40	66.7
4.Menstruation last for more than seven days	48	80
5.History of passing blood clots during menstruation	36	60
6.History of abortion	35	58.3
7.History of dilatation and curettage	33	55
8.Habit of consuming tea or coffee	48	80
9.Include green leafy vegetables in diet	32	53.3
10.Include fruits in diet	48	80
11.Having children within one year gap	27	45
12.Having children ≥3	33	55
13. Avoid taking food due to		
Nausea	37	61.7
Vomiting	47	78.3
Abdominal pain	26	43.3
Loss of appetite	40	66.7
Indigestion	39	65
Non-availability of food	27	45
14.Problems during pregnancy		
Blood in the urine	14	23.3
Vaginal bleeding	32	53.3
Breathing difficulties during daily activities	33	55
Feeling of weakness	34	56.7
Painful swollen tongue	25	41.7
15.Dewormed before six months of this pregnancy	39	65

CONCLUSION

Assessment of knowledge regarding anaemia among pregnant women revealed that all the mothers had moderate knowledge 60 (100%). The overall mean knowledge score was 24.48 with SD 2.361. Area wise analysis of knowledge in the area related to ‘ signs and symptoms’ with a mean percentage 55.42%, mean and SD of 4.43±0.647 was highest. Assessment of risk factors of anaemia among pregnant women

revealed that majority of the pregnant women had a moderate risk 50(83.3%). the overall mean risk score was 14.10 with SD 2.9 and mean percentage of 54.20%. Area wise analysis of risk factors scores shows the maximum mean percentage of 71.11%, in the area related to diet with a mean and SD of 2.13±0.747. the result shows that there was significant association between occupation of mother and level of knowledge at p<0.05.

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