

Assessment of depression anxiety and stress among the anaemia in pregnant women attending selected health care facilities in Sebha, Libya

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ABSTRACT

In pregnancy, anaemia has significant impact on health of the foetus as well as that of the mother. 20% of maternal deaths in Africa have been attributed to anaemia. The WHO report in 2006, the prevalence of anaemia is highest in Africa. Depression, anxiety and stress were significant factor which affects the mother-child bonding, growth and development.

Objectives :The aim of the study were to determine the degree of anaemia among pregnant women and to assess the depression, anxiety and stress among the anaemia in pregnancy women.

Material and Methods: A descriptive study was conducted to assess the depression, anxiety and stress among anaemia in pregnant women attending selected health care facilities in Sebha, Libya. Purposive sampling technique was employed to select sample and it consisted of 258 anaemic pregnant women. Data was collected using structured interview schedule.

Results :Findings of the study showed that 118 (45.74%) pregnant women had mild anaemia; 122 (47.28%) pregnant women had moderate anaemia and 18 (6.98%) pregnant women had severe anaemia and majority of 146 (56.59%) anaemic pregnant women had normal depression scale ; maximum 193 (74.42%) anaemic pregnant women had normal anxiety scale and majority 177 (68.60%) anaemic pregnant women had normal stress scale. There was no significant association between depression, anxiety, stress and haemoglobin level during pregnancy.

Conclusion: Findings of the study indicated the need to conduct frequent assessment of depression, anxiety and stress among the anaemia in pregnancy women. Awareness programmes should be conducted among the pregnant women for their Promotion of health.

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

Introduction

Pregnancy is a special and joyful period of life. It is the time for great responsibilities and emotional attachment with the pregnant women. Today, mental disorders stand among the leading cause of diseases and disability in the world.

Stress is a fact of life that every human deals with on a daily basis. Being 'stress' as a universal phenomena reflecting in each aspect of life cycle, was identified as a major cause of attrition among all categories of people [1].

Depression, anxiety and stress affects the biophysical and emotional wellbeing of the people, it varies with age, gender, mental capabilities and environmental conditions. Stress has been defined as a process, which causes or participates individual to believe that they are unable to cope up with situation facing them and feeling of anxiety, tension, frustration and anger, which results from the recognition that they are failing in some ways and

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situation is getting out of control [2]. Studies showed that proper screening and early detection can prevent postpartum depression women experience pregnancy both emotionally and physically [3]. Stress is an unavoidable phenomenon in every aspect of human life. It is generally an emotional imbalance which may be due to several reasons. It affects all individuals rich and poor, literate and illiterate, both men and women and young and old alike across the developed and developing nations [4]. Generally, women reported experiencing a mixture of anxiety and nausea when pregnant. During childbirth they feel, they endure such dangerous fear and pain that it almost equals to encountering death. The issue of anxiety and stress in pregnant women is not unique [5]. Anxiety and stress are an unpleasant emotion characterized by terms like worry, apprehension, dread and fear that we all experience at times in varying degrees. It may affect the foetus badly or the mental health of the foetus later [6].

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 [7].

The deleterious effects of anaemia in pregnancy include increased risk of maternal and foetal morbidity and mortality [1,3,4].

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:

1. Determine the degree of anaemia among pregnant mothers attending healthcare facilities.
2. To assess the depression, anxiety and stress among the anaemia in pregnancy women healthcare facilities.

Material 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 258 anaemic 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 haemoglobin level. Colorimetric method was used to determine the pregnant women's anaemic state. The scoring key was as follows :- 10-11 g% (10.1 to 10.9) considered as mild anaemia; 8-9 g% (8.1 to 9.9) considered as moderate anaemia and below 7g% (below 7.9) considered as severe anaemia; Part – III that was aimed at assessing the pregnant women's depression, anxiety and stress. DASS 21 scale was used to assess pregnant women's depression, anxiety and stress.

There was no right or wrong answers. The rating scale was as follows:- 0, 1, 2, and 3 score. 0 score denotes, Did not apply to me at all – NEVER, 1 score denotes, applied to me some degree or some of time – SOME TIME; 2 score denotes, applied to me a considerable degree, or a good part of time – OFTEN and 3 score denotes, Applied to me very much, or most of time – ALMOST ALWAYS. 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 258 anaemic pregnant women. Table 1 indicates that majority of the anaemic pregnant women 84 (32.56%) belongs to the age group between 21 to 30 years; maximum 243 (94.18%) anaemic pregnant women were married; maximum 110 (42.64%) anaemic pregnant women had secondary education; maximum 113 (43.8%) anaemic pregnant women belongs to monthly income group of below 200 dinar; maximum 173 (67.05%) anaemic pregnant women were employed; majority of 125 (48.45%) anaemic pregnant women were belongs to nuclear type of family; more than half 253 (98.06%) anaemic pregnant women had mixed type of dietary habits; majority 171 (66.28%) anaemic pregnant women were from rural area; maximum 107 (41.47%) anaemic pregnant women had normal body weight. Data depicted in Table 2 indicates that majority 95 (36.82%) anaemic pregnant women were primi para; maximum 100 (38.76%) anaemic pregnant women were belongs to second trimester; majority 130 (50.38%) anaemic pregnant women had below one year interval between each pregnancies; majority 137 (53.10%) anaemic pregnant women had menarche at the age group between 10 to 12 years; majority 136 (52.71%) anaemic pregnant women had marriage at the age group between 21 to 24 years. As shown in Table 3, Out of 258 anaemic pregnant women, majority 118 (45.74%) had mild anaemia; 122 (47.28%) had moderate anaemia and only 18 (6.98%) severe anaemia. Table 4 shows that

majority of 146 (56.59%) anaemic pregnant women had normal depression scale ; maximum 193 (74.42%) anaemic pregnant women had normal anxiety scale and majority 177 (68.60%) anaemic pregnant

women had normal stress scale. There was no significant association between depression, anxiety , stress and haemoglobin level during pregnancy.

Table 1 Distribution of anaemic subjects according to the Demographic variables N =258

S.No	Variables	Frequency	Percentage
1.	Age (in years)		
	20 and Below	78	30.23
	21 - 30	84	32.56
	31 - 40	79	30.62
	41 and above	17	6.59
2.	Marital status		
	Married	243	94.18
	Divorced	15	5.81
3.	Educational status		
	Illiterates	12	4.65
	Primary	69	26.74
	Secondary	110	42.64
	Higher secondary	51	19.77
	Degree	16	6.20
4.	Occupation		
	Employed	173	67.05
	Unemployed	85	32.95
5.	Monthly family income (in dinar)		
	Below 200	113	43.80
	201 – 400	91	35.27
	401 – 600	42	16.28
	601 and above	12	4.65
6.	Type of family		
	Nuclear family	125	48.45
	Joint family	120	46.51
	Extended family	13	5.04
7.	Dietary habits		
	Vegetarian	5	1.94
	Mixed	253	98.06
8.	Residential area		
	Urban	87	33.72
	Rural	171	66.28
9.	BMI categories		
	Under weight	57	22.09
	Normal weight	107	41.47
	Over weight	52	20.16
	Obesity	42	16.28

Table 2: Distribution of subjects according to the obstetrical variables N=258

S.No	Variables	Frequency	Percentage
1.	Parity (Order of birth)		
	0 (Primi)	95	36.82
	1 – 2	69	26.74
	3 – 4	55	21.32
	5 and above	39	15.12
2.	Gestational age		
	First trimester	79	30.62
	Second trimester	100	38.76
	Third trimester	79	30.62
3.	Interval between pregnancies		

	First pregnancy	95	36.82
	Below 1 year	130	50.38
	Between 1 – 2 years	29	11.24
	Between 2 – 4 years	2	0.78
	4 and above	2	0.78
4.	Age at menarche (in years)		
	10 and Below	37	14.34
	Between 10 – 12	137	53.10
	Between 13 -15	84	32.56
	16 and above	-	-
5.	Age at marriage (in years)		
	20 and Below	51	19.77
	21 – 24	136	52.71
	25 – 28	68	26.36
	29 – 32	3	1.16
	33 and above	-	-

Table 3: Distribution of subjects according to the degrees of anaemia N=258

Degrees of anaemia	Frequency	Percentage
Mild anaemia (10 -11gm/dl)	118	45.74
Moderate anaemia (8 -9 gm/dl)	122	47.28
Severe anaemia (below 7 gm/dl)	18	6.98

Table 4: Distribution of psychological factors of anaemic subjects according to the DASS
N = 258

Variables	Frequency	Percentage	Median	Mean	SD	Range
Depression						
Normal (0 -4)	146	56.59				
Mild (5 – 6)	82	31.78	4.00	3.76	2.14	8.00
Moderate (7 -10)	30	11.63				
Severe (11 – 13)	-	-				
Ex. Severe (14 +)	-	-				
Anxiety						
Normal (0 -3)	193	74.42				
Mild (4 – 5)	62	24.42	3.00	2.76	1.23	6.00
Moderate (6 -7)	3	1.16				
Severe (8 – 9)	-	-				
Ex. Severe (10 +)	-	-				
Stress						
Normal (0 -7)	177	68.60				
Mild (8 – 9)	81	31.40	7.00	7.07	.80	4.00
Moderate (10 -12)	-	-				
Severe (13 – 16)	-	-				
Ex. Severe (17 +)	-	-				

Conclusion

Majority of the anaemic pregnant women 84 (32.56%) belongs to the age group between 21 to 30 years ; maximum 110 (42.64%) anaemic pregnant women had secondary education; maximum 113 (43.8%) anaemic pregnant women belongs to monthly income group of below 200 dinar; maximum 173 (67.05%) anaemic pregnant women were employed. Findings of the study

showed that 118 (45.74%) pregnant women had mild anaemia; 122 (47.28%) pregnant women had moderate anaemia and 18 (6.98%) pregnant women had severe anaemia and majority of 146 (56.59%) anaemic pregnant women had normal depression scale ; maximum 193 (74.42%) anaemic pregnant women had normal anxiety scale and majority 177 (68.60%) anaemic pregnant women had normal stress scale. There was no significant association between

depression, anxiety, stress and haemoglobin level during pregnancy.

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