



**Psychosocial factors of pregnant anaemia women attending selected health
care facilities at UP- a study**

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Abstract:

Introduction: Anemia is an alarming condition in pregnancy which needs a special attention to promote the health of the mother and child. Anemia is a major public health problem worldwide and is the most common Haematological disorder during pregnancy. The current study aimed to assess psychosocial factors that contribute to anemia in pregnant women. In this study, psychological factors refer to anxiety, depression, and stress, which affect the day-to-day activities during pregnancy and social factors refer to the obstetrical and demographic characteristics of anemic pregnant mothers. **Materials and method:** To identify the psychosocial aspects related to anemia in pregnant women, the researcher used an exploratory strategy in the current study. In this study, 700 anaemia pregnant women, aged between 14-48 years, and visiting selected healthcare facilities in UP, for prenatal checkup were selected. **Data Collection:** Using the Depression Distress Stress scale, psychological factors were evaluated. "Depression Anxiousness Anxiety Scale" was used to evaluate anxiety, stress, and depressive disorders in anemic pregnant women. **Results:** Most of the anaemic pregnant women had mild depression 288 (41.1%), mild stress 317 (45.3%), and mild anxiety 254 (36.3%). The demographic characteristic of the pregnant women showed that most of them belonged to the age group 21-30 years. Most of the anaemic pregnant women belong to low educational status (primary), less monthly income, lived in a joint family set-up, birth interval <1year, whereas majority of non-anaemic pregnant women had secondary education, employed, average monthly income, belonged to nuclear family set-up, residing in urban area,

either 1-2 or 3-4 parity, and birth interval between 1-2 years. **Conclusion:** Regarding psychological factors that contribute to anemia in pregnant women, the study concluded that none of the anaemic pregnant women had severe and extremely severe depression, severe and extremely severe anxiety, and severe and extremely severe stress. Psychological factors such as depression, anxiety, stress, were significantly associated with severity of anaemia. Regarding social factors that contribute to anemia in pregnant women, the study concluded that, age, educational status, income, type of family set-up, residential area, dietary habits, parity, and interval between pregnancies are the high-risk factors for Anemia among pregnant women.

Keywords: Psychosocial factors, Anaemia, Pregnant women, Healthcare facilities

Introduction:

Anaemia is harmful to women's and children's health and may contribute to prenatal and maternal mortality (Roy, 2023). Anaemia also raises the chance of preterm birth as well as low birth weight. Early anaemia identification may help to avoid concerns with growth of kids and risks related to becoming pregnant and giving birth (McElroy, 2023). Because anemia is such a serious health issue in India, the researcher decided to directly measure the Hemoglobin levels of all married women between the ages of 16 and 49 (Santhakumar et al., 2023).

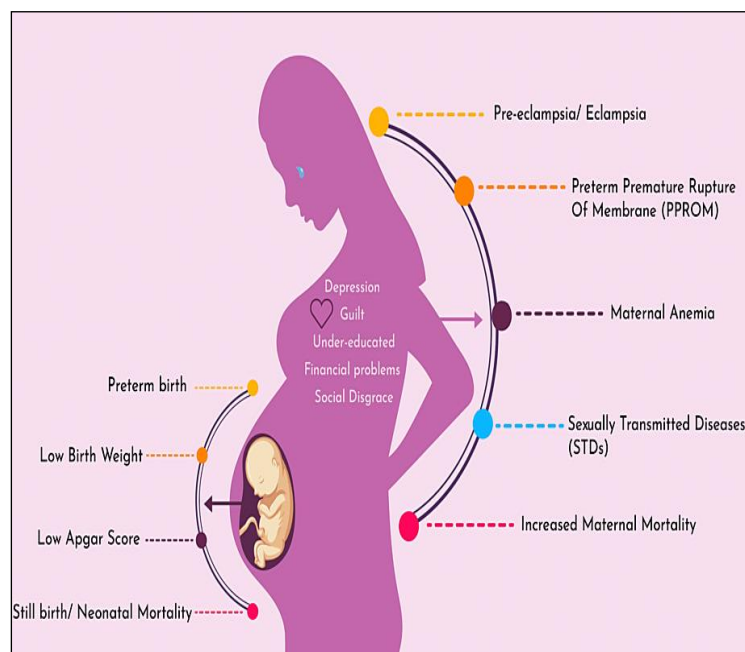


Figure1: Psychosocial factors of pregnant women having anaemia



Psychological factors refer to anxiety, melancholy, and tension, which influence the daily activities of pregnant women. Depressed is characterized by self-criticism, a loss of interest or engagement, a feeling of drowsiness (Ousman, 2023). The stress factors in this research include trouble relaxing, nervous arousal, and being frequently annoyed or disturbed, irritable/overreacting, and impatient (Santhakumar et al., 2023). The current study aimed to assess psychosocial factors effect on pregnant anaemic women.

Material and method:

To identify the psychological aspects related to iron in pregnant women, the researcher used an exploratory strategy in the current study. In this phase, 700 anaemic pregnant women, aged 14-48 years, and visiting selected healthcare facilities in UP, for prenatal checkup were selected.

Data Collection

In UP, there are eight healthcare facilities. Three were purposively selected for this study. They are UP Central Hospital-UP, University clinic-UP, and Local Clinic-UP. On an average 70-80 pregnant women, all type of cases, attended the healthcare facilities every day. UP is the one of the most-populated cities in India. UP has one of the highest nominal per capita GDP in India. Using the Depression Distress Stress The scale, mental aspects were evaluated.

Result and Discussion:

Distribution of anaemic pregnant women based on their obstetric variables and severity of anaemia

Table 1 shows that, majority of the mild 242 (55.1%) anaemic pregnant women attained menarche at the age group 13-15 years and majority of moderate anaemic pregnant women attained menarche between the age of 10-12 years 127 (54.7%), whereas majority of the severe 18 (62.1%) anaemic pregnant women attained menarche the mild 206 (46.9%), and moderate 96 (41.4%) anaemic pregnant women married at the age group of 21-24 years, whereas majority

Majority of the mild 125 (28.5%), and moderate 125 (53.9%) anaemic pregnant women s majority of the severe 10 (34.5%) anaemic pregnant women had 1-2 parity. Majority of the anaemic pregnant women in the mild, Majority of the mild 201 (45.8%) anaemic pregnant



women belonged to second trimester, whereas majority of moderate 124 (53.4%) and severe 13 (44.8%) anaemic pregnant women belonged to the third trimester.

Table 1: Distribution of the anaemic pregnant women based on the variables and severity of anaemia

(n=700)				
Sl. No	Variables	Degrees of anaemia		
		Mild (n=439)	Moderate (n=232)	Severe (n=29)
1	Age at menarche (in years)			
	a. ≤ 10	21 (4.8)	48 (20.7)	18 (62.1)
	b. Between 10-12	176 (40.1)	127 (54.7)	8 (27.6)
	c. Between 13-15	242 (55.1)	57 (24.6)	3 (10.3)
	d. ≥ 16	-	-	-
2	Age at marriage (in years)			
	a. ≤ 20	76 (17.3)	49 (21.2)	11(37.9)
	b. 21-24	206 (46.9)	96 (41.4)	9 (31.0)
	c. 25-28	116 (26.4)	61 (26.2)	7 (24.1)
	d. 29-32	24 (5.5.)	18 (7.8)	1 (3.5)
	e. ≥ 33	17 (3.9)	8 (3.4)	1 (3.5)
3	Parity (order of birth)			
	a. 0 (primi)	102 (23.2)	43 (18.5)	9 (31.0)
	b. 1-2	119 (27.1)	42 (18.1)	10 (34.5)



	c. 3-4	93 (21.2)	22 (9.5)	1 (3.5)
	d. ≥ 5	125 (28.5)	125 (53.9)	9 (31.0)
4	Interval between pregnancies			
	a. First pregnancy	100 (22.8)	54 (23.3)	11 (37.9)
	b. Below 1 year	198 (45.5)	155 (66.8)	18 (62.1)
	c. Between 1-2 years	137 (31.2)	23 (9.9)	-
	d. Between 2-4 years	-	-	-
	e. ≥ 5	-	-	-
5	Gestational age			
	a. First trimester	84 (19.1)	37 (15.9)	10 (34.5)
	c. Third trimester			
	b. Second trimester	201 (45.8)	71 (30.6)	6 (20.7)
	c. Third trimester	154 (35.1)	124 (53.4)	13 (44.8)

The data was collected by using a questionnaire. The data is represented as frequency with percentage in parenthesis.

Psychological Factors and Anaemia

Using the Depression Distress Stress The scale, mental aspects were evaluated. (DASS), among the anaemic pregnant women participants of the present study.

Distribution of anaemic pregnant women based on the psychological factors

Table 2 shows that most of the anaemic pregnant women 288 (41.1%) had mild depression, and 138 (19.7%) had moderate depression, and the rest were normal. However, assessment of



anxiety levels showed that, most of the anaemic pregnant women 274 (39.1%) were normal, 254 (36.3%) had mild anxiety, and 172 (24.6%) had moderate anxiety. Majority of the pregnant women 317 (45.3%) had mild stress, 106 (15.1%) had moderate stress, and the rest were normal. None of the participants were in the severe or extremely severe categories of depression, anxiety and stress (Table 4.9). The findings of DASS are presented in Figure 4.4.

Table 2: Distribution of anaemic pregnant women based on the psychological factors**(n=700)**

Sl. No	Variables	n (%)
1.	Depression	
	a. Normal (0-9)	274 (39.1)
	b. Mild (10-12)	288 (41.2)
	c. Moderate (13-20)	138 (19.7)
2.	Anxiety	
	a. Normal (0-6)	274 (39.1)
	b. Mild (7-9)	254 (36.3)
	c. Moderate (10-14)	172 (24.6)
3.	Stress	
	a. Normal (0-10)	277 (39.6)
	b. Mild (11-18)	317 (45.3)
	c. Moderate (19-26)	106 (15.1)

The data was collected using DASS scale. The data is represented as frequency and percentage. The DASS scale is a set of three self-report scales which includes depression, anxiety and stress. DASS consists (Depression 7 things, Anxiety 7 things, Stress 7 objects) out of 21 items. The lowest and highest possible ratings on each express scale are 0 and 42, respectively. The overall categorization of DASS is normal, mild, moderate, sever, extremely severe. None of

the participants belonged to severe and extremely severe. Hence these 2 categories is not shown in the table. DASS- depression anxiety stress scale.

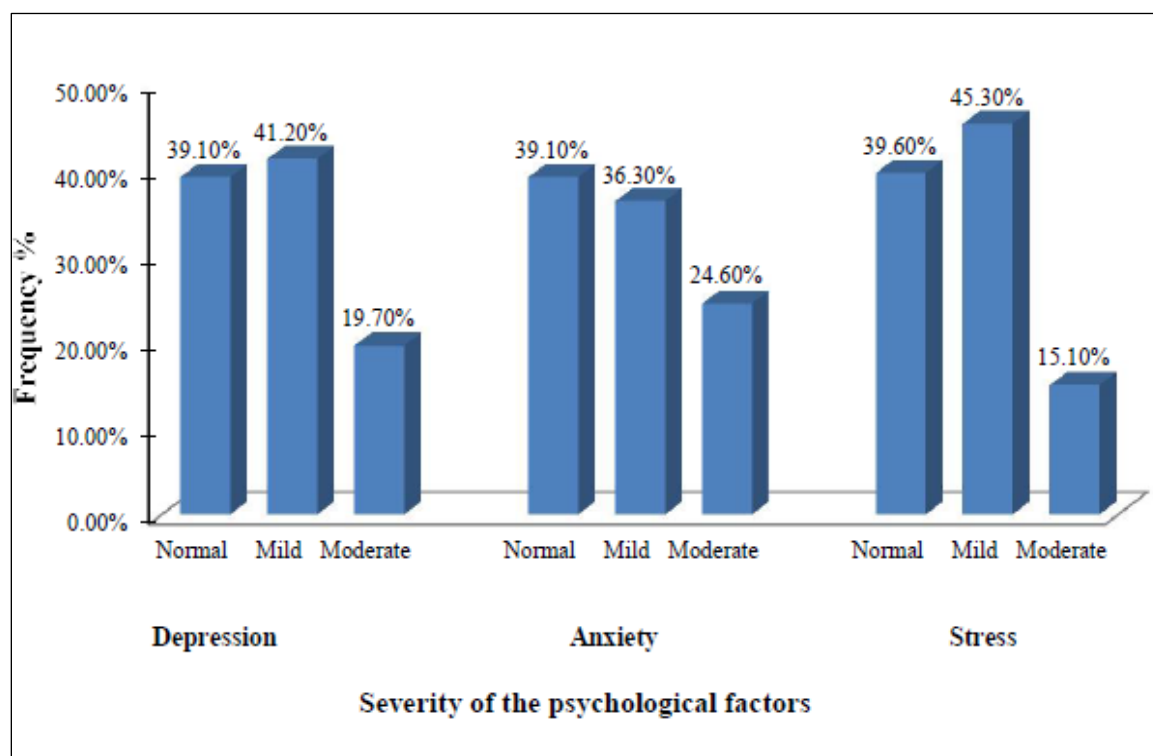


Figure 2: Distribution of anaemic pregnant women based on psychological factors

The total number of participants n=700. The data was collected using DASS scale. The data is represented as frequency and percentage. Three report themselves ratings called the DASS measure of anxiety, depression, and pressure. The lowest and greatest scores on each feedback scale are 0 and 42, respectively (Fig 2). The DASS is divided into five categories: typical levels, mild to moderate, serious to severe, and very severe.. None of the participants belonged to severe and extremely severe. Hence these 2 categories are not shown in the graph. DASS- depression anxiety stress scale.

Most of the pregnant women were either mild anaemic or moderately anaemic. Moderate and severe anaemia are significantly associated with low education, low income, rural area and high parity (Sappani et al., 2023).

Few of the research listed in this section's discussion of interpersonal risk factors for unhappiness looked at the connection between medical variables, particularly anemia and



pregnant depression. There is a substantial corpus of research on pregnant unhappiness and its associated factors

Conclusion:

The psychological factors the "Depression Anxiousness Anxiety Scale" was used to evaluate anxiety, stress, and depressive disorders in anemic pregnant women. (DASS)". Most of the anaemic pregnant women had mild depression 288 (41.1%), mild stress 317 (45.3%), and mild anxiety 254 (36.3%). Thus, it can be reduced from the current study that emotional issues including stress, depression, and anxiety during gestation are linked to a higher risk of anemia.

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