

Research Paper :

## Prevalence of anaemia in pregnant women in Kanpur city

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### ABSTRACT

Food consumption is one of the important determinants of physical status of the pregnant women directly and indirectly to the fetal growth. A good nutritional level minimizes the risk of child birth and ensures a healthier baby. Anaemia in pregnancy is associated with increased morbidity. The present investigation was carried out among the pregnant women between the age of 20 - 35 years and it was found that the women belonging to age group of 20 - 25 years were deficient in all essential nutrients. It may be due to lack of education, resources and nutrition education.

**Key words :** Anaemia, Haemoglobin, Pregnant women

Anaemia is defined as reduction in the haemoglobin level in blood circulation. It is a major global problem affecting 20 - 70% of the population in various countries. The incidence is high among the women of child bearing stage. Nutrition is of paramount importance to all human beings because it lays down the foundation of lifetime health, strength and intellectual vitality. The upliftment of nutritional status of the people, especially the vulnerable segments of the population who are the worst sufferers of malnutrition is an essential input in the context of national development.

Maternal nutrition is an important determinant of the course and outcome of pregnancy and seventy five per cent of fetal growth is related to maternal nutritional status. However, maternal nutritional status not only determines the state of the offspring at birth but also the future course of its development and health in late adult years.

Therefore, the main thrust of the present study is to highlight the prevalence of anaemia among them which is one of the most common malnourished problems as it is a stage of critical period in woman's life and its increased metabolic demands significantly influenced the maternal health and fetal growth (Tandon and Mishra, 2003).

Nutritional anaemia is the condition that results from the inability of the erythropoietic tissues to maintain a normal haemoglobin concentration on an account of inadequate supply of one or more nutrients leading to reduction in total circulating haemoglobin (Srilakshmi, 2005). Nutritional anaemia is observed to be the most widespread nutritional disorder in the world affecting 30% of the

world's population (Rao, 2006). In India, the incidence of anaemia is alarmingly high that is 87.5% in which 40.8% were mild anaemic, 33.6% were moderate anaemic and 13.1% were severe anaemic. 43% of pregnant women revealed signs of malnutrition such as oedema, glossitis etc. (Vatsala, 2001).

Socio - economic status of the families also play a crucial role in determining the health status of the new born.

Iron is the most important element for the formation of haemoglobin of red blood cells. Its deficiency causes nutritional anaemia. Recommended dietary allowances for iron is 38 mg/d for pregnant women for meeting expansion of blood volume and growth of fetus (WHO, 2007).

The usual diet of majority of pregnant women in India have been found nutritionally inadequate both quality and quantity wise. Apart from diet, poverty, ignorance, early marriage, high work burden, small birth intervals and discriminating food customs are reasons which are responsible for this devastating condition. Severity of anaemia in pregnancy as per WHO guideline is as follows:

Severity of anaemia	Cut off level of haemoglobin
Normal	10 g/dl and above but below 11 g/dl
Moderate anaemia	7 g/dl and above but below 10 g/dl
Severe anaemia	Below 7 g/dl

The present investigation was carried out with the objective to assess the hemoglobin level of pregnant women.

## METHODOLOGY

For the present investigation, pregnant women (22 - 35 years) belonging to urban part were selected. Total 110 respondents were selected from four hospitals of Kanpur using purposive random sampling technique. The hospitals included were R.K. Devi Hospital, Swaroop Nagar; Mariampur Hospital, Shashtri Nagar; Bhargava Hospital, Civilines and Sheel Nursing Home, Barra. Socio - demographic profile of the subjects was collected with the help of interview schedule method.

## FINDINGS AND DISCUSSION

The results obtained from the present investigation are presented below:

### *Relationship between maternal age and anaemia:*

Observations presented in Table 1 reveal a significant association between maternal age and anaemia. 57.27% mothers were anaemic between 20 - 25 years and 38.18 % between 25 - 30 yeas of age. Thus, the pregnant adolscent were medically, nutritionally and socially at risk (Tandon and Mishra, 2003).

**Table 1 : Anaemic condition in relation to age of pregnant women (n=110)**

Age group (years)	Total number of pregnant women	Anaemic pregnant women (%)
20 - 25	63	57.27
25 - 30	42	38.18
30 - 35	05	4.55
Total	110	100.00

Significant at 0.05% P

$$\chi^2 = 7.562$$

### *Category of haemoglobin level:*

Table 2 reveal the haemoglobin level of the respondents. Majority of the respondents fell into severe category (below 7 g/dl). On the contrary, most of the respondents (29.09%) fell into the normal category in which haemoglobin level ranged between 7 g/dl - 109 g/dl. Vatsala (2001) has also reported same type of observations in pregnancy and nutritional status of women.

**Table 2 : Distribution of pregnant women on the basis of haemoglobin level**

Category of haemoglobin level	Respondents (n = 110)	Percentage (%)
Normal	32	29.09
Moderate	21	19.09
Severe	57	51.82
Total	110	100.00

### *Recommendation :*

In brief, it can be stated that over all socio economic development, adequate birth intervals, proper antenatal care and adequate nutrition will surely help in reducing the prevalence of anaemia among pregnant women. Urgent need of an integrated intervention programme based on pharmaceutical supplementary and food based strategy should be developed to improve their haemoglobin level.

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