

Anemia a Common Aliment in Women and its Prevalence in Ruler Population: A Random Survey Report

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Available Online: 12th January, 2016

ABSTRACT

This study was conducted to assess the prevalence of anemia in women (15-60 years) in rural area of Varanasi district of Uttar Pradesh, India. Villages were randomly selected for this survey and 113 women were included. Mean Hemoglobin level in g/dL 9.5 respectively. A high prevalence of anaemia (68.04%) was observed in women of mixed vegetarian. Majority of the women were moderately anaemic (59.56%) and were under BMI 18.5. Occurrence of anaemia in women was found to be inversely proportional to the literacy status. Statistically significant association ($P < 0.05$) were found amongst anaemic antenatal women with their literacy status and BMI however statistically significant association was not found in various dietary factors.

Keywords: Anemia, women, ruler, literacy, health.

INTRODUCTION

Anemia is still considered a major public health problem in India. It leads to reduced work capacity in adults and leads impact on mental development in children and adolescents. There is some evidence that anemia affects cognition in adolescent girls and causes fatigue in adult women. Anemia may affect visual and auditory functioning and is weakly associated with poor cognitive development in children. The National Family Health Survey-31 revealed a high prevalence of anemia among children (78.9%), ever-married women (56.2%), pregnant women (57.9%) and ever-married men (24.3%) in India¹. In India, anaemia contributes directly to 20% maternal death and indirectly to further 20%^{2,3}. The main causes of Anaemia in the developing countries in women includes low dietary intake of iron and folic acid, poor bioavailability of iron and fiber rich Indian diet, poor absorption of iron due to hook worms infestation and blood loss during delivery and heavy menstrual blood loss⁴⁻⁶. Anaemia increases the risk of maternal morbidity & mortality and adverse maternal outcome such as ante-partum haemorrhage, post-partum haemorrhage & puerperal sepsis⁷⁻⁹. National Nutritional Anaemia prophylaxis programme (NNAPP) was initiated in 1970 during the fourth Five year plan with the aim to reduce the prevalence of Anaemia to 25%¹⁰. This study is to find out the prevalence of anemia in rural area of Varanasi district in women with their literacy status, dietary factors and BMI.

MATERIAL METHOD

Present community based, cross sectional study was carried out at Rural, Area of Varanasi under CENTRE FOR NATIONAL FACILITY FOR TRIBAL & HERBAL MEDICINE, BHU, Varanasi UP, India from

Feb 2015 to Sep. 2015. The women of aged 15-60 years old were included in the study. Any anaemia was defined as $Hb < 12$ g/dl. Severe, moderate, and mild anaemia was defined as Hb below 7 g/dl, 7-9.9 g/dl and 10-11.9 g/dl respectively (1). Data were entered and compiled to avoid human errors

RESULT

Table-1 describes the distribution and prevalence of any anemia in relation to dietary factors. About one fourth of the women were between 20-30 and 31-45 years. However, 20.9% and 24.1% of the women belonged to 15-19 and 40-49 years respectively. According to dietary habit the percentage of anemic women are higher in mixed dietary habit compared to vegetarian. More than half of the women BMI were less than < 25 of the age group 25-40. According to table-2 the prevalence of anemia was higher among the women of BMI 18.5 compare than BMI > 25 . The prevalence was higher among the women who had no education (57.45%) compared with less than 5 years of education (48.2%), 5-9 years (25.45%) and 15 years (10%) of education (Table-3).

DISCUSSION

The prevalence of anemia is higher 85% in ruler areas.

Table 1. Distribution of anaemia according to dietary habits of women (n=215)

Type of diet	Vegetarian	Mixed
Kuraut	14.6%	46.57%
Pholwaria	16.37%	50.55%
Lohta	12.05%	68.04%
Chandpur	11.56%	32.56%

Table 2. Distribution of anaemic women according to their bmi. (n=215)

Bmi (level)	18.5	18.5-25	>25
Kuraut	37.05	12.52	4.30
Pholwaria	39.46	8.47	2.06
Lohta	59.56	27.78	2.45
Chandpur	42.56	13.65	1.02

Table 3. Distribution of women according to their literacy status. (n=215)

Literacy	Un-literate	Pri-ary	Middle	Graduate
(%)			anemia	in
Kuraut	26.32	15.02	11.05	5.56
Pholwaria	32.56	18.79	13.55	4.78
Lohta	57.45	48.25	25.45	10.56
Chandpur	35.12	23.85	11.02	4.45

This is higher than the prevalence of 51% reported for the developing countries. Higher prevalence of Anaemia was observed in the subjects of lower literacy category and lower prevalence of anaemia was seen in high literacy category. Anaemia in women is thus inversely related to the literacy status as seen in earlier studies¹¹⁻¹³. Present study showed the high prevalence of anaemia in vegetarian diet subjects as compare to the subjects on mixed diet & similar results were seen in earlier studies¹⁴. Prevalence of anaemia was minimal amongst over weight subjects and higher in lower BMI subjects. These results coincides with the earlier studies of Bentley/Griffith¹⁵.

CONCLUSION

It is evident from the current study that the burden of nutritional anemia is high among people in the rural areas and hence, sincere efforts must be initiated adopting specific interventional measures with regard to nutritional education and anemia prophylaxis to reduce the morbidity due to anemia in the rural areas.

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