Introduction
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Nutritional adequacy is one of the key determinants of the quality of human resources everywhere. There is no doubt that India has made substantial progress in human development during the post-independence period. Green Revolution during 1960’s contributed a great deal in solving the food problem and making the country self sufficient in food. It was a breathing spell for the country by achieving balance between human population and food output.

The overall nutritional status has definitely improved during last few decades. Still more than half of Indian children under five years of age are moderately or severely malnourished, 30 percent of newborns are significantly underweight and 60 percent of Indian women are anaemic and such manifestations of malnutrition are certainly unacceptable (Measham and chaterjee, 1999).

Malnutrition during pregnancy may contribute to the development of nutritional deficiency disorder, affecting about 47 percent of non-pregnant women and 60 percent women worldwide (Stolzfus, 2001). Prevalence of micronutrients in respect of iron, iodine and vitamin A is more wide spread than Protein Energy malnutrition. Recent study of National Nutrition
Monitoring Bureau (NNMB) on the prevalence of micro 
nutrient deficiency indicates prevalence of anaemia was highest 
(78%) among lactating women followed by pregnant women 
with 75% (Rajgopalan at al. 2005). Therefore, women in 
reproductive age group (15-45 yrs) are more susceptible for 
development of anaemia.

Anaemia is a deficiency in oxygen carrying component of 
the blood, which results from low iron content. Robinson & 
Lowler (1982) described the term anaemia as biochemical 
lowered haemoglobin level, number of red blood cells & 
haematocrit resulting diminished oxygen carrying capacity of the 
blood. (Robinson C.H., Lower M.R. et. al, 1982)

Anaemia is defined as reduction in circulating 
haemoglobin (Hb)mass below the critical level. W.H.O. has 
accepted the normal haemoglobin concentration in the body as 
between 12-14 gm/dl in healthy pregnant women. Therefore any 
haemoglobin level below 11gm/dl in pregnancy should be 
considered as anaemia. However in India and in most of the 
other developing countries the lower limit is often accepted as 
10gm/dl (Basu S.K., 2007).

There are several forms of anaemia

- Nutritional anaemia
- Hemolytic anaemia
• Anaemia caused by inherited abnormalities of R.B.C. (for example, sickle cell anaemia and thalassemia)
• Anemia caused by chromic (ongoing) disease, such as rheumatoid arthritis and hepatic disorders.
• Infections and co-existance of parasite (like hook worm and tape worm etc) also cause anaemia.

In developing countries the most common cost of anaemia in pregnancy is nutritional anaemia specially iron deficiency anaemia.

Iron deficiency anaemia (IDA) is one of the most observed nutritional deficiencies among pregnant women around the world. The World Health Organization (WHO) estimates that nearly half of all pregnant women suffer from anaemia. IDA is also known to be an important factor in maternal death, the poor cognitive development of children and decreased work capacity of mother. Anaemia remains a major cause of maternal mortality in India accounting for more than 20% of all maternal deaths. In response to the low dietary intake of iron and folate, the high prevalence of anaemia and its adverse health consequences are very common in our country. India was the first developing country to adopt a National Nutritional Anaemia Prophylaxis programme (NNAPP) to prevent anaemia among pregnant women and children. Screening for anaemia and iron-folate therapy in appropriate doses have been essential components of antenatal and pediatric care for the last three decades, but
coverage of these programmes is very low. As a result, very high rates of anaemia in pregnant women persist, and the maternal mortality remains unaltered. Anaemia continues to be a major problem affecting all segments of the populations, and there has been consequence associated with it.

Postpartum haemorrhage (3%), pre term delivery (4%) and fetal growth restriction (6%) were more frequent in anaemic women as compared to non anaemic counterparts (Fareh, O.I., 2005).

The Government of India aims to reduce anaemia among Indian women by 50% over the next 5 years even as official figure show that it is more prevalent among married women than before. “The planning commission has recommended this target for reduction in anaemia among women and girls by the end of the 11th Plan”, (The 11th Plan runs between 2007 and 2012).

The ambitious target notwithstanding official figures show that the incidence of anaemia among married women actually increased between 1988-89 and 2005-06. The percentage of pregnant and married women suffering from anaemia went up in three out of every four and three out of every five states, respectively (Singh and S. Sharma, 2007).

According to the National Family Health Survey, -III (2006) while the percentage of married women aged 15-49
suffering from anaemia rose from 51.8% to 56.1% the percentage of pregnant women suffering from anaemia went up from 49.7% to 57.8% (NHFS-3).

Various studies have also suggested that the type of anaemia prevalent during pregnancy is mostly iron deficiency anaemia.

In 1968, WHO co-ordinated a series of studies in pregnant women and came to the conclusion that iron deficiency was present in 40-99% of pregnant women. Various other workers have also studied and undoubtedly found that iron deficiency was highly responsible for anaemia in majority of pregnant women.

In Mauritius 50 percent of population is anaemic and 95 percent of such anaemia is due to iron deficiency (WHO, 1970).

A retrospective case control study was conducted by Fareh et al on pregnant women with singleton pregnancies indicated that the major causes of anaemia were iron deficiency (91%), followed by beta-thalassaemia trait (8%) and folate deficiency (1%) (Fareh O.I., 2005).

As proven by various studies related to anaemia in India as well as in other countries, the major cause of anaemia is iron deficiency. This is the main reason that this study is basically focused on iron deficiency anaemia.
The preliminary results from NHFS-3 show rising prevalence of iron deficiency anaemia in women & children (Chandrakant et al, 2007).

The nutrition and health status of women is important both for the quality of their lives and for the survival and healthy development of their neonates, yet relatively less attention has been given on this area; further women should not be considered solely with respect to their reproductive roles as mothers, adequate nutrition is a human right for all and the nutritional benefits to women's social and economic capabilities need to be viewed as major goals.

The field of nutrition of pregnant woman in rural areas is sadly a much neglected area of research. There is a dearth of literature on health and nutrition of pregnant women in rural areas. Hence, the present study is undertaken to know the nutritional status and prevalence of anaemia among the women in reproductive age group (15-45yrs) in rural area.

What is more, anaemia in pregnancy is not just a continuation of the generally anemic condition of Indian women. A study in rural U.P. found that almost half of a group of pregnant women who are not anemic early in their pregnancies have become anemic three month later, indicating that their anaemia was either caused or precipitated by their pregnancies (Shukla et al, 1982).
It is a matter of concern that anaemia constitute to take a heavy toll of life of pregnant women inspite of two decade of operation of National Nutrition Anaemia Control Programme. A recent evaluation of programme by ICMR has shown that it has not made any noticeable impact on the prevalence of anaemia.

Keeping the above said background in mind, the proposed study "Prevalence of Anaemia in Pregnant Rural Women of Harhua Block of Varanasi" was aiming at the following objectives:

1. To study the incidence of anaemia in rural pregnant women and to assess their nutritional status.
2. To know any relation between the incidence of anaemia and different components of diet, particularly calories, protein, iron and folic acid.
3. To identifying the factors affecting the success of national nutritional program for anaemia at grass root level.
4. To educate target population regarding cause and effect of anaemia on health and to encourage them for improvement in their dietary habits.