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# Prevalence of anaemia among antenatal women in a tertiary care hospital, South India

K. S. Saraswathi<sup>1</sup>, Farhana Aljabri<sup>1</sup> and R. Shyamala<sup>2</sup>

<sup>1</sup>Department of Obstetrics and Gynaecology, Shadan Institute of Medical Sciences and Post Graduate Research Centre, Hyderabad, India <sup>2</sup>Department of Microbiology, Bhaskar Medical College, Yenkapally Village, Moinabad Mandal, Rangareddy District, India

#### ABSTRACT

Nutritional anaemia in pregnancy is one of India's major public health problems. The prevalence of anaemia in pregnant women ranges from 33% to 89%. The object of this study is to assess the incidence of anaemia in antenatal women. 9642 antenatal women were tested for Haemoglobin concentration in the blood. Incidence of anaemia was seen in 4918 women accounting for 51%.

Keywords: Anaemia, Prevalence, Antenatal women, Hb(Haemoglobin)

### INTRODUCTION

Anaemia in pregnancy is a major public health hazard in India , where nearly 40-90% of pregnant women are anaemic. In 1972 the WHO expert group recommended that pregnant women with Hb level below 11gm% should be considered anaemic. Anaemia contributes directly to 20% of maternal deaths and indirectly to a further 20%[1,2]. Severe anaemia also increases perinatal morbidity and mortality, by causing intrauterine growth retardation and preterm delivery[3]. Anaemia results from nutrition related causes and from inflammatory or infectious diseases, worm infestations and from blood loss. Iron deficiency anaemia resulting from inadequate intake and low absorption of dietary iron is the most common form of anaemia in India [4,5].

India launched the National Nutritional Anaemia Prophylaxis Programme (NNAPP) in 1970. Under this programme, iron and folic acid tablets are distributed to pregnant women. The present study reports the prevalence of anaemia among pregnant women in a tertiary care hospital.

### MATERIALS AND METHODS

Pregnant women attending the antenatal clinic of Shadan Institute of Medical Sciences and Post Graduate Research Centre formed a part of the study. Informed consent was obtained from them after explaining them the purpose of the study, then blood samples were collected. Hb concentration in the blood was estimated by the indirect cyan methaemoglobin method[6,7]. Anaemia was assessed according to WHO criteria [8]. A Hb concentration of less than 11 gm% was considered an indication of anaemia. Hb concentration of less than 7 gm%, 7-8gm%, and 8-11gm% were considered to indicate severe, moderate and mild anaemia respectively.

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## RESULTS

A total of 9642 antenatal women in the period from January 2011 to December 2012 were examined, and 4918 women i.e, 51% of these women showed the presence of anaemia.

The results are as follows:-

Severe anaemia was seen in 720 women accounting for 7.46% Moderate anaemia was seen in 3030 women accounting for 31.43% And Mild anaemia was seen in 1168 women accounting for 12.11%





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### DISCUSSION

The prevalence of anaemia among pregnant women was 51%. The National Family health Survey 2 NFHS-2 conducted during 1998-99 found an overall prevalence of 49.7% among 5654 pregnant women from 25 states [9]. Anaemia remains endemic among pregnant women in India despite intervention measures such as the distribution of 100 folifer tabs ( containing 100 mgm of elemental iron & 500ug of folic acid) to each woman to be taken during pregnancy.

Some of the reasons that iron supplementation programs are ineffective may be that the programs do not always reach the target people, health staff are inadequately trained and mobilized to ensure the effective distribution of supplements, and compliance is low, due, in particular, to the side effects associated with iron supplements[8,10].

The overall prevalence of severe anaemia among pregnant women was 13.1%. A prevalence of 8.3% for severe anaemia has been reported among pregnant women in the slumps of hyderabad[11]. In rural and Urban areas in punjab the prevalence of severe anaemia was as high as 56% in a population based survey.

### CONCLUSION

Nutritional anaemia can be prevented by taking proper diet and also taking iron supplements.

Regular hemoglobin check and good care of pregnant women i.e, by giving iron supplements to them will prevent nutrional anaemia in pregnancy.

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