

Original Research Article

<https://doi.org/10.20546/ijcmas.2019.806.309>

Prevalence of Anaemia in a Tertiary Care Hospital in Hyderabad, Telangana, India

K.S. Saraswathi¹ and R. Shyamala^{2*}

¹Department of Obstetrics & Gynaecology, Shadan Institute of Medical Sciences & P.G
Research Institute, Hyderabad, Telangana, India

²Department of Microbiology, Malla Reddy Medical College for Women, Hyderabad
Telangana, India

*Corresponding author

ABSTRACT

Keywords

Pregnant women,
Anaemia, Indirect
Cyanmethaemoglobin
method

Article Info

Accepted:
20 May 2019
Available Online:
10 June 2019

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. A total of 10520 antenatal women in the period from January 2017 to December 2017 were examined, and 4735 women *i.e.*, 45% of these women showed the presence of anaemia. 5785 *i.e.*, 55% had no anaemia.

Introduction

Anaemia is a major and the most common hematologic disorder in the developing countries, leading to 40 to 60% of maternal deaths. Nearly half of the total global numbers of anaemic women live in the Indian subcontinent. In India the prevalence of anaemia in pregnancy is 87.5% and hence it is responsible for high maternal mortality.

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% (World Health Organization, 1992, 1993; Brabin *et al.*, 2001).

Severe anaemia also increases perinatal morbidity and mortality, by causing intrauterine growth retardation and preterm delivery (Prema *et al.*, 1981; World Health Organization, 1992, 1993). 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 (Seshadri *et al.*, 1994, 1997). 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 (Seshadri *et al.*, 1994, 1997; Sood *et al.*, 1975). Anaemia was assessed according to WHO criteria(8). A Hb concentration of less than 11gm% was considered an indication of anaemia. Hb concentration of less than 7gm%, 7-8gm%, and 8-11gm% were considered to indicate

severe, moderate and mild anaemia respectively.

Results and Discussion

A total of 10520 antenatal women in the period from January 2017 to December 2017 were examined, and 4735 women *i.e.*, 45% of these women showed the presence of anaemia. 56% had no anaemia.

Among the 4735 patients diagnosed with Anaemia, 238 patients (5%) had Severe anaemia.

1562 patients (33%) had Moderate anaemia, 2935 patients (62%) had mild Anaemia.

The prevalence of anaemia among pregnant women was 45%. 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 [National Family Health Survey (NFHS-2)]. 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 and 500ug of folic acid) to each woman to be taken during pregnancy (Table 1 and 2).

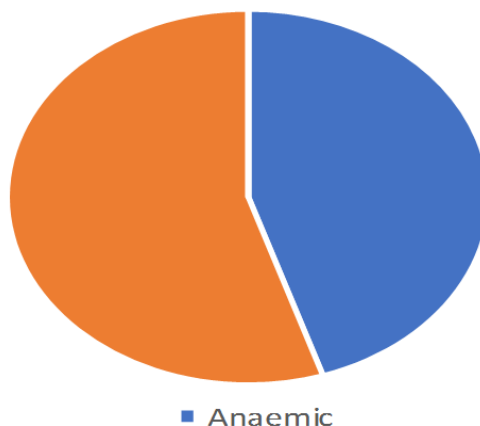
Table.1

Total number of Patients Tested for Anaemia	10,520 patients
Patients Having Anaemia	4735 patients having anaemia (45%)
Patients with no Anaemia	5785 patients (55%)

Table.2

Type of Anaemia	Number of Patients
Severe Anaemia	238 patients (5%)
Moderate Anaemia	1562 patients (33%)
Mild Anaemia	2935 patients (62%)

Chart.1



Incidence of Anaemia

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 (ICMR Task Force Study) (Stoltzfus, 2001). 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 (Raman *et al.*, 1989). In rural and Urban areas in Punjab the prevalence of severe anaemia was as high as 56% in a population based survey.

In 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 nutritional anaemia in pregnancy.

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How to cite this article:

Saraswathi, K.S. and Shyamala, R. 2019. Prevalence of Anaemia in a Tertiary Care Hospital in Hyderabad, Telangana. *Int.J.Curr.Microbiol.App.Sci.* 8(06): 2568-2571.

doi: <https://doi.org/10.20546/ijcmas.2019.806.309>