



CODEN [USA]: IAJ PBB

ISSN: 2349-7750

## INDO AMERICAN JOURNAL OF PHARMACEUTICAL SCIENCES

<http://doi.org/10.5281/zenodo.2574424>
Available online at: <http://www.iajps.com>

Research Article

### ANEMIA OF THE PREGNANCY: A SURVEY FROM MIRPURKHAS, SINDH PAKISTAN

Dr. Partab Puri<sup>1</sup>, Dr. Abid Hussain<sup>2</sup>, Dr. Muhammad Amin Memon<sup>3</sup>, Dr. Ball Chand<sup>4</sup>,  
Dr. Shafaq Ansari<sup>5</sup>, Dr. Samina<sup>6</sup>

<sup>1</sup>MBBS, MPH, Lecturer, Department of Community Medicine, Muhammad Medical College, Mirpurkhas., <sup>2</sup>MBBS, M Phil (Microbiology), Associate Professor, Department of Pathology, Liaquat University of Medical & Health Sciences, Jamshoro., <sup>3</sup>MBBS, DTCD, M Phil (Physiology), Assistant Professor, Department of Physiology, Muhammad Medical College, Mirpurkhas., <sup>4</sup>MBBS, DTCD, MCPS (Pulmonology), FCPS (Medicine), Assistant Professor, Department of Medicine, Muhammad Medical College, Mirpurkhas., <sup>5</sup>MBBS, Diploma in Anaesthesia, M Phil (Physiology), Assistant Professor, Department of Physiology, Muhammad Medical College, Mirpurkhas., <sup>6</sup>MBBS, FCPS (Obs & Gynae), Professor, Department of Gynaecology & Obstetrics, Jinnah Medical College, Peshawar.

#### Abstract:

*Pregnancy is a natural state where body requirements of nutrients get increased to fulfil the demands of the growing fetus. Anemia is the main presentation in pregnancy as the supply falls from the required needs. Current study evaluated this issue in anterior Sindh (Mirpurkhas) pregnant women for anemia. For this purpose, we included pregnant females with no other co-morbidity in an age range of 15-45 years. We found 75.8% of the women were anemic while only 24.2% were having their hemoglobin in normal range. There was significant difference between rural and urban female p=0.005 while there was no significant difference among the two age groups (15-30 years) and (31-45 years) regarding anemia status p=0.17.*

**Conclusion:** Most of the pregnant women were suffering from anemia rural women were more affected as compared to urban women and there was no difference in anemia in terms of age groups.

**Key Words:** Anemia, Pregnancy, Rural, Urban.

#### Corresponding author:

**Dr. Partab Puri,**

MBBS, MPH, Lecturer, Department of Community Medicine,  
Muhammad Medical College, Mirpurkhas. Address: H # 11, Block 3 B,  
Satelite Town Mirpurkhas 69000 Sindh.

Email: [drmemonmpk1970@hotmail.com](mailto:drmemonmpk1970@hotmail.com), Cell # 03142613782

QR code



Please cite this article in press Partab Puri et al., *Anemia Of The Pregnancy: A Survey From Mirpurkhas, Sindh Pakistan*, Indo Am. J. P. Sci, 2019; 06(02).

QR code



**INTRODUCTION:**

Pregnant women often suffer from anemia (Hemoglobin <11 g/dl) and the figures are higher in developing countries (33% to 75%) as compared to developed countries (15%) which usually results iron deficiency due to less duration of child spacing, poor socio-economic background, multiparity and infections placing both the child and mother at risk [1]. Anemia during pregnancy is a major risk factors for eclampsia, hemorrhage (antepartum and postpartum), infections (puerperal sepsis) and maternal deaths so it needs to be diagnosed early and be treated accordingly [2]. Iron deficiency anemia as described by the WHO is Hb concentration <11 gm/dl at it is prevalent in various countries and the rate being 65.8% in African women and 24% in Uganda while WHO reports 40%-60% of the pregnant women of the developing countries to be suffering from anemia [3]. Anemia accounts for the 3%-4% maternal mortality as reported in published literature [4]. Anemia affects 56 million pregnant females (Worldwide) it is severe when Hb% is below 7g/dl while becomes moderate at 7-9.9g/dl and it is called mild when Hb% is 10-11g/dl anemia is responsible for more than 115000 maternal deaths/year globally [5]. During pregnancy iron supplementations along with folic acid are required and this can be achieved by nutrition counseling and medical care through nurses, midwives and by arranging parent classes for high risk patients in terms of age factor, income support, health education and any other problem under consideration [6]. Research work reveals that women with regular antenatal care show much knowledge regarding dietary protein intake, healthy diet and anemia prevention so this aspect should be given more weightage in the management of this disorder [7]. Insufficient iron stores in mother may show normal hemoglobin in the

babies at birth but certainly lack the iron stores necessary for growth and development in early years of life that will further place the child at the risk of infections so balanced diet in sufficient amount is advisable during pregnancy and lactation [8]. The current survey was arranged to assess the anemia status in the pregnant women of the Mirpurkhas district of the Sindh province.

**METHODOLOGY:**

The research survey was carried out at district hospital, Mirpurkhas, Sindh; 190 pregnant ladies were included in the study of all age groups and parity who permitted through written consent excluding the non-pregnant, lactating and ladies with other systemic illnesses and non-willing patients. Demographic and other related data was collected on proforma (predesigned). 2ml blood was obtained observing aseptic protocols for blood complete picture purpose. Samples were analyzed in local hospital laboratory and data was analyzed on SPSS version 22 for various variables using chi-square.

**RESULTS:**

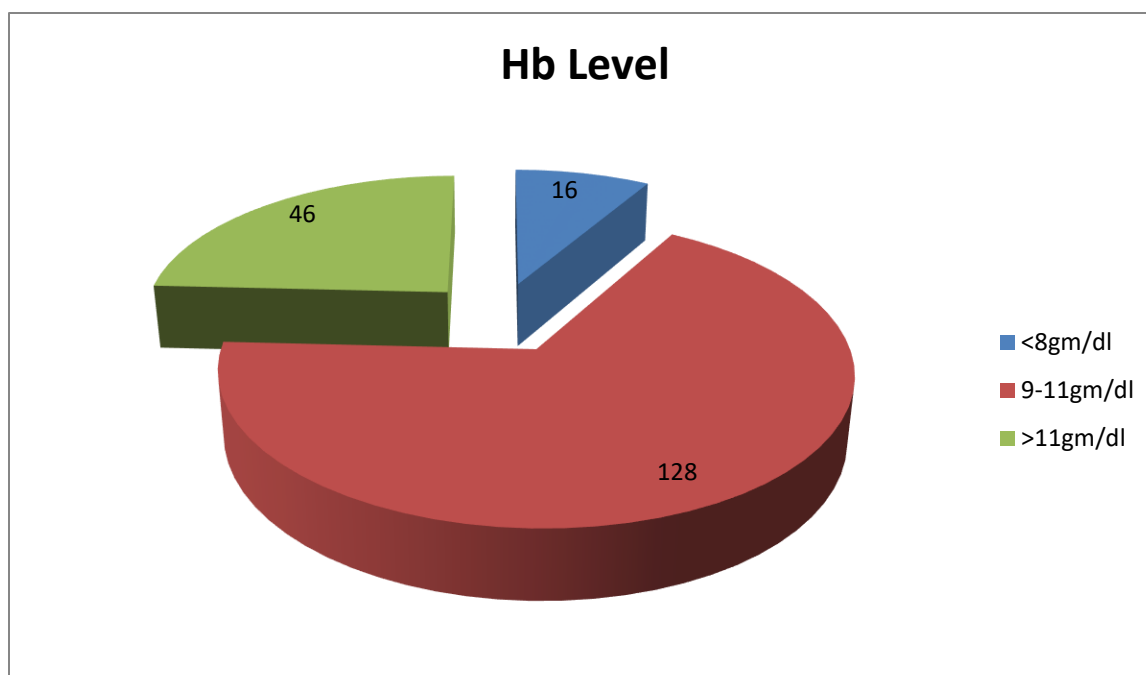
There were 190 women in total for this study 81(42.63%) were from rural area 70(36.84%) were anemic 11(5.79%) were normal while 109(57.37%) were from the urban area 74(38.8%) were anemic and 35(18.42%) were normal that was statistically significant ( $p=0.005$ ). As a whole 144(75.8%) women were anemic and 46(24.2%) were normal. There 127(66.84%) women in the age range of 15-30 years and 63(33.16%) females in the age range of 31-45 years both age groups were equally affected by anemia there was no significant difference between the two age groups  $p=0.17$ .

Table 1.

Parameters	Rural	Urban	Total	Chi-Square	P-Value
Anemia +ve	70(36.84%)	74(38.95%)	144(75.8%)	7.71	0.005
Anemia -ve	11(5.79%)	35(18.42%)	46(24.2%)		
Total	81(42.63%)	109(57.37%)	190(100%)		

Table 2.

Age Range	15-30 Years	31-45 Years	Total	Chi-Square	P-Value
Anemia +Ve	92 (48.42%)	52 (27.37%)	144(75.8%)	1.82	0.17
Anemia -Ve	35 (18.42%)	11 (5.79%)	46(24.2%)		
Total	127(66.84%)	63(33.16%)	190(100%)		



#### DISCUSSION:

The anemia in pregnant women we found was present in 75.8% women which fall inconsistent to the world estimated 41.8 % prevalence of anemia [9]. According to published data by M. Ilyas Ansari (2003) about 47% and 41 % of the rural and urban females respectively of age range 15- 44 years are anemic, pregnant women in particular that is also in agreement with our results [10]. Among anemic women, the presence of anemia was slightly higher, 51.4 percent in urban resident women where as 46.6 percent in women of rural area. Non-anemic were in majority 76 percent in urban area as compared to 24 percent of rural area. More or less equally distribution of severe and mild to moderate anemia was found among urban and rural pregnant women but anemia was not present three times more in number in urban residing pregnant women in our study area The prevalence of anemia shows significant rural urban difference( P-0.005).The anemia was found in 146 (75.8 percent) pregnant women. The anemia was equally distributed among the age range 15-30and 31-45years women (P-0.17). Awan MM et al (2004) in their study on pregnant women found 86% of the women as anemic which was consistent to our results of 75.8% [11].Another Pakistani study conducted by Dileep K. Roha et al.(2008) shows a 49.7% of the pregnant women were anemic that is inconsistent with our findings which were 75.8% [12].

The possible cause may be the area difference as the quoted study was conducted in Karachi so level of care and health education might be different from our remote area population of Mirpurkhas. A good antenatal care is necessary to examine the expectant women and to educate mothers in health, nutrition, care and gives instructions regarding the care of the infant and to detect any abnormality during pregnancy.

#### CONCLUSION:

The Anemia is highly prevalent in pregnant women of Mirpurkhas district more affecting the females belonging to rural but equally affecting all age groups.

#### Recommendations:

Community based approach regarding knowledge about anemia in pregnancy and it's preventable and treatment aspects should be adopted at district levels covering the rural and urban areas equally.

#### REFERENCES:

1. Cyril C. D, Hyainth E. Onali. (2007). The prevalence of anemia among pregnant women at booking in Enugu, Nigeria, American J of Public Health. 97(11):247-256.
2. Binay K. Shah, Lubna A. Baig.(2000). Association of anemia with parasitic infestation in

- pregnant Nepalese women. *Journal of Obs and gynae*. 79(5):341-149.
3. Gerald Obai, Pancras O, Ronald W (2016). Prevalence of anemia and associated risk factors among pregnant women attending antenatal care in Gulu and Hoima Regional Hospitals in Uganda: A cross sectional study. *BMC Pregnancy and Childbirth* 16:76 DOI 10.1186/s12884-016-0865-4.
  4. Situation analysis and evidence based approach to maternal and child health in Pakistan, Ministry of Population Welfare, GOP, (2002):3-20.
  5. Fikir Asrie(2017). Prevalence of anemia and associated risk factors among pregnant women attending antenatal care at Aymiba Center, northwest Ethiopia. *Journal of blood medicine*8:35-40
  6. Milman N.(2008). Prepartum anemia. Prevention and treatment .*Annal Hemtol* 87(12):949-959.
  7. Qudsia Anjum. (2003).Gil child today-mother of nation tomorrow .*J Pak Med Assoc*;53:47-51.
  8. J. Park, K .Park(2004). Preventive medicine in obstetric s. *Park's Text book of preventive and social medicine*. 24<sup>th</sup> edition :360-363.
  9. McLean E, Cogswell M.(1998).World prevalence of anemia. *African J Med*. 44(12):297-305.
  10. M. Ilyas Ansari (2003). Human Nutrition and Women Health. In *Text book of Community Medicine and Public Health*.6<sup>th</sup> edition PP 524-573.
  11. Mahe-Munir Awan, Muhammad A Akber (2004). A study of anemia in pregnant women of railway colony, Multan. *Pak J Med Res* 43(1):15-20.
  12. Dileep Kumar Roha et al.(2008).Hemoglobin status of pregnant women visiting tertiary care hospitals of Pakistan. *Pak J Med Res*47(2):1-9.