Prevalence of anemia in pregnant women and its associated factors : a sudy for a tehsil headquater hospital.

Saba Shabnum, Ayesha Hashmi[2], Aneeta Khalil[3]

[1]W.M.O.THQ Chunian
[2]W.M.O.THQ Chunian
[3]Student Army Medical College,

ABSTRACT

Objectives; To calculate the prevalence of anemia in pregnant women and to evaluate the causative factors. **Methodology**: It was a cross-sectional study carried out at THQ Chunnian,Kasur. The population was female population of chunian and the surrounding areas. Out of which we took sample of 100 subjects via convenient random sampling. An anonymous structured questionnaire was used. Anemia is calculated through hemoglobin level in blood and the associated factors assessed were; parity, abortions, SVDs VS cesarean sections, education levels, supplement intake during pregnancy and spacing. Data analysis was done on SPSS software. **Results:** The results were as follow:12% of the females were below 25 year of age,74% were between 26 to 30,7% were between 31 to 35 and 36 to 40 year of age. 2 % have hemoglobin level of 12g/dl and above,6% has 11g/dl,45% has Hb level of 10 g/dl,37% has Hb level 9 and below.25% of the females were primigravida,20% has parity 2,35% has parity 3,19% has parity 4 and above.92% has 0 still births,6% has 1 still birth and % has 2 or more still births.77% of females has zero abortions,11% has 1 abortion 12% has 2 or more abortions.50% has 1 previous SVD,11% has 2 SVDs and 21% has 2 or more SVDs.75% of females has previous C-sections. More than 60% of the population has less than 1 year spacing between children,20% has 1 year spacing and only 10% has spacing for 2 or more year. Only 6% of the females has been transfused blood one, rest of the population was never being transfused.60% of the females didn't take any supplements during pregnancy while 20% has a poor compliance. Women who don't take supplements during pregnancy 80% of them had Hb level below 10g/dl,10% has Hb 11 and only 0 % has Hb level of 12 and above.Women with previous C section 60% ha HB level 9,20% has 10, 10% has 11 and only 10% has 12 or above Hb. **Conclusion:** Prevalence of anemia in peripheral areas are really high n it directly associated with low supplement intake,less spacing between children and increased no of births.

Keywods : anemia, tehsil headquater hospital.

INTRODUCTION:

Anemia is globally considered the most common nutritional deficiency diseases. It affects all age groups and all gender but the deficiency is more pronounced among pregnant women and contributes to fetal and maternal morbidity and mortality birth weight[1]. especially in developing countries Anemia occurring during pregnancy is a public health issue and is associated with adverse outcomes both maternally and perinatal[2]. Anemia in pregnancy has labeled by World Health Organization (WHO) as the hemoglobin levels of less than 11 g/dl[3]. According to WHO, if in a given population the rate of anemia exceeds 40% ,it is considered a severe public health issue[4]. Globally 56% of pregnant women in developing and poor countries have anemia[3]. The percentage is highest among pregnant women in sub- Sahara Africa (57%), followed by South-East Asia (48%) with prevalence (24.1%) reported among pregnant women in South America[4].

In Pakistan, 26% ever-married women aged 15 to 44 in urban areas are reported to be anemic while the value increases to 47% in rural areas[5]. The levels among pregnant women living in urban areas is similar, ranging from 29%[6] to 50% among pregnant women attending antenatal clinics in a large private, tertiary hospital in Karachi[7,8] .

Multifactorial causes including geographic contributor to the etiology of anemia during pregnancy in developing countries[9]. Iron deficiency is considered the leading cause of anemia during pregnancy worldwide only secondary to chronic inadequate diet and menstruation. The hemoglobin levels are worsened by the increased physiologic demands due to fetus growth and maternal blood volume expansion[9,10]. other contributing factors can be Genetics, poor hygiene, infections and infestations[11].
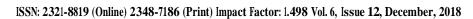
With scarcity of resources available in developing countries to address public health problems, comprehension of the local etiological factors accountable for anemia is vital in order to devise suitable prevention and management strategies.

OBJECTIVES:

-to calculate the prevalence of anemia in pregnant women

-to evaluate the association of parity abortions and spacing between children with anemia

To asses the knowledge and compliance of women to supplements during pregnancy.

METHODOLOGY:

Study Design:

• Cross sectional

Study Area:

• THQ chunian

Study Population:

• female population of THQ and surrounding areas

Technique:

☐ Randomized Convenient sampling

Study Duration:

☐ One months

Sample Size:

☐ The approximate sample size required to estimate prevalence in large population with the desired level of confidence 95% and desired absolute precision 0.05%. Calculated sample size is 100.

Study Subjects selection criteria:

Inclusion Criteria:

women of the reproductive age

who are currently pregnant or have been pregnant.

Exclusion Criteria:

• post menopausal

• women with zero P 0 A0

Study Variables Assessed:

hemoglobin level in blood

parity

abortions

SVDs VS caesarian sections

education levels

supplement intake during pregnancy

spacing

other chronic diseases.

Instruments

☐ Questionnaires only

Measurements:

☐ Frequency tables of various parameters are constructed. p value calculated.

Data Compilation and analysis:

☐ SPSS v.20 is used to enter data and construct tables.

Social and Ethical Consideration:

☐ All cultural ethics were observed.

☐ Consent was taken from individuals before interview.

☐ The information about the name, address, social habits etc. will not be disclosed to any one and will not be used for unethical purposes.

RESULTS:

The results were as follow

1. 12% of the females were below 25 year of age,74% were between 26 to 30,7% were between 31 to 35 and 36 to 40 year of age
2. 2 % have hemoglobin level of 12g/dl and above,6% has 11g/dl,45% has Hb level of 10 g/dl,37% has Hb level 9 and below
3. 25% of the females were primigravida,20% has parity 2,35% has parity 3,19% has parity 4 and above
4. 92% has 0 still births,6% has 1 still birth and % has 2 or more still births
5. 77% of females has zero abortions,11% has 1 abortion 12% has 2 or more abortions
6. 50% has 1 previous SVD,11% has 2 SVDs and 21% has 2 or more SVDs
7. 75% of females has previous C-sections
8. More than 60% of the population has less than 1 year spacing between children,20% has 1 year spacing and only 10% has spacing for 2 or more year
9. Only 6% of the females has been transfused blood one, rest of the population was never being transfused
10. 60% of the females didn't take any supplements during pregnancy while 20% has a poor compliance
11. Women who don't take supplements during pregnancy 80% of them had Hb level below 10g/dl,10% has Hb 11 and only 0 % has Hb level of 12 and above
12. Women with previous C section 60% ha HB level 9,20% has 10, 10% has 11 and only 10% has 12 or above Hb.

DISCUSSION:

The prevalence of anemia in our study population was 98.5 % markedly higher than that calculated by mostly other studies from Pakistan. One study conducted in. PAKISTAN shows similar results where the prevalence is 90%[12]. A comparable high

rates of anemia were found in an Indian study which included 11 states, where the prevalence was 87% among pregnant women at more than 20 weeks of gestation[8]. The prevalence of anemia among pregnant women in other developing countries ranges from 35% to 81%[1,8] Our data shows 25% of the females were primigravida,20% has parity 2,35% has parity 3,19% has parity 4 and above. There is estimated 500 ml blood loss at the time of delivery[14]. The amount of blood loss during delivery of a single baby. The amount varies according to the individual's differences in coagulation profiles, race, parity, placental abnormalities and the quality of obstetric facilities, however it is usually considered that the blood loss during vaginal delivery is considerably less than that during cesarean section[15]. In our study, 75% of females has previous C-sections. Decreased level of Hb is linked with multiple C. Section. Multiple studies conducted explains independent relation between anemia n cesarean section[13]. More than 60% of the population has less than 1 year spacing between children,20% has 1 year spacing and only 10% has spacing for 2 or more year 60% of the females didn't take any supplements

during pregnancy while 20% has a poor compliance. The reason behind the low and no compliance is the educational status of the females. and their access to information material and supplementations. 60% of the women who didn't take supplements 40% have never attended school. 15% has no access to information regarding supplementation.

Our study shows that anemia is directly linked to. Supplement intake during pregnancy. Women who don't take supplements during pregnancy 80% of them had Hb level below 10g/dl,10% has Hb 11 and only 0 % has Hb level of 12 and above. This ia contrary to a research conducted[12] where women who reported consuming regular iron supplements had a decreased hemoglobin levels. Finally, we found poor diets, increasing gravidity, cesarean sections and low educational status to be associated with anemia, as has been reported previously in Pakistan[5].
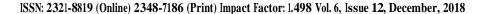
CONCLUSION:

Prevalence of anemia in peripheral areas are really high n it directly associated with low supplement intake,less spacing between children and increased no. of births.

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