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ASSESSMENT OF THE FREQUENCY AND PERCENTAGE OF THE RISK FACTORS: FOR THE ANEMIA IN PREGNANCY IN DISTRICT MIRPURKHAS

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Abstract:

Pregnancy related anemia is often seen in medical practice and it has multifactorial etiology from poor socio-economic status to lack of proper antenatal care. Current work was based on assessing risk factors like age at marriage, age at first pregnancy, education status, socio-economic status, religious status, dietary habits, number of children, H/o abortion, H/o worm infestation, H/O Iron/Folic acid usage and regular visit for antenatal checkup in pregnant ladies in Mirpurkhas district of Sindh province of Pakistan. We found that 24.21% (46) women were having their hemoglobin levels >11gm/dl that is normal while majority of the women 67.37% (128) were suffering from moderate anemia with Hb% of 9-11gm/dl and 8.42%(16) women were found as severely anemic at a Hb% <8gm/dl. It was noted that 124(65.3%) women had antenatal visits and 66(34.7%) had no antennal visits but surprisingly 84 women gave the history of Iron or folic acid supplementations while 106 had no history of such supplementations. Anemia was more common in illiterate and poor women as compared to rich and educated women.

Conclusion: *Poor socio-economic status, rural area and literacy were the main risk factors for anemia in pregnant women in Mirpurkhas.*

Key Words: *Hemoglobin, Anemia, Literacy, Rural Area.*

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INTRODUCTION:

Anemia associated with pregnancy if diagnosed and managed early it may reduce the maternal mortality (3%-4%) being a risk factor in the development of eclampsia, puerperal sepsis, antepartum and postpartum bleeding [1,2]. Anemia is very common in pregnancy with prevalence of 33%-75% in developing countries and 15% in developed, the cause behind is iron deficiency resulting from poverty, lack of child spacing, multiparity[3]. Anemia in pregnancy is the hemoglobin concentration <11g/dl which is prevalent 65.8% and 24% in Africa and Uganda while 40%-60% pregnant ladies in developing countries have anemia as reported by WHO[4]. Another estimation reveals 14% of developed and 51% of developing countries are affected by anemia [5].Even the milder form of anemia influences the health status resulting decreased productivity, fatigue along with aggravating the comorbidities [6,7]. As the body requirements are increased during pregnancy so anemia compromises that demand with enhanced risk of LBW (low birth weight) and perinatal mortality [8]. There exist numerous factors which predispose the pregnant ladies to anemia like excessive menstrual bleeding disorder prior to conceive, low nutritional food, multiparity with less spacing, lack of knowledge and ignorance of antenatal care etc. This research was under taken in the District hospital of Mirpurkhas district that provides health coverage to many urban and remote rural areas to assess the risk factors responsible for anemia in pregnant women. This work will hopefully help to identify the points to be focused for the prevention of anemia in pregnancy in this particular area.

METHODOLOGY:

Informed written consent was taken prior to obtaining the data required on proforma and sample collection for blood analysis and blood complete picture was performed in hospital laboratory. Selection of the study sample was based on exclusion and inclusion criteria only pregnant ladies were registered with no age restriction although comorbidities were excluded. Frequency and percentage of the collected data was done and presented in tables and charts.

RESULTS:

Normal hemoglobin (>11gm/dl) was observed in 46(24.21%) pregnant women, 128(67.37%) were moderately anemic (9-11gm/dl) and severe anemia(<8gm/dl) was noted in 16(8.42%) pregnant ladies. Age at marriage was <20 years in 137(72.2%), 20-24 years in 41(21.6%) and 25-29 years in 12(6.3%) while age at first pregnancy was<20 years in 121(63.7%), 20-24 years in 53(27.9%) and 25-29 years 16(8.4%). About the education status of the study population we observed that there were 120(63.2%) Illiterate, 61(32.1%) Primary to Secondary level and 9(4.7%) were having Intermediate to higher level of education. Poor socio-economic status were 164(86.3%) while only 13(6.8%) were from Middle and Upper classes. Regarding religious status of the study population Muslims were 171(90%), Christians were 4(2.1%) and Hindu were 15(7.9%). Dietary Habits were Good Diet intake in 22(11.6%), average intake in 72(37.9%) and poor intake in 96(50.5%). Number Of children previously was none in 33(17.4%), 1-2 children in 75(39.5%) while 3 and above in 82(43.2%). History of abortion was positive in 36(18.9%) women while no history of abortion was reported by 154(81.1%) women. Worm infestation was experienced by 11(5.79%) while no history of worm infestation was reported by 179(94.21%). Intake of Iron/Folic acid supplementation were reported by 84(44.2%) and no such supplementations were taken by 106 (55.8%). Regular antenatal visits for checkup were reported by 124(65.3%) women and 66(34.7%) women reported no proper antennal care by the health care providers.

Table.01 Showing distribution of risk factors among the study subjects

	Anemia Status of study population		
	Normal 46(24.21%)	Moderate Anemia 128(67.37%)	Severe Anemia 16(8.42%)
S. No	**Risk factors for anemia in pregnancy**		
1.	**Age at Marriage**		
	<20 years 137(72.2%)	20-24 years 41(21.6%)	25-29 years 12(6.3%)
2.	**Age at first pregnancy**		
	<20 years 121(63.7%)	20-24 years 53(27.9%)	25-29 years 16(8.4%)
3.	**Education Status**		
	Illiterate 120(63.2%)	Primary-Secondary 61(32.1%)	Intermediate –higher 9(4.7%)
4.	**Socio-economic status**		
	Poor 164(86.3%	Middle class 13(6.8%)	Upper class 13(6.8%)
5.	**Religious Status**		
	Muslims 171(90%)	Christians 4(2.1%)	Hindu 15(7.9%)
6.	**Dietary Habits**		
	Good Diet intake 22(11.6%)	Average Diet intake 72(37.9%)	Poor Diet intake 96(50.5%)
7.	**No. Of children**		
	No child 33(17.4%)	1-2 children 75(39.5%)	3 and above 82(43.2%)
8.	**H/o Abortion**		
	Yes 36(18.9%)		No 154(81.1%)
9.	**H/o Worm infestation**		
	Yes 11(5.79%)		No 179(94.21%)
10.	**H/O Iron/Folic acid Usage**		
	Yes 84(44.2%)		No 106(55.8%)
11.	**Regular Visit for Antenatal checkup**		
	Yes 124(65.3%)		No 66(34.7%)

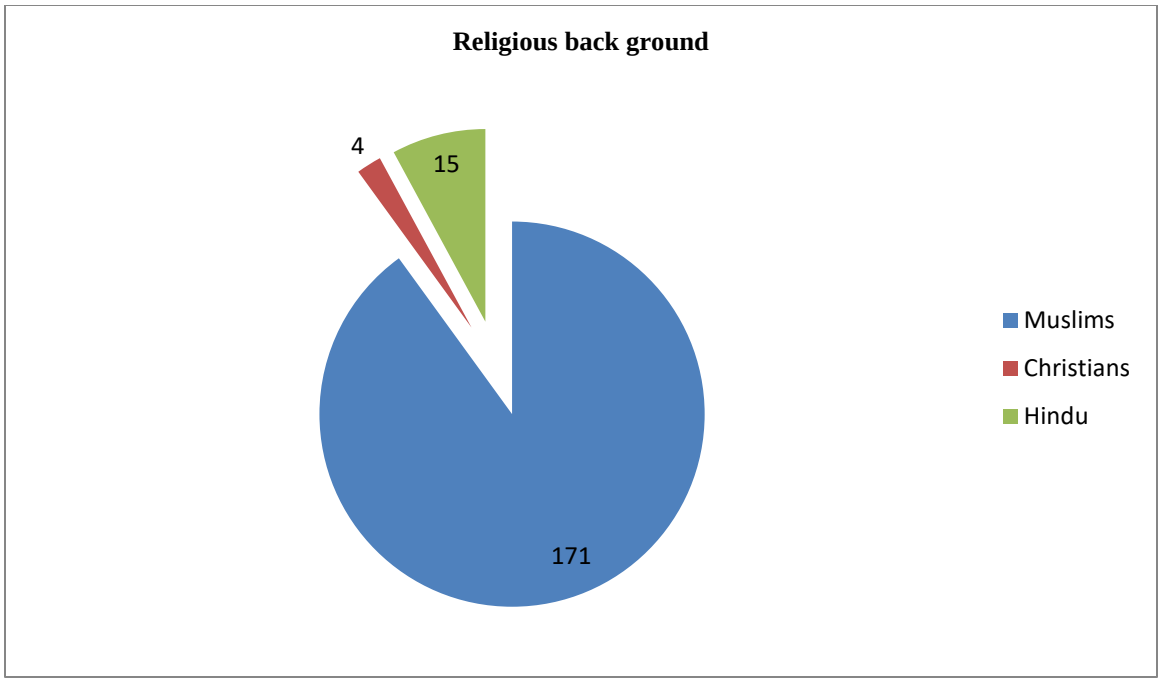

Figure.01 Pie charts of the religious background of the study subjects

DISCUSSION:

In our study the prevalence of anemia in pregnant women was found to be 75.79% that is consistent to Cheema et al (2016) reporting it as 65.6% age group between 35-49 years were more affected [13]. Singh et al(2009) who reported65.5% [14]. Kefiyalew et al(2014) reported 27.9% prevalence in Ethiopia he also reported moderate anemia in most cases and severe anemia in 12.9% that is consistent to our findings that is in contrast tour findings[15]. Vanamala VG et al(2018) found 83 (58%) moderately anemic and Severe anemia in 11 (7.8%) patients he also nutritional deficiency in 98 (68.5%) patients and multiparous women were more affected [16]. Singh et al(2015) had similar findings[17]. In study by Fikre Asrie (2017) majority of patients 67.3% had mild anemia while moderate anemia was in 32.7% patients and there was no patient with severe anemia [18]. A Pakistani study by Baig-Ansari N et al (2008) reported 75.0%mildanemia, 14.8% moderate anemia while 0.7% as severe anemia that is inconsistent to current results [19]. An Indian study by Vijaynath et al (2010) reported moderate anemia in 50.9% and severe anemia in 18.9% [20]. We could not evaluate the serum ferritin levels , TIBC (Total iron binding capacity), serum Folic acid and vitamin B12 levels to further categorize the nature of anemia due to financial constrain that was our limitation. All the patients were benefited with proper treatment after this evaluation regarding anemia but we could not arrange the follow up study to reassess the improvement in the Hb% as a tool to assess the compliance to therapy.

CONCLUSION:

It is concluded that poor socio-economic status, rural area and literacy are the main risk factors in this area leading to poor compliance to therapy and result into the development of anemia in pregnancy.

REFERENCES:

1. 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.
2. Situation analysis and evidence based approach to maternal and child health in Pakistan, Ministry of Population Welfare, GOP, (2002):3-20.
3. 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.
4. 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.
5. Lee AI, Okam MM(2011). Anemia in pregnancy. Hematol Oncol Clin North Am. 25(2):241-59.

6. Balarajan Y, Ramakrishnan U, Ozaltin E, Shankar AH, Subramanian SV(2011). Anaemia in low-income and middle-income countries. Lancet.378: 2123–35.
7. Okeke PU(2011). Anaemia in pregnancy-is it a persisting public health problem in Porto Novo-Cape Verde? Res J Med Sci. 5(4):193–9.
8. Kozuki N, Lee AC, Katz J(2012). Moderate to severe, but not mild, maternal anemia is associated with increased risk of small-for-gestational-age outcomes.J Nutr. 142:358–62.
9. Cheema HK, Bajwa BS, Kaur K, Joshi H(2016). Prevalence and possible risk factors of anaemia in different trimesters of pregnancy. IJCMR.3(4):1194-7.
10. Singh AB, Kandpal SD, Chandra R, Srivastava VK, Negi KS(2009). Anemia amongst pregnant and lactating women in district Dehradun. Indian J Prev Soc Med.1:19-22.
11. Kefiyalew F, Zemene E, Asres Y, Gedefaw L(2014). Anemia among pregnant women in SoutheastEthiopia: prevalence, severity and associated risk factors. BMC research notes.7(1):771.
12. V. G. Vanamala, Aruna Rachel, Sushil Pakyanadhan, Somavathi(2018). Incidence and outcome of anemia in pregnant women: a study in a tertiary care centre Int J Reprod Contracept Obstet Gynecol. 7(2):462-466.
13. Singh R, Singh AK, Gupta AC, Singh HK(2015).Correlates of anemia in pregnant women. Indian JCommun health. 27:351-5.
14. Fikir Asrie(2017). Prevalence of anemia and associated risk factors among pregnant women attending antenatal care at Aymiba Center, northwest Ethopia. Journal of blood medicine8:35-40.
15. Baig-Ansari N, Badruddin SH, Karmaliani R, et al(2008). Anemia prevalence and risk factors in pregnant women in an urban area of Pakistan. Food Nutr Bull. 29:132–139.
16. Vijaynath, Jitendra, Ramesh P, Abhishek P(2010). Prevalence of anemia in pregnancy. Indian J Appl Basic Med Sci. 12:23–35.