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Research Article

MULTI GRAVIDITY: A MAJOR RISK FACTOR OF ANAEMIA AMONG PREGNANT WOMEN OF DISTRICT KURUKSHETRA (HARYANA) INDIA

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A B S T R A C T

Anaemia is a global health problem which is commonly associated with pregnancy and experienced by almost all pregnant women during pregnancy. Out of 400 pregnant women 261 (65.2%) were found anaemic and out of these 33 were found with multi gravidity. Prevalence of anaemia was higher (77.1%) among women with 3 pregnancies and 100% pregnant women were found anaemic with more than three pregnancies. It is highly recommended that awareness programmes about consequences of multiple and frequent pregnancies should organized by the government and family planning methods must be adopted by the parents.

INTRODUCTION

Anaemia is a worldwide public health disorder commonly experienced by almost all women during pregnancy. It affects all age groups people but is most prevalent in pregnant women. About 65-70 percent expecting mothers are anaemic in India. WHO Statistics data reported that 40.1% pregnant women were found anaemic at global level in 2016. This is the matter of concern that about half of the maternal death are caused by anaemia. This condition is worst in India with 80 percent maternal death (De Benoist, World Health Organization, & Centers for Disease Control and Prevention (U.S.), 2008). Prenatal anaemia is associated with various risk factors. Multi gravidity is one of these, which is a major responsible factor for anaemia. It adversely affects the health status of pregnant women as well as their foetus.

Definition of high parity-: According to WHO, the women with gestation period of more than 20 weeks and five or more pregnancies is termed as women with high parity whereas gestation period less than 20 weeks with <5 pregnancies is known as women with low parity.

REVIEW OF LITERATURE

(Karaoglu et al., 2010)reported that out of 823 pregnant women 27.1% Turkey women had anaemia and moderate anaemia was found more prevalent. It is observed that multi parity and soil eating were predictors of anaemia.

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(Al-Farsi et al., 2011) reported that out of 684 anaemic pregnant women 48.7% were found with high parity and it is found significantly associated with anaemia. The women with higher parity had higher risk of anaemia as compare to women with less number of pregnancies. Most of the women with higher parity were found illiterate.

(Ivan, 2013) studied and reported that out of 75 antenatal mothers of Pondicherry 83% were found anaemic with Haemoglobin < 10gms. In spite of regular visits to ANC during 3rd trimester the rate of anaemia found very high. Multi parity, low educational and socio-economic status, higher age group were common associated factors with anaemia. They suggested health education programmes should be introduced for safe maternal and foetal outcomes.

(Ramesh, Patil, & Joseph, 2017) studied and found that overall prevalence was 58.33%. multigravida women (70.67%) were have higher incidence of anaemia than primigravida women i.e; (46%). Severe anaemia was found higher among expectant mothers with multi gravidity (13.2%) than primigravidity (5.8%). They recommended that awareness should be created among women about complications of multi parity and its ill effects on mother as well as foetus and its relation with anaemia.

(Berhe et al., 2019) reported that out of 304 pregnant women only 7.9% were found anaemic and significantally associated factors were include the frequent pregnancies, history of recent abortion, illiteracy, third trimester and no intake of iron supplements.

METHODOLOGY

A total of 400 pregnant women attending ANC Clinics were randomly selected from various hospitals and public health centres (PHC) situated in the four blocks of Kurukshetra district i.e. Thanesar, Pehowa, Shahabad and Ladwa and included in the study. The names of hospitals were Lok Nayak Jai Parkash Civil Hospital Kurukshetra, Ashirwad Nursing Home, Sunders Hospital, Civil Hospitals of Ladwa, Pehowa and Shahabad and Public Health Centres of Umri and Deegh villages. The consent was taken from authorities and respondents before conducting the study. To identify anaemic subjects out of the sample, the haemoglobin level of each subject was determined from her medical records. Data was coded and analyzed with the help of SPSS and parametric and non- parametric statistical tools were used to analyzed the data.

RESULTS AND ANALYSIS

Table 1 Distribution of Respondents on the Basis of Gravidity

Gravida	Frequency	Percentage
Primigravida	221	55.3
Secondgravida	136	34.0
Multigravida	43	10.8
Total	400	100.0

The analysis suggested that majority of Respondents had their first pregnancy i.e. 55.3% were primigravida, whereas 34.0% secondgravida and 10.8% were multigravida i.e. who had their third pregnancy or more.

Table 2 Distribution of the Respondents on the Basis of Inter-pregnancy Interval

Interval	Frequency	Percentage
First Pregnancy	213	53.3
< 2 yrs	37	9.3
> 2 yrs	150	37.5
Total	400	100.0

After analysing the data based on the inter-pregnancy interval, it was observed that 53.3% of the respondents had the current pregnancy as their first whereas 9.3% of them had less than two years' inter-pregnancy interval and 37.5% had more than two years' interval between two pregnancies.

Table 3 Association between number of pregnancies and overall Prevalence of Anaemia

Number of Pregnancies		Overall prevalence of Anaemia		Total
		Anaemic	Non-anaemic	
1	Count	138	89	227
	% within Number of Pregnancy	60.8%	39.2%	100.0%
	% within Overall prevalence of Anaemia	52.9%	64.0%	56.8%
2	Count	90	42	132
	% within Number of Pregnancy	68.2%	31.8%	100.0%
	% within Overall prevalence of Anaemia	34.5%	30.2%	33.0%
3	Count	27	8	35
	% within Number of Pregnancy	77.1%	22.9%	100.0%
	% within Overall prevalence of Anaemia	10.3%	5.8%	8.8%
More than 3	Count	6	0	6
	% within Number of Pregnancy	100.0%	0.0%	100.0%
	% within Overall prevalence of Anaemia	2.3%	0.0%	1.5%
Total	Count	261	139	400
	% within Number of Pregnancy	65.3%	34.8%	100.0%
	% within Overall prevalence of Anaemia	100.0%	100.0%	100.0%
	χ^2 = 7.868 P-Value =.049	(df) 3 Table Value 7.82		

Note: * Value is significant at 5% level of significance.

Table depicts that 100% prevalence of anaemia was found in case of more than three pregnancies and (77.1%) women were found anaemic with three pregnancies whereas in case of two pregnancies it was 68.2%. only 60.8% respondents were found anaemic who had only one pregnancy. The chi-square value is 7.868 is more than the tabulated value 7.82. Hence, H_0 was rejected and H_1 was accepted and it was inferred that there was significant association was found between number of pregnancies and overall prevalence of anaemia. It may be, because of frequent pregnancy or less inter pregnancy interval can cause depletion of nutrient storage from pregnant women's body. Similarly, Nigerian study conducted by Idowu et.al. 2005 also found significant association between multi gravidity and anaemia.

CONCLUSION

Anaemia is a common health problem during pregnancy and associated with various risk factors. Multi gravidity is one of these which is a great risk factor and responsible for anaemia. It adversely affects the health status of pregnant women as well as their foetus. Prevalence of anaemia was higher among women with multi gravidity and significantly associated with it. It is highly recommended that awareness programmes about consequences of multiple and frequent pregnancies should organized by the government and family planning methods must be adopted by the parents**.**

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