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Prevalence Of Anemia In Lactating Mothers In Guntur District, Andhra Pradesh A Case Study.

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Abstract

Prevalence of anemia in India is among the highest in the world. Prevalence of anemia is higher among Lactating mothers,pregnant women and preschool children. Inadequate dietary iron,folate intake due to low vegetable consumption, perhaps low B_{12} intake and poor bioavailability of dietaryiron from the fibre, phytate rich Indian diets are the major factors responsible for high prevalence ofanemia. In India Iron deficiency is the most common single cause of anemia, the lactating mothers are suffers with maternal anemia this may impact the growth of infants. Major insight of the study is that anemia level of lactating mothers largely differs with the changes in lifestyle variables like food habits and work.

Key words: Anemia, Lactating mothers and Iron.

INTRODUCTION

Anemia is a serious nutrition problem affecting millions in developing countries and remains a major challenge for human health and social and economic development(1). Anemia is a late indicator of iron deficiency, so it is estimated that the prevalence of iron deficiency is 2.5 times that of anemia(2). The estimated prevalence of anemia in developing countries is 39% in children <5 years, 48% in children 5–14 years, 42% in women 15–59 years, 30% in men 15–59 years, and 45% in adults >60 years(3).

In India, anemia affects an estimated 50 percent of the population(4). In women, anemia may become the underlying cause of maternal mortality and perinatal mortality(5). Anemia also results in an increased risk of premature delivery and low birth weights. Iron deficiency in late pregnancy results in poor foetal iron stores(6).Latent iron deficiency is known to alter brain iron content and neurotransmitters irreversibly in fetal life and postnatal babies(7,8).

Lactating mothers are vulnerable to anemia. During the period of lactation, mothers are susceptible to anemia because of maternal iron depletion and blood loss during childbirth(9).Studies have shown that, although breast milk is not a good source of iron, the concentration of iron in breast milk is

independent of maternal iron status. This indicates that the quality of breast milk is maintained at the expense of maternal stores(10).Postpartum anemia is highest in mothers who are anemic during pregnancy(11). Furthermore, lactating mothers are highly susceptible to iron depletion if the energy and nutrient intake in their diets is inadequate. Lactating mothers begin the postnatal period after having iron depleted through the continuum from pregnancy to childbearing(12). A study from South Africa showed that iron status was associated with depression, stress and cognitive functioning in poor African mothers during the postpartum period(13).

Material and Methods

A descriptive study was carried out at Government general Hospital in Guntur district, Andhra Pradesh. Guntur, Government General Hospital, a tertiary care hospital with 1170 beds, catering to the needs of people coming from rural villages who are very poor. Study wascarried out during the period extending from August to February,2017, collected data from 200 Lactating mothers divided into two groups. Group-I Lactating mothers who fed their babies(0-6months),Group-II Lactating mothers who fed their babies(6-12months).Information related to socio-demographic factors, maternal factors and obstetric history (including status of anemia by Hb levels) was obtained by personal interview and from antenatal records and was recorded in standardized and pre-tested schedule.

Socio-demographic factors included in the study were maternal age, parity, birth interval, maternal education, husband's education, socioeconomic status, consanguinity of marriage and work during lactation.

Table -1: Socio demographic characteristics

		N-100
Age	20-25yrs	65
	25-30yrs	35
Education	Primary	55
	Secondary	37
	higher	8
Delivery	Normal	38
	Cessaraen	62
Husbands education	Primary	45
	Secondary	35
	higher	20

Financial status	Poor Middle	45 55

Results and Discussion

Table -2: Lactating mothers (0-6months) Total Hemoglobin percentage

GROUP-I (0-6months)	**N=100**	**Total Hb(g/dl)**	**Condition** (WHO/UNICEF/UNO.IDA, 1998)[14]
Lactating And sedentary	32	10.8 ± 0.08-0.3	**Normal** >10.1
Lactating And house keeping work	28	9.76 ± 0.05-0.5	**Mild** 8.1-10
Lactating And Agricultural works	40	7.8 ± 0.3-0.5	**Moderate** 6.5-8.0

values are significant at P > 0.5

Table -3: Lactating mothers (6-12months) Total Hemoglobin percentage

GROUP-II (6-12months)	N=100	Total Hb(g/dl)	Condition (WHO/UNICEF/UNO.IDA , 1998)[14]
Lactating And sedentary	40	9.8 ± 0.8-1	**Mild** 8.1-10
Lactating And house keeping work	52	7.8 ± 0.5-1	**Moderate** 6.5-8.0
Lactating And agriculture work	8	6 ± 0.5-1.5	**Severe** (4.0-6.4)

values are significant at P > 0.5

Lactating mothers who fed breast milk for 0-6months and doing normal works had lower odds of having anemia than those who fed breast milk for 1 year and doing agricultural work(tables-2-3). This may be due to growing child requires more milk. Lactating mothers who had been doing hard work had higher odds of having anemia than the others. This may be because of food taken by them is not sufficient.

Nutrition is the most important factor in child health promotion, growth and development; especially during the first 2 years of life, when the speed of neuropsycho motor growth and developments more(15).Nutrition of mothers and their children are intimately related. The effects of nutrition begin even before conception, promoting intrauterine growth and development, physical growth and m mental development, with repercussions for adulthood(16).66.0% of lactating mothers have been reported as having anemia in India(17). A study also found that breastfeeding increases the risk of anemia significantly(18). Poor eating habits play a major role in the development of iron deficiency anemia that is an important indicator of poor health status(19).

CONCLUSION

Anemia in women is considered as a serious health problem for them, for their families, society and for the economic development of the states as well as for the country. Iron supplementation programs have not been effective in reducing anemia prevalence(20,21). Government of India has started many intervention programmes to eradicate the problem of anemia in the country but most of the efforts are towards the supplementation of iron tablets to the women(22).

Anemia is a public health problem in lactating mothers. Screening for anemia, treatment of anemic women, and availability of food fortification (wheat flour with iron and folic acid), milk sugar and salt with iron to build long term iron stores remains the key to reduce anemia. Even cooking in cast iron utensils improves iron content in diet. The anemia control program needs to be implemented more efficiently in these regions.

DECLARATIONS

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