

International Journal of Scientific Research in Science and Technology

© 2018 IJSRST | Volume 4 | Issue 8 | Print ISSN: 2395-6011 | Online ISSN: 2395-602X

# Nutritional Assessment of Pregnant and Lactating Women in An Urban Slum of Muzaffarpur District, Bihar, India



Dr. Chanda Kumari M.A., Ph.D. (Home-Science) B.R.A. Bihar University, Muzaffarpur, Bihar, India

## ABSTRACT

Nutrition is an essential component which has a very important role in outcome of pregnancy. The health of women and mother are directly related to their status in the society. The nutrient supply during pregnancy to the fetus is a vital process that can affect the birth weight and development of the infant. During this physiological stage of life a women needs best foods available within the family. If a mother is malnourished, the quantity of breast milk produced is very limited. So adequate nutrition is very much required for well-being of mother and child. In important role in outcome of pregnancy. The health of women and mother are

directly related to their status in the society.<sup>1</sup> The nutrient supply during pregnancy to the fetus is a vital process that can affect the birth weight and development of the infant. During this physiological stage of life a women needs best foods available within the family. If a mother is malnourished, the quantity of breast milk produced is very limited. So adequate nutrition is very much required for well-being of mother and child.

## INTRODUCTION

In India, about 1/3<sup>rd</sup> women in reproductive age are undernourished and more than 60% are anaemic.<sup>2</sup> Maternal nutrition is related with many biological and socio-cultural factors adapted in the living community that affect women's dietary pattern, habits and practices. Frequent pregnancies and lactation leads to increased maternal mortality. Aims and objectives of the study was to assess dietary intake and pattern of pregnant and lactating women through detailed dietary assessment. To know the socio-demographic profile of pregnant and lactating women. To find out impact of various socio-cultural factors on dietary pattern of pregnant women.

Nutritional status is the condition of health of people which is attributed to the foods they habitually consume. It is the outcome of many direct and indirect influence of dietary, environmental, Social, cultural, genetic and most of other factors. The food consumption pattern of a community varies due to many factors, geographical environment etc. All these factors both individually and collectively affect the food consumed which, in turn, affects dietary behaviour and nutritional status. Adequate nutrition and healthf of women are of vital importance for efficiency, productivity and for the health of new born. Nutrition surveys conducted on women revealed that their diets were mainly based on cereals and deficit in protective foods. The low intake of protective foods may result in nutritional disorders. Iron deficiency anaemia is the first and foremost problem of women in the reproductive age groups. The literature report indicates that 70 per cent or more of Indian women suffer from nutritional anaemia due to iron deficiency (ICMR, 1990).

Pregnant and lactating women are nutritionally the most vulnerable group. Nutritional needs are high in some cultures, because they are responsible for much heavy work carried out with in efficient clumsy tools which continued throughout pregnancy. Cultivation, carrying food to market, collecting water and wood and pounding or hand-milling of foods, as well as cooking for the family and carrying young children are commonly women's task.

A great asset in our present nutritional situation is the remarkable ability of the poor Indian mothers to undergo the period of great stress and strain of pregnancy where the women has to meet the needs of the foetus and adjust herself to the changes occupying in her own system and later to breast feed her infant for prolonged periods, sometimes extending to nearly two years.

Child bearing and nursing place mothers in a nutritionally vulnerable position. The period of pregnancy is marked by high accumulation of nutrients in the form maternal and foetal tissue growth.

There are increasing expressions of concern in developing countries about malnutrition problem. In these countries stunting in adolescents ranging from 27-65 per cent. In India, BMI is low in adolescents ranging from 3-53 per cent. Adolescent girls are at high risk of developing iron deficiency anaemia due to growth, menstruation, pregnancy and lactation.

The important causes for this state of affairs are :- (i) large increase in population, (ii) to purchasing power, (iii) illiteracy ignorance, superstition and food fads, (iv) low per capita availability of land and productivity of soil (v) low level of industrialization and (vi) in sanitary conditions leading to large incidence of infectious diseases which aggravate malnutrition.

Adequate nutrition before and during pregnancy has greater potential for a long term health impact than it does at any other time. Material health is a complex, influenced by various genetic, social and economic factors, infections and environmental conditions, many of which may affect the foetal growth. Physiological adaptations result in improved utilisation of nutrients either through increased absorption, decreased excretion or alternations in metabolism.

Maternal nutritional plays a role in certain types of fetal malformations or spontaneous abortion. Because these abnormalities occur so early in pregnancy (during organogenesis) modification must be made before pregnancy begins.

Anaemia due to B<sub>12</sub> deficiency in pregnancy is uncommon. A single injection of 40mcg of B<sup>12</sup> is enough to produce a maximum response in 10 days in B<sub>12</sub> deficient mothers.

Studies conducted at National Institute of Nutritional (1992-93) indicate that severe pregnancy induced hypertension (eclampsia) are associated with higher incidence of vitamin A and protein deficiencies resulting in poor pregnancy outcome.

Lactating mother's nutritional requirement should meet (1) Her own daily needs, (2) provide enough nutrients for the growing infant and (3) furnish the energy for the mechanics of milk production. Diet of lactating mother.

Nutritional needs exceed during lactation compared to pregnancy. In six months a normally developing infant doubles the birth weight accumulated in 9 months of pregnancy.

Analysis of human milk have shown considerable variation in composition, not only among women but also in the same women over a time.

Caffeine is absorbed in human milk and can inhibit the letdown reflex. The metabolism of caffeine in the infant takes longer than in the adult. Irritability of the infant can result. Therefore, it is recommended that caffeine-containing beverages be limited to 2 cups per day for the lactating woman Chocolate, through it contains small amounts of caffeine, does contain theobromide, a stimulat similar to caffeine. Theobromide can cause the infant to become irritable and should be limited in mother's diet.

#### Contaminants

Drugs, pesticides herbicides and other contaminants are transferred to mother's milk. When DDT was used more, mother's milk also contained high amount of DDT. Oral contraceptives lead to lowered milk production and sedatives lead to a decrease in the strength of infant's sucking reflex. Almost all drugs taken by the mother appear to some extent in her milk and hence drugs are to be avoided during lactation.

## CONCLUSION

Maternal education had a very significant impact on the poor nutritional status of pregnant women and lactating mothers. Hence, strategies to encourage girl's education to be adapted by all the developing countries.

#### REFERENCES

- 1. Hassan, N. Huda. N. and Ahmad. K. 1985. Seasonal patterns of food intake in rural Bangladesh: Its impact on nutritional status. Ecol. Of Fd. And Nutr. 17 (2) :175.
- 2. Arora, A. and Verma, S. 1995. Energy and protein intake of elderly people of Ludhiana City. J. Res. PAU. 32(3): 328.

- 3. Rao KM, Balakrishna N, Arlappa N, Laxmaiah A, Brahmam GN. Diet and nutritional status of women in India. J Human Ecol. 2010;29(3):165-70.
- 4. International Institute for Population Sciences. National Family Health Survey (NFHS-3), 2005-06: India. International Institute for Population Sciences; 2007.
- 5. Kawatra A, Sehgal S. Nutrient intake of lactating mothers from rural and urban areas. Ind J Soc Res. 1998;39(2):91-9.
- 6. Chatterjee M. Indian women, health, and productivity. World Bank Publications; 1990.
- 7. Jood S, Bishnoi S, Khetarpaul N. Nutritional status of rural pregnant women of Haryana State, Northern India. Nutri Health. 2002;16(2):121-31.
- 8. Saxena V, Srivastava VK, Idris MZ, Mohan U, Bhushan V. Nutritional status of rural pregnant women. Ind J Commu Med. 2000;25(3):104.