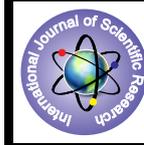


## Assessment of Nutritional Knowledge Regarding Maternal and Infant Feeding Practices Among Pregnant Mothers Visiting A Private Hospital in Chennai



### Home Science

**KEYWORDS :** Nutritional Education, Nutritional Knowledge, Feeding Practices

**Ms. Renny Jasper Mary** Assistant Professor, Ethiraj College for Women, Chennai- 600008 Tamil Nadu

#### ABSTRACT

*Adequate knowledge regarding various aspects of feeding practices during pregnancy and during infancy is very essential. The study was undertaken to assess the nutrition knowledge regarding maternal and infant feeding practices of pregnant women before and after imparting nutrition education in a private hospital in Chennai. An interview schedule was used to collect the information of the subjects. Nutrition education was conducted on topics such as balanced diet, food grouping, nutrients in food, sources and its function, special nutrient requirement during pregnancy and lactation for mothers and importance of breastfeeding for infants. A questionnaire was used to assess the nutritional knowledge of the subjects. There was significant improvement in the knowledge of the subjects after imparting nutritional education. The use of visual aids and face to face counselling created a positive impact on the subjects. All the subjects had benefited from the nutrition education that was imparted which was seen in the improvement in their scores.*

#### Introduction:

Health and nutritional status of the population of a nation is an important indicator of development of the country. In India it is observed from various nutrition survey that the nutritional status of pregnant and lactating and infants is not satisfactory. This is probably due to lack of basic knowledge regarding proper nutrition and wrong customs prevalent in the community besides non availability and low intake of food.

Inadequate nutrition is the predominant factor leading to malnutrition, which can be expressed as either under nutrition or over nutrition. Under nutrition occurs when there is not only inadequate energy but also a lack or imbalance of specific food components and nutrients. In addition to sufficient energy, adequate supplies of macronutrients and micronutrients are required to promote optimum growth. The proportions and amounts of these nutrients may change according to the various stage of growth.

Under nutrition is an important factor responsible for high infant mortality rate, maternal mortality rate and also for low birth weight of infants. Appropriate nutritional practice on the other hand plays a pivotal role in determining optimal health and development of infants. (Bamji Ms, 2003). There is abundant epidemiological evidence that poor prenatal nutrition predisposes the offspring to diseases in its later life.

Nutrition is a multi - sectoral issue and needs to be tackled at various levels. Nutrition affects the development as much as development affects nutrition. It is therefore, important to tackle the problem of nutrition through direct nutrition intervention for vulnerable groups such as pregnant mothers. Adequate knowledge regarding various aspects of feeding practices during pregnancy and during infancy is very essential especially among females as they are going to influence the feeding practices of this vulnerable group. In order to bring about change in the knowledge and practices prevailing in this people regarding nutrition, an attempt was made to provide an awareness regarding maternal and infant feeding practices among the mothers who are visiting a private hospital in Chennai. The objective of the present study is to assess and impact nutritional knowledge regarding maternal and infant feeding practices among the pregnant mothers visiting city hospital.

#### Materials and Methods:

Experimental research design was used in the assessment of nutrition knowledge, regarding maternal and infant feeding practices of pregnant mothers visiting city hospital before and after imparting nutrition education. Forty subjects were selected using purposive sampling technique. In this method of sampling, the investigator purposively chooses particular units of the universe for consisting a sample on the basis that one will be a typical representation of the whole (Kothari CR, 2004).

The subjects included were all pregnant mothers in the age range of 18-30 years doing sedentary activity visiting the Chen-

nai city hospital. An interview schedule was used to collect the information regarding general information, socio-demographic details medical history, diet pattern and life style pattern of the subjects. Anthropometric measurements such as height, weight of the subjects were assessed. Nutritional intake of the subjects was assessed by 24 hour dietary recall method and compared with the recommended dietary intake (Gopalan, 2005). Nutrition education was conducted on topics such as balanced diet, food grouping, nutrients in food, sources and its function, special nutrient requirement during pregnancy and lactation for mothers and importance of breastfeeding for infants. Various visual aids like posters, charts, flip charts and models and face to face counselling were used for nutrition education. A pre-test post-test questionnaire containing questions on above mentioned topics was used to assess the nutritional knowledge regarding maternal and infant feeding practices of the subjects before and after imparting nutrition education. The questionnaire was prepared in such a way that it covered areas such as balanced diet, food grouping, nutrient content of food, functions of nutrients, special nutrient requirement during pregnancy and lactation for mothers, importance of breast feeding. The questionnaire was framed in local language (Tamil) so that the participants could understand. The subjects were individually interviewed by the researcher to collect information. The scores of pre-test and post-test on different topics were collected processed, tabulated and subjected to analytical procedures such as arithmetic mean, standard deviations and paired test.

#### Results and Summary:

In the study, the subjects included were all pregnant mothers in the age range of 18-30 years doing sedentary activity. It is also seen that the literacy level of the subjects are also varied and all the subjects have a basic education at least up to fifth standard. Socio economic status of the subjects was assessed by using HUDCO classification which revealed that the subjects of the study belonged to high income group in majority and very less percent to low income group. The nutritional status of an individual is influenced by educational level, income and family size. In this study, the educational level of the subjects were satisfactory, the subjects belonged to middle and high income groups and nuclear families. The subjects had the basic education to opt for their food choices and had the purchasing power to procure their food commodities. It is necessary to impart proper nutritional knowledge for the selection of healthy foods during pregnancy in order to avoid unhealthy eating practices. The nutritional demands of the mothers are different according to their gestational age. It is necessary for the subjects to know about their actual nutritional need in their respective trimester. Most of the subjects had certain symptoms like nausea, loss of appetite, heart burn and constipation which hindered them to have their regular food leading to inadequacy in diet.

In the study, the Anthropometric measurements revealed that the majority (87.5%) of the subjects had normal weight gain every month until now. This indicates the subjects were not at risk nutritionally.

Dietary assessment showed that the subjects had deficit in micro nutrient intake especially iron and so it is essential to counsel them to increase their intake in order to meet the demands of the both mother and fetus. It is seen that subjects included all the food groups like cereals, pulses, fruits and vegetables, milk and milk products, fats and sugars in their diet but they were not aware of the number of servings to be taken. The subjects must be counseled about the number of servings to be included in their diet with the help of food guide pyramid.

**Table 1**  
**Nutrient intake of the subjects**

Nutrients	Mean $\pm$ SD
Energy (kcal)	1803.05 $\pm$ 238.70

**Table 2**  
**Assessment of Nutritional knowledge of pregnant mothers**

Topics	Pre -test Mean $\pm$ SD	Post -test Mean $\pm$ SD	Paired test	Level of significance
Balanced diet and food groups	1.8750 $\pm$ .1.47	4.3928 $\pm$ 1.86	11.396	Significant at 1% level
Nutrients, sources and its functions	3.2128 $\pm$ .0.957	9.3928 $\pm$ 1.33	13.396	Significant at 1% level
Special nutritional requirement during pregnancy and lactation	2.8228 $\pm$ .0.67	15.0028 $\pm$ 1.563	7.696	Significant at 1% level
Importance of breast feeding	7.1000 $\pm$ 2.57	9.7500 $\pm$ 1.31	6.032	Significant at 1% level
Overall Nutritional Knowledge before and after imparting nutrition education	22.00 $\pm$ 7.96	32.70 $\pm$ 3.70	7.527	Significant at 1% level

Tailored nutrition education is effective in changing diet. Face to face counseling as a part of tailored nutrition education has always produced a positive impact among less educated individuals. Female education also has a strong inverse relationship with infant mortality rate. Educated women have greater roles in household decision making, particularly those relating to nutrition and feeding practices.

Protein (g)	58.82 $\pm$ 18.967
Carbohydrate (g)	358.93 $\pm$ 189.29
Fat (g)	33.65 $\pm$ 180.29
Iron (mg)	20.51 $\pm$ 7.08
Calcium (mg)	510.39 $\pm$ 143.38

There was significant improvement in the knowledge of the subjects after imparting nutritional education on balanced diet, food groups, nutrients, sources and its functions, special nutrient requirements during pregnancy and lactation for mothers and importance of breast feeding.

Therefore emphasis on women's education particularly nutrition and health education should provide the bedrock of the nation's nutritional intervention. The use of visual aids like posters, charts, flip charts and models and face to face counseling created a positive impact on the subjects. Therefore it can be concluded that this study had a very good impact on the subjects. All the subjects had benefited from the nutrition education that was imparted which was seen in the improvement in their scores.

## REFERENCE

1. Bamji M.S, Rao N.P, Reddy V, Textbook of Human Nutrition, Oxford & IBH Publishing Company, New Delhi, pp 350-360, 1996. | 2. Gopalan C, Sastri B.V, Bala Subramanian S.C, Nutritive Value of Indian Foods, National Institute of Nutrition, Hyderabad, 2005. | 3. HUDCO, Housing and Urban Development Corporation, 1994, NA. | 4. Kothari C.R., Research Methodology – Methods & Techniques, First edition reprint, Wishwa Prakashan, New Delhi, pp 68-84, 2004 |