

## IMPACT OF NUTRITION EDUCATION PROGRAMME ON LACTATING WOMEN (0-12 MONTHS) OF BARAN DISTRICT OF RAJASTHAN

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### ABSTRACT

The present study was conducted with an objective to assess nutritional status of lactating women and the impact of nutrition education programme on maternal nutritional knowledge. The study was conducted at Kishanganj and Shahbad panchayat samities of Baran district of Rajasthan. One twenty participants ranging between 18-45 years lactating women (0-12 months) were selected for the present study. 120 lactating women were selected for imparting nutritional education, respectively. Total 120 lactating (0-12 months) women from both the Panchayat samities were selected for judging the impact of nutrition education, as per the objective. Pre-testing was done, which revealed a poor knowledge level of respondents i.e. 81.66% (0-6 months) and 68.34% (6-12 months). In post test, nutrition education was imparted to the lactating women, which showed marked improvements, with obtaining high scores of (56.67% in 0-6 months), (63.34% in 6-12 months), and there was a significant difference in pre and post knowledge of lactating women. The nutrition education programme made a significant impact on nutritional knowledge of lactating women (0-12months), as the post test knowledge was found high in all aspects.

**KEYWORDS:** Lactating Women, NPNL, Nutrition Education Programme

### INTRODUCTION

About half of the World's total population of indigenous people, often referred as tribals, is living in India. The tribal population in Indian language known as "*Adibasi*", stands for the original inhabitants, constitutes 8.1 per cent of the total Population of India. A general feature of the tribal population of the country is their exclusive geographical habitat. But there are certain communities among them, who live in more or less total isolation in a lifestyle, which shows only a little change from that of centuries ago. Most of them are small communities with relatively low growth rate compared to rest of the population. Government of India identified a total of 72 such tribal communities, as primitive tribes on the basis of low growth rate, pre agricultural level of technology and extremely low level of literacy. The Shariya is one of those primitive tribes inhabiting 'Baran' district in the State of Rajasthan. The total population of Shariya is 79,312 with a sex ratio of 951 females per 1000 males. A majority (93%) of the Shariya population is the inhabitants of Kishanganj and Shahbad blocks of Baran district. The health problems of any community are influenced by the interplay of various factors, including social, economic and political ones. The poor are caught in a vicious cycle of: poverty breeds ill-health and ill-health keeps poor people poor (Wag staff 2002). Health and nutrition are important elements in the development process. Both nutrition and health increases life expectancy, which is most important for development. Healthy and nutritious well-fed population is indispensable for economic growth and development of a country. The health problems of any community are influenced by the interplay of various factors, including social, economic, biological and political ones.

Food is the most basic necessity of life. Every human being needs a minimum amount of it for existence and a balance diet to maintain sound health. But unfortunately, where there are availability issues there is a great deal of deprivation and ignorance among the rural masses about a balanced diet. Normally, this leads to various health problems, which ultimately affects the economic growth and prosperity of a country. Food consumption is a dynamic process and is greatly influenced by size and composition of household, number of earning hands, prices of food items, educational level, geographical, cultural and climatic conditions in the region, etc.

Women with poor health and nutrition are more likely to give birth to low weight infants. They are also less likely to be able to provide food and adequate care for their children. Finally, a women's health affects the household economic well-being and as women with poor health will be less productive in the labor force (Rao et al. 2010). The majority of antenatal women was moderately anemic (58.38%), and was under 20 years of age Khan et al. (2014). It includes iron deficiency anemia, vitamin deficiency, also calcium deficiency, malnutrition and some allergic diseases affect to the lactating mother. These diets should be included in the daily diet for the lactating mothers to prevent the deficiency diseases, (Bose, 2010). Therefore, a survey was carried out by the National Institute of Nutrition (NIN) during October – November 2004, with an objective to assess the diet and nutritional status of Saharia tribal lactating women. Lactation makes considerable nutritional demands on the tribal mother. The success of lactation as well as the health status of the infants depends on the type of diet consumed by women during pregnancy and lactation period. The maternal diet is significantly important during lactation. The quality and quantity of milk secretion depend upon maternal diet. Lactating mothers need of nutrients is more than the pregnancy period, and if this additional requirement of nutrients foodstuff isn't fulfilled lactation causes malnutrition in lactating women. There is a paucity of information on diet and nutritional status of women, including non-pregnant, non-lactating (NPNL), pregnant and lactating women (less than 12 month of lactation). Therefore, there is a need to assess the diet and nutrition profile of lactating women in tribal area of Baran district Rajasthan.

Hence, the present study endeavors to assess the diet and nutritional status of lactating woman. Keeping in mind the above facts, the present study was planned with the following objectives

To impart nutrition education to the lactating women and assess the knowledge gained.

## **METHODOLOGY**

The present study was conducted in Baran district of Rajasthan. The study was conducted in Kishanganj and Sahahbad panchayat smities of Baran district (Rajasthan). The random selection method was used in selection of village as well as sample.

### **Nutrition Knowledge of Lactating Women**

In the present study, existing level of nutrition knowledge of the respondents was assessed with the help of a questionnaire. The Questionnaire was developed under the guidance of experts and with due consideration of literature. The questionnaire was based on general questions related to foods, cooking practices, balance diet and nutritional knowledge like nutrient deficiency disorder and nutritional practices.

### Delivering of Nutrition Education

Respondents were informed about the purpose of imparting nutrition education. Nutrition education was imparted to selected lactating women respondents of one of the selected villages for one day in the village aganwaadi center. An information package was developed using selected messages, and for this, in depth content was collected from the relevant and available literature.

### Data Collection Was Done in Two Phases

- In the first phase, data regarding the nutritional status of lactating women was obtained.
- In the second phase, pre testing the nutritional knowledge of the women with the help of appropriate tool, and then after imparting nutrition education of lactating women, the same structured questionnaire was used, for post testing their nutritional knowledge level. Impact of nutrition education was assessed through change in scores of the lactating women before and after imparting the nutrition education.

## RESULTS AND DISCUSSIONS

### Impact of Nutrition Education Programme on Selected Subjects

Nutrition education is one of the effective intervention strategies for bringing about nutritional knowledge, attitudinal and behavioral changes in the individual. Nutrition education is one of the effective means of alerting individuals, particularly women and communities of the need of nutrition improvement. It is the step towards improving food habits.

The ultimate goal of nutrition education is to aid individual to effectively apply nutritional knowledge, attitudes, beliefs and practices and modify their diets. A well planned and well delivered nutrition education programme targeted at lactating women may produce lactating women who are motivated, knowledgeable, and skilled and who can be empowered to make informed decisions on nutritional issues. Lactating women should be the important target group in any nutrition education programme because, she has to play a critical maternal role. This is because, lactating women are the founding pillars of the family and the health care system and in addition, they produce, prepare and serve food and maintain the environment. Similarly, lactating women are the household food securities in many communities. This justifies the choice of lactating women as the primary target group for the present study.

### Nutritional Knowledge of Respondents

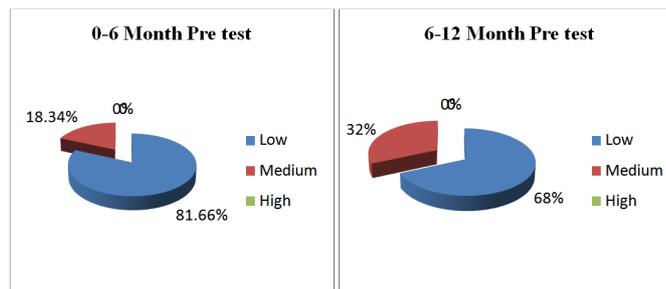
To know the overall nutritional knowledge of respondents, three knowledge categories were made i.e. low, medium, and high on the basis of the score obtained by respondents in the knowledge test. Nutritional knowledge of the respondents was assessed before and after delivery of the nutrition education programme and change in knowledge scores were calculated.

**Table 1: Percentage Distribution of Respondents on the Basis of Knowledge Score**

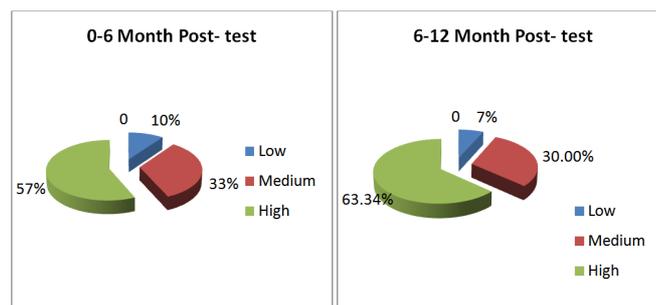
Categories of Knowledge Score	0-6 month (n=60)		6-12 month (n=60)	
	Pre (frequency)	Post (frequency)	Pre (frequency)	Post (frequency)
Low	49 (81.66%)	6(10%)	41 (68.34%)	4 (6.67%)
Medium	11(18.34%)	20(33.34%)	19(31.67%)	18(30%)
High	0 (0%)	34(56.67%)	0 (0%)	38(63.34%)

## Result

It is clearly evident from the table that in pre-testing, where there was absence of knowledge. The results were favoring low scores in lactating women (0-6 month) and (6-12 month) i.e. 81.66% and 68.34%, respectively followed with medium scores of 18.34% and 32%, respectively and 0% high score in both the categories. This result clearly depicts the low level of education in both sets of 60-60 respondents. On the other hand, there is a highly significant change in the knowledge score after imparting of nutrition education with a high scoring of 56.67% (0-6 month), 63.34% (6-12 month), and medium scoring by 33.34% (0-6 month), 30% (6-12 month), and low scoring of 10% (0-6 month), 6.67% (6-12 month).



**Figure 1: Overall Knowledge of Lactating Women during Pre-Test (0-12 Month)**



**Figure 2: Overall Knowledge of Lactating Women during Post-Test (0-12 Month)**

### Gain in Nutritional Knowledge of the Respondents

As it is clear from the research topic that, the researcher wants to highlight the impact and importance of nutrition education, and therefore the main purpose of selecting lactating women (0-12 months) was

- Results can be easily depicted
- A clear difference can be estimated on the basis of the results
- Neglected group will show that there is a need for education, whereas on the other hand, selected lactating women will show the impact of education upon them

Lactating women (120) were chosen from the selected village. In order to achieve desired results, this group of the respondent ladies was not given any nutritional knowledge and was devoid of any kind of nutritional knowledge. Afterward, there was pre as well as post test done. In order to check the difference in knowledge on the basis of achieving scores, paired t- test was used to estimate the desired difference. Data in table 1 shows the difference in their pre and post knowledge. One hundred and twenty ladies from another village were selected, in order to highlight the impact and

importance of nutritional knowledge. Therefore, they were supplemented with nutrition education. After conducting their pre-test, data in the table shows their gain in post scores.

**Table 2: Impact of Education on Knowledge Scores of Respondents (N=120)**

<b>Lactating Women (0-6 Month)</b>	<b>Mean± SD</b>	<b>t Value</b>
Pre Test	3.96±1.72	13.64*
Post Test	11.26±3.71	
<b>Lactating Women (6-12 Month)</b>	<b>Mean± SD</b>	<b>t Value</b>
Pre Test	4.28±1.89	16.29*
Post Test	12.31±3.20	

\* Significant at 0.5 per cent

Table 2 and figures 1 and 2 give a consolidated picture of the nutritional knowledge scores obtained by the respondents before and after delivery of nutrition education programme to lactating women (0-12 month). As observed from Table 2 that, initially or in pretest, all the respondents had a low level of overall nutritional knowledge. After the delivery of nutritional education package and from the post test scores, it can be stated that the majority of lactating women i.e. 56.67% (0-6 month) and 63.34% (6-12 month) lactating women shifted to high level of knowledge, thus significant difference was found in the pre and post knowledge scores of respondents.

The study was conducted by Maurya and Rathore 2014 on “Effectiveness of self instructional module on knowledge among parents of primary school children about identifying Attention deficit hyperactivity disorder”. The study was conducted with 60 parents categorized as 30 controls and 30 experiments, and in the same way, control did not receive any knowledge of attention deficit hyperactivity disorder. In pre-testing, parents in both groups were not aware with the subject, as it resulted isn’t’ value of 1.34 with a p value of 0.14, with no significant difference, and in post-test, there was a significant difference to the t value of 6.17 and p value of.000. The study so far conducted with the objective of impact of nutritional knowledge on selected respondents clearly signifies the need of nutritional knowledge. As it is evident from the above results that, those who were deprived of education remain low in score, be it in pre or post score, whereas, on the other hand, those who availed the nutritional knowledge showed significant changes in their score.

## CONCLUSIONS

Nutrition is one of the most important aspects of life. It not only helps individuals to live a sound and healthy life, but also guide us to cater different nutritional problems. Women are always on marginal lines when talked about nutrition. It is due to their selfless love, generosity values towards their families that they neglect the urgent need of nutrition. On the other hand, the lifestyle of working women is so hectic and scheduled that, it overpowers their nutritional needs. A study entitled **An exploratory study of diet and nutritional status of Shariya tribe lactating women in Baran district, Rajasthan** was carried out with an objective to impart nutrition education to the lactating women and assess the knowledge gained. For finding the impact of nutritional knowledge, the respondents were purposely categorized under 0-6 month and 6-12 month lactating women of sixty-sixty respondents, making a total of one-twenty respondents. A questionnaire was prepared and interview schedule was carried out for data collection. At first, pre-testing was done on lactating women (0-12 month), which revealed that respondents in lactating women (0-12 month) were having a low knowledge with the scores of 81.66% (0-6 month), and 68.34% (6-12 month), respectively. This shows that there is an absence of nutritional knowledge. Further scores were calculated after imparting nutrition education to 0-6 month and 6-12

month lactating women. There was a marked change in score with high score of 56.67% (0-6 month), 63.34% (6-12 month) and medium score is 33.34% in 0-6 month and 30% in 6-12 month.

From the above results it can be concluded that

- The nutritional knowledge of the participant was very low.
- After imparting nutritional knowledge, remarkable changes were observed with high scores in lactating women.

## RECOMMENDATIONS

- Studies can be conducted to check the effective working of aganwadi centers in distributing the necessary facilities provided by the government.
- As the findings of the present study indicates that there is a significant lack of nutritional knowledge among education deprived respondents, awareness about nutrition and balanced diet could be created among respondents, according to their requirement.

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