

Impact appraisal of nutrition training programme on knowledge of rural women

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■ **ABSTRACT** : Malnutrition and under nutrition is a serious problem in both urban and rural India. This can be solved through approaches like institution of Specific feeding programme to overcome malnutrition and to increase food availability, to improve environmental sanitation and impart nutrition education to the women and increase their income. A study was conducted in Deoria district of U.P. state to know the extent of knowledge of rural women in relation to nutrition and to ascertain the extent of gain in knowledge of rural women through nutrition training programme. The findings of this study highlights that there is a significant gain in knowledge of rural women through nutrition training programme. The findings of this study highlights that there is a significant gain in knowledge of all the components of nutrition domain included in the training programme. It can be suggested that for greater generalization of the findings of this study. Similar type of training programmes should be conducted at different part of the country and over a wide geographical area.

■ **KEY WORDS**: Impact, Knowledge, Rural women, Nutrition training programme

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Nutrition is defined as the scientific study of food and its relation to health. It can also be defined as the science which deals with these processes by which body utilize food for energy, growth and maintenance of health. Good nutrition requires a satisfactory diet which is capable for supporting the individual consuming. It is a state of good health by providing the desired nutrients in required amounts. It must provide the right amount of fuel to execute normal physical activities. If there is a wrong proportion of one or other of these nutrients for a longer time, then the body can face a condition of malnutrition. Nutrition plays

an important part of our life. Quality of our health depends on nourishment that we provide to our body. Nutritional well-being is a sustainable force for health and development and for maximization of human genetic potential.

Malnutrition and under nutrition is widely prevalent in the urban rural and slums areas of the country, especially amongst vulnerable section of the population namely the preschool, school going children, expectant and nursing women lack of sanitation hygiene and knowledge about nutrition among the attested groups as well as widespread of resources are the major factors

contributing to such nutrition deficiencies. A desirable change in the situation can be achieved by two major approaches. Institution of specific feeding programme to overcome malnutrition and to increase food availability, to improve environmental sanitation and impart nutrition education to the women and increase their income.

Malnutrition and under nutrition can be overcome by increasing the nutrition knowledge of rural women because a woman plays an important role in the selection, preparation and serving of food of the members of the family. Nutritional knowledge has great importance in proper management of food, application of balanced diet and specific requirements of different nutrients for people of different age groups. Nutrition education should be practical and adopted to suit the socio-economic conditions, food habits and local food resources. It should include effective demonstration in which mothers take an active part. It should form a part of the community development programme. Keeping this in view a study was conducted to know the impact of knowledge of rural women in relation to nutrition and to ascertain the extent of gain of knowledge of rural women through nutrition training programme.

■ RESEARCH METHODS

The present study was undertaken in the Salempur and Bhatparrani block of Deoria district of Uttar Pradesh state. Three villages were selected from each Block randomly. Six villages *i.e.* Malhani, Laxmanchak, Majhauri Raj, Chapiya, Dharamkhorkaran and Jamuniadih were selected, in which twenty women from each village were selected for this study. Therefore, the total sample for the study was 120. The data were

collected with the help of an interview schedule. A knowledge test was developed to ascertain the knowledge of the women on nutritional practices. The gain in knowledge was operationalized as the difference between the knowledge regarding various aspects of nutritional practices possessed by the respondents before and after the exposure of nutrition training. To measure the knowledge a respondent was given a score of one for correct answer and zero for wrong answer. This, the summation of all scores treated as the knowledge of the respondent at pre-exposure stage. Similarly post-training knowledge score was calculated separately. Suitable statistical tools and techniques were used for analysis of data.

■ RESEARCH FINDINGS AND DISCUSSION

Extent of knowledge about the effects of nutrition training the knowledge of the respondents was measured with the help of a standardized test at three periods of interval that is pre-training, immediately after training and 15 days after training programme. A score of one was given for each correct answer on the basis of score respondents were classified as having high (66.6% and above), medium (33.3 to 66.6%) and low (0 to 33.3%) level of knowledge as presented in Table 1.

Table 1 reveals that the majority 76.66 per cent of the respondents had low level of knowledge about nutritional practices followed by medium that is only 23.33 per cent per cent while none of the respondents obtained high level of knowledge score related to nutritional practices before participating in nutrition training programme. This table also highlights that mean knowledge score of respondents *i.e.* 13.88 before training programme.

Table 1 : Pre training knowledge score of respondents

Knowledge level	Frequency	Percentage
Low (0 to 33.3%)	92	76.66
Medium (33.3 to 66.6%)	28	23.33
High (66.6 to above)	00	00.00
Mean	13.88	

Table 2 : Post training knowledge score of respondents

Knowledge level	Frequency	Percentage
Low (0 to 33.3%)	00	00.00
Medium (33.3 to 66.6%)	43	35.83
High (66.6 to above)	77	64.17
Mean	32.07	

It is clear from Table 2 that after exposure of nutrition training programme majority of respondents 64.17 per cent had high level of knowledge score followed by 35.83 per cent medium level of knowledge score, while none of the respondents obtain low level of knowledge score related to nutritional practices. This table also highlights that mean knowledge score (32.07) respondents after exposure of training programme.

It is clear from Table 3 that 55.83 per cent of respondents had medium level of knowledge followed by high level that is 14.16 per cent while the none of the respondents obtain low level of knowledge related to nutritional practices after 15 days of training. After 15 days of training the mean score of knowledge of respondent were 29.44. The mean score decline slightly after 15 days of training programme.

Extent of gain in knowledge :

It is clear from Table 4 that gain in knowledge was determined by subtracting the pre training knowledge score from knowledge score obtained immediately after training. Based on the differential score respondents were classified as high (66.6% and above), medium (33.3% to 66.6%) and low (0 to 33.3%).

It has been seen from the Table 5 that the retention

in knowledge was low in respect of 31.66 per cent of the respondents, medium in 57.50 per cent while 10.83 per cent of respondent retained high level of knowledge.

The data presented in Table 5 shows that the mean knowledge scores of total six villages of Bhatparrani and Salempur Block (three villages of each block) namely Malhani (V₁), Laxman Chak (V₂), Majhauri Raj (V₃), Chapiya (V₄), Dharamkhor Karan (V₅) and Jamuniadih (V₆) at three stages *i.e.* at Pre training, immediately after the training and 15 days after training. It is clear from the table that immediately after the training. There was sharp increase in the knowledge score. When the trainees were observed after 15 days of training it was found that in the village V₃ the knowledge retained maximum was 40.83 followed by village V₂ was 30.83 and V₃ (30.00), While in the village V₄, V₆ and V₅ the knowledge level declined slightly as is evident from the reduced mean knowledge score (27.50, 25.00 and 22.50), respectively.

Knowledge gained by rural women about different aspects of nutrition through nutrition training programme :

Table 6 indicated that before exposure of training majority of respondents had low level of knowledge

Table 3 : Knowledge score of respondents after 15 days of training programme

Knowledge level	Frequency	Percentage
Low (0 to 33.3%)	00	00.00
Medium (33.3 to 66.6%)	67	55.83
High (66.6 to above)	53	44.16
Mean	29.44	

Table 4 : Knowledge gained by respondents after training programme

Knowledge level	Frequency	Percentage
Low (0 to 33.3%)	38	31.66
Medium (33.3 to 66.6%)	69	57.50
High (66.6 to above)	13	10.83
Mean	27.41	

Table 5 : Mean knowledge score of respondents in selected villages

Villages	Mean knowledge score		
	Pre training	Immediately after training	15 days after the training
V ₁	7.50	31.66	30.00
V ₂	15.83	34.16	30.83
V ₃	20.00	44.16	40.83
V ₄	16.66	29.16	27.50
V ₅	10.83	25.83	22.50
V ₆	12.50	27.50	25.00

related to various aspects of nutritional practices. Such as balance diet, weaning food, conservation of nutrient, preservation of nutrients, hygiene, deficiencies, source, food fads and fallacies. Few of the respondents obtain medium level of knowledge while none of the respondents obtain high level of knowledge except food fads and fallacies. It also clears from the Table 6 that after exposure of nutrition training programme. Majority of the respondents had medium level of knowledge *i.e.* conservation of nutrients (93), food fads and fallacies

(83), preservation of nutrients (81), balance diet (76), deficiencies (72), hygiene (71), weaning food (70) and source (63) followed by high and low level of knowledge score.

In order to ascertain the impact of training programme on gain in knowledge. The pre and post mean knowledge scores of the recipients of the training was presented in Table 7.

Statistically significant differences were found among pre and post training mean score of all the aspect

Table 6 : Distribution of respondents according to knowledge in various of nutritional training programme (n=120)				
Sr. No.	Nutrition training programme	Class	Pre-exposure knowledge	Post-exposure knowledge
1.	Balance diet	Low (0-3)	107	24
		Medium (4-6)	13	76
		High (7-9)	00	20
2.	Weaning food	Low (0-1)	88	21
		Medium (2-3)	28	70
		High (4-5)	04	29
3.	Conservation of nutrients	Low (0-3)	111	11
		Medium (4-7)	9	93
		High (8-10)	00	16
4.	Preservation of nutrients	Low (0-2)	91	07
		Medium (3-4)	29	81
		High (5-6)	00	32
5.	Hygiene	Low (0-2)	98	11
		Medium (3-4)	22	71
		High (5-6)	00	38
6.	Deficiencies	Low (0-3)	114	07
		Medium (4-6)	06	72
		High (7-9)	00	41
7.	Source	Low (0-3)	120	18
		Medium (4-6)	00	63
		High (7-9)	00	39
8.	Food fads and fallacies	Low (0-1)	66	08
		Medium (2-3)	54	83
		High (4)	00	29

Table 7 : Comparison of mean score of pre training and post training knowledge of respondents				
Sr. No.	Aspects of nutrition training programme	Pre training (Mean)	Post training (Mean)	Difference
1.	Balance diet	1.50	4.80	3.30
2.	Weaning food	1.71	4.00	2.29
3.	Conservation of nutrients	1.60	5.21	3.61
4.	Preservation of nutrients during cooking	1.84	6.00	4.16
5.	Food hygiene	1.33	5.45	4.12
6.	Nutritional deficiencies	1.41	4.61	3.20
7.	Source of nutrients	1.26	5.71	4.45
8.	Food fads and fallacies	1.14	3.42	2.28

of nutrition training programme. The significant difference between pre training and post training mean score *i.e.* before and after the training programme confirms the fact that the respondents were able to gain sufficient knowledge at post training programme. The result of this study are in tune with the findings of Singh and Verma (1998); Singh and Leelavathy (1999) and Kumari *et al.* (2010).

Conclusion :

The significant increase in the knowledge of the farm women may be due to the intensive educational training efforts made by the trainers and also due to the realization of importance of these practices by the participants in raising the health status of their families, as the subject matter and content of the training was very much closer to what the women do in their daily routine. Besides, the nutrition training programme was made interesting and stimulating that it completely captured the attention and interest of trainees and motivated them to adopt the nutritional practices to the maximum extent possible.

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