

Extent of Knowledge of Farm Women on Nutrition

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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 Samastipur district of Bihar state to know the extent of knowledge rural women in relation to nutrition and to ascertain the extent of gain of 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 parts of the country and over a wide geographical area.

Key words : Rural women; Extent of knowledge; Nutrition training programme;

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 pre-school, school going children, expectant and nursing women. Lack of sanitation hygiene and knowledge about nutrition among the affected 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 women plays in important role in the selection, preparation and serving of food of the members of the family. Nutritional knowledge have great important in proper management of food, application of balance 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 active part. It should form a part of the community development programme. Keeping this in view, a study was conducted to know the extent of knowledge rural women in relation to nutrition and to ascertain the extent of gain of knowledge of rural women through nutrition training programme.

METHODOLOGY

The present study was undertaken in the Sarairanjan Block of Samastipur district of Bihar state. Three villages were selected in Sarairanjan block, randomly. Twenty five women from each training programme were selected from three sampled villages. Therefore, the total sample for the study was 75. The data were collected with the help of 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 trainings. To measure the knowledge a respondent was given a score of one for correct answer and zero for wrong answer. Thus, 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 & techniques were used for analysis of data.

RESULTS AND DISCUSSION

Extent of knowledge about nutrition practices: To assess the effects of nutrition training the knowledge of the respondents was measured with the help of standardized; test at the three period of interval that is pre training, immediately after training and 15 days after the training. A score of one was given for each correct answer. On the basis of score respondents was 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. Pre-training knowledge score of respondents

Knowledge Level	N	%age
Low level (0 to 33.3%)	58	77.33
Medium level (33.3 to 66.6%)	17	22.66
High level (66.6% and above)	00	00.00
Mean	11.5	
Range	2.32	

Above table reveals that the majority (77.33 per cent) of the respondents had low level of knowledge about nutrition practices followed by medium that is only 22.66 per cent while none of the respondent obtain high level of knowledge score related to nutritional practices before participating in nutrition training programme.

Table 2. Post training knowledge score of respondents

Knowledge Level	N	%age
Low level (0 to 33.3%)	00	00.00
Medium level (33.3 to 66.6%)	35	46.66
High level (66.6% and above)	00	53.33
Mean	34.74	
Range	18-51	

It is clear from Table 2 that after exposure of nutrition training package majority of the respondents (53.33 per cent) had high level of knowledge score, followed by (46.66 per cent) medium level of knowledge score, while none of the respondents obtain lower level of knowledge score related to nutrition practices.

It is clear from the Table 3 that 56 per cent of respondents had medium level of knowledge followed by high level that is 44 per cent while the non of the respondents obtain low level of knowledge related to nutritional practices after the 15 days of training. The

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table also highlights that mean knowledge score of respondent i.e. 11.5 before training increased to 34.74 after exposure of training. Range of knowledge score shows increase from (2 to 32) to (18 to 51) after the exposure of training. After 15 days of training the mean score of knowledge of respondent were 33.37. The mean score decline slightly after 15 days of training.

Table 3. Knowledge score of respondent after 15 days of training

Knowledge level	N	%age
Low level (0 to 33.3%)	00	00.00
Medium level (33.3 to 66.6%)	42	56
High level (66.6% and above)	33	44
Mean	33.37	
Range	18-50	

Extent of gain in knowledge : The 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%).

Table 4. Knowledge gained by respondents after training (n=75).

Knowledge level	N	%age
Low level (0 to 33.3%)	26	34.66
Medium level (33.3 to 66.6%)	43	57.33
High level (66.6% and above)	06	8.00
Mean	21.56	
Range`	8-44	

It has been seen from the Table 5 that the retention in knowledge was low in respect of 34.66 percent of the respondents, medium in 57.336 per cent while 8.00 per cent of respondent retained high level of knowledge.

Table 5. Mean knowledge score of respondents in selected villages

Village	Mean Knowledge scores		
	Pre-training	Immediately after training	15 days after the training
V1	8.20	31.88	29.56
V2	12.36	40.52	39.52
V3	14.08	31.84	31.04

The data presented in Table 5 shows the mean knowledge scores of trainees of three villages of Sarairanjan block namely Ramchandrapur (V1) Sarairanjan V2 and Khalishpur (V3) at three stages i.e. at pre-training phase, immediately after the training and

15 days after the training. It is clear from the table that immediately after the training, there was a sharp increase in the knowledge score. When the trainees were observed after 15 days of training it was found that in

the village V1 the knowledge retained was 29.56 while in the village V2 and V3 the knowledge level declined slightly as is evident from the reduced mean knowledge score i.e. (39.52 and 31.04) respectively.

Table 6. Distribution of respondents according to knowledge in various aspects of nutrition training programme. (N=75)

S. No.	Nutrition training programme	Class	Pre-exposure knowledge (n=75)	Post exposure knowledge (n=75)
1.	<i>Balance Diet</i>	Low (0-3)	74	21
		Medium (4-6)	01	44
		High (7-9)	00	10
2.	Weaning food	Low (0-1)	50	00
		Medium (2-3)	24	39
		High (4-5)	01	36
3.	Conservation of nutrients	Low (0-3)	73	13
		Medium	02	54
		High (8-10)	00	08
4.	Preservation of nutrients	Low (0-2)	70	04
		Medium (3-4)	05	55
		High (5-6)	00	06
5.	Hygiene	Low (0-2)	70	09
		Medium (3-4)	05	48
		High (5-6)	00	18
6.	Deficiencies	Low (0-3)	74	14
		Medium (4-6)	01	45
		High (7-9)	00	16
7.	Source	Low (0-3)	75	18
		Medium (4-6)	00	37
		High (7-9)	00	20
8.	Food fads & fallacies	Low (0-1)	42	06
		Medium (2-3)	33	20
		High (4)	00	25

Table 7. Comparative mean scores of pre-training and post training knowledge of respondents.

S. No.	Aspects of nutrition training programme	Pre-training (mean)	Post training (mean)	Difference	't'-value
1.	Balance diet	1.32	4.73	3.41	18.73**
2.	Weaning food	1.17	3.37	2.20	18.09**
3.	Conservation of nutrients	1.38	4.97	3.59	18.08**
4.	Preservation of nutrients during cooking	1.09	3.80	2.71	21.30**
5.	Food hygiene	1.08	3.72	2.64	20.14**
6.	Nutritional deficiencies	1.20	5.09	3.89	19.07**
7.	Source of nutrients	1.10	5.02	3.92	15.11**
8.	Food fads & fallacies	0.90	2.89	1.89	14.87**

** Significant at 1 per cent level of probability.

Knowledge gained by rural women about different aspects of nutrition through nutrition training programme : It indicates that before exposure of

training majority of respondents had low level of knowledge related to various aspects of nutritional practices. Few of the respondents obtain medium level

of knowledge while none of the respondents obtain high level of knowledge. It also clear from the Table 6 that after exposure of nutrition training programme, majority of the respondents had medium level of knowledge followed by high and low level of knowledge score.

In order to ascertain the impact of training programme on gain in knowledge paired 't' test was employed. The pre and post mean knowledge scores of the recipients of the training was calculated and paired 't' value are presented in Table 7.

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

Indian Res. J. Ext. Edu. 10 (1), January, 2010 sufficient knowledge at post training programme. The results of this study are in tune with the findings of *Singh and Verma (1998)*, *Singh and Leelavathy (1999)*.

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 mater and content of the training was very much closer to what the women do in their daily routine. Besides, the nutrition training package was made interesting and stimulating that it completely captured the attention and interest of trainees and motivated them to adopt the nutrition practices to the maximum extent possible.

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