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Impact of Nutrition Education on Knowledge of Rural Women

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ABSTRACT

Nutrition Education is any combination of educational strategies, accompanied by environmental supports, designed to facilitate voluntary adoption of food choices and other food and nutrition related behaviors conducive to health and well being. Nutrition education is delivered through multiple venues and involves activities at the individual, community, and policy levels. A longitudinal study indicated the impact of nutrition education on rural women of Salempur block of Deoria district. A special nutrition training programme revealed that nutrition education affected an increase in knowledge gain, the motivation of women improvement reflected in the selection of food, cooking practices with increase in nutritive value of food. The most significant improvement was observed in the fuel consumption pattern, balanced diet and conservation of nutrients. It was observed that rural women motivated and guided efficiently. It would definitely faster desirable change in them which ultimately results in bringing improvement in the nutritional status of community as a whole.

Keywords: effect, knowledge of rural women, nutrition education,

INTRODUCTION

In India food and nutrition problems continue to be formidable. Malnutrition and under nutrition is widely prevalent in the urban, rural and slums areas of the country, especially amongst vulnerable selection 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 area the major factors contributing to such nutrition deficiencies. Malnutrition and under nutrition can be overcome by increasing the nutrition knowledge of rural women because a women plays an 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 balanced diet and specific requirements of different nutrition for people of different age groups. Nutrition education should be practical and adopted to suit the socio- economic conditions, food habits and local food resource.

Women's traditional knowledge about health care and nutrition spread to be in view of high risk of malnutrition and diseases. Women faces all the critical stages infancy, childhood, adolescent and reproductive phase, focused attention is to be paid on meeting the nutritional demands in all stages of life cycle, ignorance leads to heavy infant mortality, high percentage of maternity deaths, dirty homes, extravagant customs, neglect in education especially of girls and unplanned large families.

Developing awareness through the educational programmes will helps to make women trained in every sphere of life. The intervention programme can help them to identify their problems and also to tackle these problems in more tangible manner. Keeping in view the present study has been undertaken with following objectives, to find out the existing nutritional knowledge in women at various levels, to develop a nutritional intervention programme for farm women empowerment in rural sector and to assess the knowledge gain through intervention programme by pre and post test.

METHODOLOGY

The present study was conducted in Salempur block of Deoria district. Out of twenty block Salempur block selected purposively. From Salempur block three villages namely Malhani, Bankata mishra and Chatrapura randomely selected for this study. Rural women in selected village were having low awareness in relation to health and nutrition. In Salempur block there are 228 revenue villages. Out of them three villages were selected purposively because of linking facility of the *Krishi Vigyan Kendra*. Ninety rural women selected from each village. Thus, total 270 rural women who were ready to participate and interested to be involved in training

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programme for their self empowerment were purposively selected for this study. The women aged 20 to 40 years were selected belonging to middle to low economic group. As a preliminary step good rapport was established with the key leaders, *gram pradhan* & women of the village. A baseline survey was conducted by making home visits and interviews to elicit information on socio-economic background of the families. A semi structured pre-tested questionnaire was designed and administered to gather data on socio-demographic profile and to check the nutritional knowledge regarding various aspects of nutrition, process to deal with scientific approach is followed to accomplish the objective of the study.

Table 1: Developing a nutrition intervention programme.

Area of training	Training Method	Aids
Solar cooking	Demonstration	Working model + pictures display
Cooking on smokeless *Chulha*	Demonstration	Group discussion
Concept of food &nutrition	Interactive lecture	Exhibition & Charts
Balance diet	Group discussion	Poster & charts
Nutrients present in food	Demonstration	Poster & charts
Importance of fruits & vegetables in daily diet	Interactive lecture	Folder, leaflet & blackboard
Cooking methods	Group discussion & demonstration	Pictures & charts
Preserving food techniques	Demonstration & question, Answer session	Leaflet
Storage facility	Group discussion	Booklet, folder
Measure to preserve nutrients & to increase the nutritional values	Interactive lecture	Group discussion
Nutritious recipes	Demonstration and group work	Folder, pamphlet & specimen

The developed training was pre-tested with 30 rural women from Salempur block of Deoria district. Purpose of pre-testing was to check the clarity of visual message, content etc. The questions were grouped under one heading for getting the scientific information on various nutrition related topics. Different training methods supplemented with visual aids were used.

RESULTS AND DISCUSSION

During this study it was observed from table 2 that the highest difference (37.78%) in gain in knowledge was found in village Malhani . The lowest awareness related to consumption pattern was found in village Chatrapura prior to training 28.88 per cent.

Table 2: Gain in Knowledge regarding fuel consumption pattern.

Village	Pre training		Post training		Gain in knowledge	
	f	%	f	%	f	%
Malhani	22	24.44	56	62.22	34	37.78
Bankata mishra	36	40.00	52	57.77	16	17.77
Chatrapura	17	28.88	38	42.22	21	23.34

The reason was that the women were uneducated and they do not want to bring change in their household pattern. Women of Bankata mishra were more educated. There was no much difference in gain in knowledge (17.77%) contradicting with the results of other two villages.

Table 3: Gain in knowledge regarding health hazards by fuel

Village	Pre training		Post training		Gain in knowledge	
	f	%	f	%	f	%
Malhani	24	26.66	68	75.55	44	48.89
Bankatamishra	29	32.22	72	80.00	55	47.78
Chatrapura	31	34.44	68	75.55	37	41.11

The data presented in table 3 indicated that in prior training there were more health hazards by using traditional *chulha* but after adopting improved technique of smokeless *chulha* percentage was decreased. The women felt comfort while working in smokeless *chulha*. The problem related to health hazard was decrease. The gain in knowledge was found high (48.89%) in malhani village, when adopting smokeless *chulha*. Pandey (2001) observed that coal smoke had varied profile of metal emission and domestic coal emits metals in quantities which is potentially harmful to human health. The use of fuel wood in long term affect causes intestinal problems and nervous systems disorder. The fumes produce irritation in eyes, reaction on skin and exposure to high level of metallic substances that damages the brain and kidney of developing fetus. Regarding health hazards 41.11 per cent difference was found in pre and post phase in village Chatrapura, Bankatamishra (47.78%) and Malhani (48.89%), respectively.

Table 4: Gain in knowledge regarding balanced diet

Village	Pre training		Post training		Gain in knowledge	
	F	%	F	%	F	%
Malhani	15	16.66	76	84.44	61	67.78
Bankatamishra	21	23.33	86	95.55	65	72.22
Chatrapura	7	7.77	59	65.55	52	57.78

The gain in knowledge regarding balance diet of three villages is given shown in table 4. The results indicated that prior to study higher knowledge 23.33 per cent was found in women of Bankata mishra village as compare to other two villages. The difference between pre and post study was 72.22 per cent in women from Bankatamishra village, which was found higher than the result of the other two areas. It was concluded that the awareness was created in all the three villages. The difference in level of gain in knowledge was found to be low in village Malhani (67.78%) and Chatrapura (57.78%), respectively. It was also observed that after training all three village women were found to include green leafy vegetables, seasonal fruits in their daily routine diet.

Table 5: Gain in Knowledge regarding cooking methods.

Village	Pre training		Post training		Gain in knowledge	
	F	%	F	%	F	%
Malhani	24	26.66	71	78.88	47	52.22
Bankatamishra	32	35.55	82	91.11	50	55.56
Chatrapura	14	15.55	69	76.66	55	61.11

The data presented in table 5 showed that the gain in knowledge regarding the cooking techniques the slight increased variation in difference was found in pre and post phase in three different villages. It was found that in post study women skills in cooking techniques was raised. The results indicated that prior to study higher knowledge (35.55%) was found in village Bankatamishra as compared to other two villages. Khetrapaul, *et. al.* (1996) observed that majority of women were unaware about different food sources, loss of nutrients during cooking. It was felt the need to educate most of the housewives through various communication media and aids. The similar results were found in the training programmes depicted that when methods like demonstration was used and booklets regarding using correct cooking methods were distributed to them in masses, the women learnt the techniques which interest and they also adopted the right methods in cooking food. The level of awareness was raised in village Chatrapura 61.11 per cent as compared to other two villages.

Table 6: Gain in knowledge in conserving nutrients.

Village	Pre training		Post training		Gain in knowledge	
	F	%	F	%	F	%
Malhani	26	28.88	65	72.22	39	43.34
Bankatamishra	29	32.22	84	93.33	55	61.11
Chatrapura	10	11.11	79	87.77	69	76.66

Data from Table 6 study shows gain in knowledge regarding the methods to conserve the nutrients. The results indicate that in pre test knowledge regarding conserve nutrients maximum (32.22%) of women was in village Bankatamishra, 28.88 per cent in village Malhani and low in women of village Chatrapura (11.11%) when comparing to other two villages. The women from village Chatrapura gain in knowledge to 76.66 per cent. It was observed that in pre phase most of the women do not know the use of sprouts in their diet, they wash vegetable after cutting. After training period they understood the importance of conserving nutrients in the diet. The finding is in conformity with the findings of Panwar (2004) revealed that when training includes education. It aims for bringing desirable change in knowledge, skills, value, attitude, beliefs & understanding of learner.

Table 7: Gain in knowledge regarding to increase nutritive value of food

Village	Pre training		Post training		Gain in knowledge	
	F	%	F	%	F	%
Malhani	14	15.55	72	80.00	58	64.45
Bankatamishra	17	18.88	80	88.88	63	70.00
Chatrapura	19	21.11	54	60.00	35	38.89

It was observed from table 7 that in pre test knowledge regarding to increased nutritive value of food were maximum village awareness was 21.11per cent in village Chatrapura and lowest awareness in village Malhani (15.55%). It was observed that the most of the women in these areas through the boiled water of rice and pulses. Mostly the women keep iron utensils but they do not want to use and cook food in those utensils. A study conducted on children who fed food from iron ports had lower rate of anemia and better growth than those children where food was in aluminum pots. Provision of iron cooking pots for house hold in less developed country to useful procedure to prevent from iron deficiency (Adish, 1999). Women from village Chatrapura cooked food in iron pots they scored higher in pre test. Gain in knowledge regarding increase nutritive value of food was very high 70.00 per cent in women from village Bankatamishra. After training programme the improvement regarding following good food practices was observed. The women cooked food with covered pan and included different combination of cereals and pulses in their daily routine diet.

CONCLUSION

The impact of developed package in empowerment of rural women in terms of knowledge gain revealed that before the training awareness of respondents were poor, after training majority of women responded gaining knowledge. It has been revealed from the study that overall impact of nutritional intervention programme in empowering the rural women was effective in achieving the goal.

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