**R**esearch Note



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# Impact of IEC on nutrition knowledge of rural women in Uttarakhand

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Correspondence to : **PUSHPA SHUKLA** Department of Foods and Nutrition, College of Home Science,G B. Pant University of Agriculture and Technology, PANTNAGAR (UTTARAKHAND) INDIA Email: pushpa.shkl@gmail.com ■ ABSTRACT : The study was conducted in the five villages Anandpur, Bhamrolla, Netajinagar and Jainagar from Udham Singh Nagar district and Dogra from Nainital district. Twenty subjects from each village were randomly selected and socio- economic profile was recorded. Nutrition education regarding four selected topics was imparted. Scores for pre test knowledge and after imparting nutrition education scores for gain in knowledge and retention in knowledge were recorded. Findings indicated that nutrition education intervention was helpful in gaining knowledge in the selected subjects.

**KEY WORDS:** Nutrition education, Rural women, Knowledge, Retention, Information, Communication education

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utrition and health is closely related. At household level, through diverse nutrition and health related roles, women can influence the nutritional status of individual members. Hence, the type of care she provides depends to a large extent on her knowledge and understanding of aspect of basic nutrition and health care. Several nutritional studies in rural Indian communities have shown that regular and frequent nutrition and health education provided with health care, food producing and income generating activities resulted in a striking improvement in the nutritional status of infants and preschool children (Foods and Nutrition News, 2005). Educational level of rural women is low, as they leave formal education early in their life for family duties. Extension of nutrition and health related messages are, therefore, important. Nutrition education intervention can play a vital role in this regard. Thus, the present study was formulated to assess impact of nutrition education on the knowledge of women and to evaluate the effectiveness of the nutrition education.

The study was conducted in the five villages Anandpur, Bhamrolla, Netajinagar and Jainagar from Udham Singh Nagar district and Dogra from Nainital district under All India

Co-ordinated Research Project on Home Science (AICRP). In each of five villages twenty women *i.e* a total of 100 subjects were randomly selected for each message. A total of four messages were formulated and given (Table A). Socioeconomic profile of the subjects were recorded. For message 'Preparation of nutritious weaning food from locally available foods' knowledge regarding importance of weaning food, preparation methods of weaning food from locally available cereals, pulses, nuts, oilseed were explained. Procedure, method and benefit of malting technique was explained. For message 'immunization can protect your child from disease' need and importance of immunization was explained. Knowledge regarding vaccination for BCG, DPT and small pox was given. For message 'know about the health care facilities from the government for 'mother' and mother to be'. Knowledge regarding anemia prophylaxis programme, ICDS activities for pregnant mothers and primary health care facilities were imparted. Message 'nutrition for pre-school/school adolescent' focused on need of nutritious food for proper growth and development of school children. Information regarding PEM and micronutrient malnutrition was imparted. These messages were given to the selected subjects through lectures, discussions, inter personal communication and suitable support materials like chart, poster and folders. Knowledge scale was developed and subjects were assessed individually in three stages: In the first stage, the nutritional knowledge of subjects was assessed and scores were computed (pre- test score). After imparting nutrition education in second stage, the knowledge was assessed after one week (post- test score I). In the third stage the knowledge was assessed after one month (post- test score II). Impact of IEC was assessed in terms of gain in knowledge and retention in knowledge. For statistical analysis one-way ANOVA was applied.

Table 1 :	: Information education and communication messages imparted to rural women
Sr. No.	Messages
1.	'Preparation of nutritious weaning food from locally available foods'
2.	'Immunization can protect your child from disease'
3.	' Know about the health care facilities from the government for 'mother' and mother to be'
4.	' Nutrition for preschool/school adolescent'

The mean age of respondents was  $32.02 \pm 2.04$  years. Majority of subjects (76%) were married. Information regarding educational level reveal that 29 per cent were illiterate, 48 per cent had primary education, 17 per cent were high school passed and only 10 per cent were graduates. About one fifth of the subjects were muslims and rest were hindus. Distribution according to occupation revealed that 47 per cent were engaged in farming activities and 44 per cent were housewives. Majority (51%) of subjects were vegetarian.

## Impact of IEC intervention:

Mean scores for pre-test, post- test (I), post- test (II), gain in knowledge and retention in knowledge was recorded. One way ANOVA was applied to assess level of significance at 5 per cent level. For messages 'preparation of nutritious

Table 2 : Socio-economic status of subjects	(n=100)				
Attributes	Value				
Age in years (Mean <u>+</u> S.D.)	32.02 <u>+</u> 12.04				
Marital status (%)					
Unmarried	24				
Married	76				
Educational level (%)					
Uneducated	29				
Undermatric	48				
High school passed	17				
Graduate	6				
Caste (%)					
Hindu	20				
Muslims	80				
Any other					
Occupation (%)					
Farming	47				
Housewife	44				
Business	1				
Service	0				
Student	8				
Food habit (%)					
Vegetarian	51				
Non-vegetari an	49				

weaning food from locally available foods' and 'know about the health care facilities from the government for 'mother' and mother to be' mean scores for post-test (I) and post- test (II) were greater than the pre-test scores and were significantly different on statistical analysis. When pre- test score was compared with gain in knowledge and retention in knowledge, significant difference was found. Scores of post- test I and post-test II had non-significant difference. It indicates that up to one month after giving messages retention of knowledge was good for these messages. For messages 'immunization can protect your child from disease' and 'nutrition for pre-

Table 3:	Table 3: Information education and communication messages imparted to rural women												
Sr. No.	Max score	Pre-test		Post-test I		Post test II		Gain n knowledge D= difference between B and A		Retention in knowledge E=difference between C and A		Significant	Non- significant
		Score (A)	(%)	Score (B)	(%)	Score (C)	(%)	Score (D)	(%)	Score (E)	(%)	-	
1.	18	4.26	23.67	13.54	75.22	12.88	71.56	9.28	51.56	8.62	47.89	A and B, A and C,	B and C,
												A and D, A and E	D and E
2.	10	3.24	32.40	8.04	80.40	7.30	73.00	4.80	48.00	4.06	40.60	A and B, A and C, A and D, A and E, B and C, D and E	
3.	20	5.17	25.85	14.86	74.30	14.22	71.10	9.69	48.45	9.05	45.25	A and B, A and C,	B and C,
												A and D, A and E	D and E
4.	20	4.96	24.80	15.00	75.00	13.52	67.60	10.04	50.20	8.56	42.80	A and B, A and C, A and D, A and E, B and C, D and E	

school/school adolescent' mean scores for post- test (I) and post- test (II) were greater than the pre- test scores, statistical analysis indicated that the differences were significant. When scores for pre- test were compared with gain in knowledge and retention in knowledge significant difference was found. When scores of post- test I and post- test II was analyzed, significant difference was found. Significant difference among mean scores for pre-test, post-test (I), post-test (II), gain in knowledge and retention in knowledge indicate that imparting nutrition education had positive effect on the knowledge levels of the subject. Patil (2011) showed that IEC activities were beneficial in increasing the awareness regarding health and nutrition in women subjects. Saibaba et al. (2002) observed that IEC activities were effective in increasing nutritional knowledge of adolescent girls. Shankar et al. (2007) showed that nutrition education through lecture helped to improve fruits and vegetable intake in women.

### **Conclusion:**

Thus, based upon the results obtained from the present study investigation, it is concluded that nutrition education intervention helped to improve knowledge in rural women. For further research, need based messages should be designed and imparted to rural population in order to make them able to use good health and nutrition related practices. By empowering rural women improvement in nutritional status of their family members can be ensured.

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