

Impact of Nutrition Education Programs on the Knowledge, Attitude and Practices Among Farm Women of Ranga Reddy District, Andhra Pradesh

KEYWORDS	farm women, gain, nutrition education, messages, retention			
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ABSTRACT The principal aim of nutrition education is to provide people in rural and urban areas with adequate information, skills and motivation to procure and to consume appropriate diets which in turn would improve family food supplies and more efficient utilization of available food and economic resources to provide nutritious diets and better care for the most vulnerable groups. The impact of Nutrition messages were studied in a phased manner on 100 farm women (@ 20 each from 5 villages) using a pre-tested questionnaire in the Operational villages of All India Coordinated Research Project (AICRP) on Home Science, Ranga Reddy District, Andhra Pradesh. The Mean scores were calculated and student't' test was employed to study Significance. The results reveal a significant impact of nutrition messages on the gain and retention of knowledge among the farm women culminating in healthy practices by 44%.

Introduction

Household food security is a prerequisite for any person to have an adequate and balanced food intake. However, to attain good health and nutritional status, people need sufficient knowledge and skills to grow, purchase, process, prepare, eat and feed to their families a variety of foods, in the right quantities and combinations. This requires a basic knowledge of what constitutes a nutritious diet and how people can best meet their nutritional needs from available resources^[11]. Undesirable food habits and nutrition-related practices, which are often based on insufficient knowledge, traditions and taboos or poor understanding of the relationship between diet and health, can adversely affect nutritional status especially the vulnerable group – the pregnant, lactating women and children.

More women die due to pregnancy and child-related causes in India than anywhere in the world. According to the National Ministry of Health maternal mortality rate (MMR) for India in 2009 is 230 per 100,000 live births, which make up almost one quarter of the maternal deaths that occur annually worldwide. Though there is a significant decline in the MMR of Andhra Pradesh at134^[2], the figure is not less alarming when compared to its Southern state counterparts Kerala and Tamil Nadu^[3,4]. MMR measures number of women aged 15-49 years dying due to maternal causes per 1,00,000 live births^[5].

The basic aim of nutrition education is to reinforce specific nutrition-related practices or behaviours to change habits that contribute to poor health; by creating a motivation for change among people, to establish desirable food and nutrition behaviour for promotion and ultimately protection of good health.

Successful nutrition education goes beyond the simple accumulation of knowledge, towards positive action. A change in behaviour leading to desirable nutrition practices. Therefore effective nutrition education programmes were planned and executed in such a way as to motivate beneficiaries to develop skills and confidence for the adoption of positive and lasting practices.

It is increasingly recognized that unless people are offered the opportunity to participate actively in seeking solutions for their nutritional problems, the long-term impact of an intervention will be marginal.

The community-based approach to nutrition education, which encompasses the best elements of the two approaches, emphasizes the importance of active community participation in making decisions and finding solutions for nutritional problems. The community-based approach addresses the need for increased coverage, with widespread training of community workers and members; the importance of building on indigenous knowledge by incorporating community members as partners in programmes; and also the need for actions to transform the socio-economic conditions of the community^[6].

The purpose of this study is to assess the impact of Nutrition messages on the knowledge and attitudes of farm women in the operational villages of AICRP on Home Science, AN-GRAU, Hyderabad. The objectives of the study include:

Increasing the nutrition knowledge and awareness of farm women awareness programmes.

Promoting desirable food behaviour and nutritional practices through demonstrations.

Increasing the diversity and quantity of family food supplies through horticultural intervention.

Methodology

Sample Size & Technique: 100 farm women (@ 30 each from 5 villages) were selected through Purposive sampling technique based on their willingness and interest to participate in the intervention.

Venue : The study was conducted in the Operational villages of AICRP, Ranga Reddy District, Andhra Pradesh

Impact Assessment: The impact of Nutrition messages were studied in 3 phases using a pre-tested questionnaire. The parameters assessed were a) Gain in knowledge b) Retention of knowledge and c) behaviour change on the IEC messages delivered. The 3 phases are Phase 1: Pre test (before intervention); Phase 2: Post test 1 (one week after intervention) and Phase 3: Post test 2 (one month after intervention).

 $\mbox{Statistical Analysis: The Mean scores were calculated and student 't' test was employed to study Significance.$

Results & Discussion

A Baseline Survey was carried out in the 5 operational villages. A total of 150 households from 5 villages (@ 30 households each village) were randomly selected to collect data on the General Profile of the families, Major crops grown, Anthropometric measurements of women and children, Consumption pattern and mean nutrient intake.

The data was collected, tabulated and subjected to statistical analysis. Mean, frequency and percentages calculated and reveal the following:

General Profile of the family: Majority (75.3%) of the households in the five operational villages live as nuclear families with family size less than 5. Half (50%) of the households live in mixed houses while 38% live in pucca houses. More than half (57.4%) of the households had land holding of 1.1 to 5 acres. Majority (72.67%) were involved in cultivation as their major occupation. The major source of information is through TV (83%) followed by newspaper (35%).

Major crops grown by the family:

The major Occupation in the five operational villages is Agriculture. The major crops are Rice, Maize and Jowar under Cereals & Millets. Red gram and Bengal gram are the widely grown pulses. Spinach, Amaranthus, Gogu and Coriander are the Major Green leafy vegetables grown. The Other vegetables grown are Brinjal, Lady's finger and Cluster beans. Carrots are the major crop grown under Roots & Tubers. The major crops under Nuts & Oil seeds are Sunflower and Safflower while Chillies under Spices grown in the 5 villages. Tomato is the abundantly grown fruit.

Bench mark survey

A bench mark survey was conducted to study the Nutritional status of 30 households willing to establish Nutrition Garden in the operational villages.

Anthropometric measures and Classification of women by BMI: The height and weight of women in the child bearing age, pregnant and lactating mothers were measured and BMI calculated. Majority (60.7%) of women of child bearing age was malnourished, 26.5% were of normal BMI and 12.8% were either overweight or obese. Majority (87.5%) of the lactating mothers in the households surveyed were malnourished while 12.5% were found normal.

Deficiency symptoms among the family members: The commonly observed deficiency symptoms were angular stomatitis, spongy and bleeding gums, teeth carries and pale eyelids and palm.

Development of Need based IEC messages:

Need based IEC messages were developed based on the results bench mark survey conducted in the five operational villages. The focal areas were:

Nutritionally adequate diet for good health (Message 1)

Additional food is requirement during pregnancy and lactation (Message 2)

Importance of nutrition garden for food and nutrient diversity (Message 3)

Awareness programs were conceived and implemented through participatory approach, focused group discussion, role plays, case studies and demonstrations.

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Table1: Gain in knowledge

Operational	Gain in knowledge			
villages	Message 1	Message 2	Message 3	
	't' value	't' value	't' value	
Khandawada	27.4	19.0	21.0	
Palgutta	23.3	25.1	22.6	
Malkapuram	26.8	26.1	24.0	
Kesaram	13.9	20.1	25.1	
Ibrahimpally	21.8	17.4	25.1	

There was a significant impact on gain and retention of knowledge of the farm women on the nutrition messages delivered. However, variations were observed with the messages among the villages. The farm women of Kesaram showed the least gain in knowledge in Message1 while the highest for Message3. This could be partially attributed to the area of interest among them. The results support the likely value of including nutrition knowledge as a target for health education campaigns aimed at promoting healthy eating^[7].

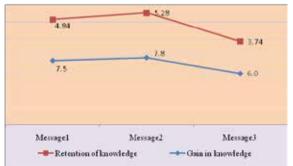
Table2: Retention of knowledge

Operational villages	Retention of knowledge			
	Message 1	Message 2	Message 3	
	't' value	't' value	't' value	
Khandawada	10.5	10.2	11.7	
Palgutta	13.6*	18.0*	12.7*	
Malkapuram	17.7*	15.9*	13.6*	
Kesaram	8.4	14.9*	11.3	
Ibrahimpally	11.1	9.9	15.9*	

* Significant at 5% level

The retention of knowledge exhibited by farm women of the villages Palgutta and Malkapuram showed significant impact at 5% level in all the three messages. The age of the participants in the two villages ranged between 21 and 34 years could partly explain higher retention of knowledge levels than farm women in other villages. Recollection proved to be severely affected by aging; older adults showed significantly more repetition errors than did younger adults, even at very short retention intervals^[8].

Figure 1: Mean scores of Gain and Retention in knowledge on the 3 IEC messages



Behaviour Change / Practice

The gain in nutrition knowledge translated into practice

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through establishment of nutrition garden by 44% of the participants and 12% were involved as promoters by encouraging relatives and friends to adopt sustainable horticultural practices through sharing of crop yield and seed.

Summary

A successful nutrition education often entails the active participation of the people, their awareness of their nutrition problems, their willingness to change, intersectoral collaboration among different professionals, an effective comprehensive and well-planned communication strategy, often using a multimedia approach.

Conclusion:

With a strong participatory approach, Community-based nutrition education facilitates in identifying and examining the factors that influence malnutrition in the community and helps people to suggest solutions and implement actions to overcome nutritional problems.

Thus it becomes part of a much wider programme aimed at improving health and nutritional status within the context of socio-economic development, and is not an end in itself.

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