www.ThePharmaJournal.com

The Pharma Innovation



ISSN (E): 2277-7695 ISSN (P): 2349-8242 NAAS Rating: 5.23 TPI 2023; SP-12(11): 98-101 © 2023 TPI

www.thepharmajournal.com Received: 25-08-2023 Accepted: 29-09-2023

Preeti Verma

Subject Matter Specialist, Home Science, Krishi Vigyan Kendra, Banasthali, Vidyapith, Rajasthan, India

Naresh Kumar Agarwal Subject Matter Specialist, Horticulture, Krishi Vigyan Kendra, Banasthali, Vidyapith, Rajasthan, India

Impact of nutrition education on knowledge of farm women in Tonk district of Rajasthan

Preeti Verma and Naresh Kumar Agarwal

Abstract

The impact of trainings on Nutrition education in farm women of Tonk district of Rajasthan from the year 2018-2022 by Krishi Vigyan Kendra, Tonk, Banasthali Vidyapith was assessed. The research was conducted in purposely selected Newai block of Tonk district of Rajasthan to check the nutritional knowledge level in farm women. Three villages namely Sangrampura, Damodarpura and Motipura from Newai block were selected purposively. Total 75 farm women, who were ready to participate, were selected for the research work. Pre and post training impact was observed in these selected farm women. On the basis of results, significant improvement in the knowledge of farm women regarding the concepts of Balanced diet, Nutrition gardening, developing low cost recipes, Processing and cooking, designing high nutrient efficiency diet, Value addition, Minimization of nutrient loss in processing, Storage loss minimizing techniques was observed. Sangrampura village stood first among all the villages in getting nutrition education followed by Damodarpura and Motipura.

Keywords: Nutrition education, farm women, trainings, balanced diet, nutrition garden

Introduction

Bharat is a rural county. The soul of Bharat lives in village. The progress of any country depends on the progress of village. It has been realized that only increasing income does not lead to improvement in quality of life of people. There should be the goal of rural development efforts to improve the awareness of people in the rural area. Food is a key factor for good health as it influences both physical and mental health of rural community. Lack of Nutrition knowledge is one of the important factors for nutritional deficiencies in rural areas. Under nutrition and over nutrition are widely prevalent in the rural areas of the country, especially amongst vulnerable section of the population namely expectant and nursing mother, preschoolers and school going children. Lack of knowledge on hygiene and sanitation and Nutrition Knowledge among the affected population is the major contributing factors to such nutrition deficiencies. The mentioned problems can be reduced by increasing the nutrition knowledge of rural women because a woman plays a key role in the family in the selection, preparation and serving of food. In proper management of food and in application of balanced diet, Nutritional knowledge has a great importance. Nutrition knowledge also enables a woman to understand the specific nutritional requirements during infancy, toddlers, adolescent and old age. Hence, Nutrition education should be practical and adopted to suit the socioeconomic conditions, food habits and local food resource. Keeping in view the present study has been undertaken (i) to find out the existing nutritional knowledge in farm women at various levels. (ii) to develop a nutritional intervention programme for farm women empowerment in rural area. (iii) to assess the knowledge gain through intervention programme by pre and post training.

Research Methodology

The present research work was conducted in Newai block of Tonk district of Rajasthan. Out of Eight blocks, Newai block was selected purposively. Three villages namely Sangrampura, Damodarpura and Motipura were purposively selected from Newai block for the present study. The impact of Training programmes on Nutrition education in farm women organized by Krishi Vigyan Kendra, Tonk, Banasthali Vidyapith from the year 2018-2022 was assessed. 25 farm women who were ready to participate were selected from each village, thus making a total sample of 75 farm women of the three villages (Sangrampura, Damodarpura and Motipura). The farm women aged 18 to 40 years were selected belonging to low and middle economic group.

Corresponding Author: Preeti Verma Subject Matter Specialist, Home Science, Krishi Vigyan Kendra, Banasthali, Vidyapith, Rajasthan, India A semi structured pre-tested questionnaire was designed to check the nutritional knowledge regarding various aspects of nutrition.

| S. No. | Title of training | Method | Teaching aid |
|--------|---|-------------------------------|--------------|
| 1 | Balanced diet | Training and group discussion | Manual |
| 2 | Nutrition Gardening | Demonstration and training | Folder |
| 3 | Developing low cost recipes | Demonstration and training | Leaflet |
| 4 | Processing and cooking | Training and group discussion | Poster |
| 5 | Designing high nutrient efficiency diet | Demonstration and training | Leaflet |
| 6 | Value addition | Demonstration and training | Exhibition |
| 7 | Minimization of nutrient loss in processing | Training and group discussion | Chart |
| 8 | Storage loss minimizing techniques | Training and group discussion | Leaflet |

Table 1: Nutrition education programme for farm women by KVK, Tonk

Results and Discussions

Gain in Knowledge regarding Balanced diet: Table 2 showed the data regarding gain in knowledge about balanced diet. Majority of farm women were aware of balanced diet in Sangrampura village after training programmes. Results revealed that Highest gain in knowledge regarding balanced diet was recorded in Sangrampura village (76 percent) followed by Village Damodarpura (68%) and Motipura (59%). Results indicated that lowest awareness was recorded in Motipura village in comparison to other villages.

Table 2: Gain in Knowledge regarding Balanced diet

| S. No. | Village | Pre training (%) | Post training (%) | Gain in knowledge (%) |
|-----------|-------------|------------------|-------------------|--------------------------|
| 1 | Sangrampura | 19 | 95 | 76 |
| 2 | Damodarpura | 16 | 84 | 68 |
| 3 | Motipura | 09 | 68 | 59 |

Gain in Knowledge regarding Nutrition Gardening: Table 3 depicted the data on gain in knowledge regarding Nutrition gardening among Farm women. Results revealed that highest gain in knowledge regarding Nutrition gardening was recorded in Sangrampura village (74 percent) followed by Village Damodarpura (65%) and Motipura (58%). Results indicated that lowest awareness was recorded in Motipura village in comparison to other villages.

Table 3: Gain in Knowledge regarding Nutrition Gardening

| S. No. | Village | Pre training (%) | Post training (%) | Gain in knowledge (%) |
|-----------|-------------|------------------|-------------------|--------------------------|
| 1 | Sangrampura | 16 | 90 | 74 |
| 2 | Damodarpura | 15 | 80 | 65 |
| 3 | Motipura | 11 | 69 | 58 |

Gain in Knowledge regarding developing low cost recipes:

Table 4 revealed the gain in knowledge regarding developing low cost recipes. It was found that after the training programmes, women skills in making low cost recipes were improving continuously. The results indicated that prior to training higher knowledge (17%) was found in village Sangrampura. The lowest knowledge regarding making low cost recipes was found in village Damodarpura (12%) prior to training. After training programmes, 89% farm women gained knowledge about developing low cost recipes in Sangrampura village followed by Damodarpura village (76%) and Motipura village (72%). The study showed that maximum 72 percent difference in gain in knowledge was found in Sangrampura village followed by 64 percent in Damodarpura village and 56 percent in Motipura village.

Table 4: Gain in Knowledge regarding developing low cost recipes

| S. No. | Village | Pre training (%) | Post training (%) | Gain in knowledge (%) |
|-----------|-------------|------------------|-------------------|--------------------------|
| 1 | Sangrampura | 17 | 89 | 72 |
| 2 | Damodarpura | 12 | 76 | 64 |
| 3 | Motipura | 16 | 72 | 56 |

Gain in Knowledge regarding processing and cooking: Table 5 showing data regarding gain in knowledge in processing and cooking. The data showed that maximum 71 percent difference in gain in knowledge was found in Sangrampura village followed by 62 percent in Damodarpura village and 54 percent in Motipura village. Most of the farm women were aware about processing and cooking in Sangrampura (85%) village after training followed by 73% in Damodarpura village and 70% in Motipura village. The lowest awareness related to processing and cooking was found in village Damodarpura prior to training.

Table 5: Gain in Knowledge regarding processing and cooking

| S. No. | Village | Pre training (%) | Post training (%) | Gain in knowledge (%) |
|-----------|-------------|------------------|-------------------|--------------------------|
| 1 | Sangrampura | 14 | 85 | 71 |
| 2 | Damodarpura | 11 | 73 | 62 |
| 3 | Motipura | 16 | 70 | 54 |

Gain in Knowledge regarding designing high nutrient efficiency diet: Table 6 showing data in gain in knowledge regarding designing high nutrient efficiency diet. It was clearly found that in post study farm women were more aware of designing high nutrient efficiency diet. The results indicated that, prior to training, higher knowledge (14%) was found in village Damodarpura regarding designing high nutrient efficiency diet followed by Sangrampura and Motipura. Majority of the farm women gained knowledge about Designing high nutrient efficiency diet in Sangrampura village after training followed by Damodarpura village and Motipura village.

Table 6: Gain in Knowledge regarding designing high nutrient efficiency diet

| S. No | Village | Pre training (%) | Post training (%) | Gain in knowledge (%) |
|----------|-------------|------------------|-------------------|--------------------------|
| 1 | Sangrampura | 12 | 90 | 78 |
| 2 | Damodarpura | 14 | 86 | 72 |
| 3 | Motipura | 11 | 72 | 61 |

Gain in knowledge regarding value addition: The data of table 7 shows that very small group of farm women were aware of value addition prior to training programmes. After training programmes, 96% farm women of Sangrampura

village got knowledge regarding value addition. In Damodarpura, 91% farm women were trained and 81% in Motipura village. The impact of the training was that majority of farm women have the skills to preserve food.

Table 7: Gain in Knowledge regarding Value addition

| S. No. | Village | Pre training (%) | Post training (%) | Gain in knowledge (%) |
|-----------|-------------|------------------|-------------------|--------------------------|
| 1 | Sangrampura | 17 | 96 | 79 |
| 2 | Damodarpura | 16 | 91 | 75 |
| 3 | Motipura | 12 | 81 | 69 |

Gain in Knowledge regarding minimization of nutrient loss in processing: Women from village Sangrampura cooked food in iron pots they scored higher in pre-test. After training programmes, Gain in knowledge regarding minimization of nutrient loss during processing was recorded highest in farm women of Sangrampura village followed by farm women of Damodarpura and Motipura. After the training programme the improvement was observed regarding good food practices. Majority of the women cooked food with covered pan and included different combination of cereals,

minor millets and pulses in their family food (Table 8).

Table 8: Gain in Knowledge regarding Minimization of nutrient loss in processing

| S. No. | Village | Pre training (%) | Post training (%) | Gain in knowledge (%) |
|-----------|-------------|------------------|-------------------|--------------------------|
| 1 | Sangrampura | 19 | 98 | 79 |
| 2 | Damodarpura | 16 | 91 | 75 |
| 3 | Motipura | 14 | 90 | 76 |

Gain in Knowledge regarding storage loss minimizing techniques: Singh and Samal, 2016 [21] in their research work mentioned that majority of women were unaware about different food sources and loss of nutrients during cooking. The need to educate the farm women was essential for good health. After training programmes, Gain in knowledge regarding storage loss minimizing techniques was high 76% in farm women from Sangrampura village followed by Damodarpura and Motipura village having same scores (73%). Majority of farm women started keeping oil in coloured container, washing vegetables before cutting and sprouting the cereals and pulses for procuring nutrients after trainings (Table 9).

Table 9: Gain in Knowledge regarding storage loss minimizing techniques

| S. No. | Village | Pre training (%) | Post training (%) | Gain in knowledge (%) |
|--------|-------------|------------------|-------------------|-----------------------|
| 1 | Sangrampura | 19 | 95 | 76 |
| 2 | Damodarpura | 18 | 91 | 73 |
| 3 | Motipura | 16 | 89 | 73 |









Training programmes organized by Krishi Vigyan Kendra, Banasthali Vidyapith

Conclusions

The impact of Nutrition education trainings organized by Krishi Vigyan Kendra, Banasthali Vidyapith on farm women had a positive effect on farm women. Farm women became self-confident in making their food more nutritious after trainings programmes. Through the training programmes, They also became skilled in making balanced diets, nutritious recipes with less nutrient losses techniques. Sangrampura village stood first among all the villages in getting nutrition education and improved their lives. It was also noticed that farm women also motivated and guided other women. Nutritional knowledge had great impact in proper management of food and other behavior practices to change the family health of rural areas in better way.

References

- Brown O, O'Connor L, Savaiano D. A pilot study using text messaging to provide nutrition education and promote better dietary choices in college students. American Journal of Community Health. 2017;62:320-27.
- 2. Butler SM, Black DR, Blue CL, Gretebeck RJ. Change in diet, physical activity, and body weight in female college freshman. American Journal of Health Behavior. 2004;28:24-32.
- 3. Campbell KJ, Abbott G, Spence AC. Home food availability mediates associations between mothers' nutrition knowledge and child diet. Appetite. 2013;71:1-6.
- Centers for Disease Control and Prevention [CDC]. Adolescent Health. Atlanta, GA: U.S. Department of Health & Human Services; c2017. 11.02.2022. https://www.cdc.gov/nchs/fastats/adolescent-health.htm
- Cholewa JM, Landreth A, Beam S. The effects of a sports nutrition education intervention on nutritional status, sport nutrition knowledge, body composition, and performance in NCAA Division I baseball players. International Society of Sports Nutrition. 2015;12(1):44-45
- 6. Chourdakis M, Tzellos T, Pourzitaki C, Toulis KA, Papazisis G, Kouvelas D. Evaluation of dietary habits and assessment of cardiovascular disease risk factors among Greek University Students. Appetite. 2011;57(3):77-83.
- Egg S, Wakolbinger M, Reisser A, Schätzer M, Wild B, Rust P. Relationship between nutrition knowledge, education and other determinants of food intake and lifestyle habits among adolescents from urban and rural secondary schools in Tyrol, Western Austria. Public Health Nutrition. 2020;23(17):3136-3147.
- 8. Follong BM, Prieto-Rodriguez E, Miller A, Collins CE, Bucher T. An Exploratory Survey on Teaching Practices Integrating Nutrition and Mathematics in Australian Primary Schools. International Journal of Research in Education and Science. 2020;6(1):14-33.
- 9. Glover S, Piper CN, Hassan R, Preston G, Wilkinson L, Bowen-Seabrook J. Dietary, physical activity, and lifestyle behaviors of Rural African American South Carolina Children. Journal of the National Medical Association. 2011;103(4):300-305.
- 10. Grosso G, Mistretta A, Turconi G. Nutrition knowledge and other determinants of food intake and lifestyle habits in children and young adolescents living in a rural area of Sicily, South Italy. Public Health Nutrition.

- 2013:16:1827-1836.
- 11. Gupta M, Singhal A, Gain S. Assessment of training needs of farm women in nutrition. Journal of Extension Education. 2011;19:222-225.
- 12. Kaur S, Virk B. A comparative study-Impact of nutrition education on dietary fiber knowledge in urban and rural women of Nainital district. The Journal of Rural and Agricultural Research. 2014;14(2):97-100.
- 13. Lua PL, Putri EWD. The impact of nutrition education interventions on the dietary habits of college students in developed nations: a brief review. Malaysian Journal of Medical Science, 2012;19(1):4-14.
- 14. Mahumud RA, Uprety S, Wali N, Renzaho AMN, Chitekwe S. The effectiveness of interventions on nutrition social behavior change communication in improving child nutritional status within the first 1000 days: Evidence from a systematic review and meta-analysis. Maternal Child Nutrition. 2021;18(1):55-56.
- 15. Miller T, Chandler L, Mouttapa M. A needs assessment, development, and formative evaluation of a health promotion smartphone application for college students. American of Journal Health Education. 2015;46:207-215.
- 16. Philippou E, Middleton N, Pistos C, Andreou E, Petrou M. The impact of nutrition education on nutrition knowledge and adherence to the Mediterranean Diet in adolescent competitive swimmers. Journal of Science Medicine in Sport. 2017;20:328-332.
- 17. Prelip M, Kinsler J, Thai C. Evaluation of a school-based multi component nutrition education program to improve young children's fruit and vegetable consumption. Journal of Nutrition Education and Behavior. 2012;44:310-318.
- 18. Santhi P, Sathyava T, Bhuvaneswari K. Impact of transfer of Health and Nutrition technologies on empowerment of rural women in developing countries, Inter. J. of Maternal and Child Health. 2013;1(1):1-6.
- 19. Santoso MV, Kerr RB, Hoddinott J, Garigipati P, Olmos S, Young SL. Role of Women's Empowerment in Child Nutrition Outcomes: A Systematic Review. Advance Nutrition. 2019:10(6):1138-1151.
- 20. Silveira JAC, Taddei J, Gueraa PH. Effectiveness of school-based nutrition education interventions to prevent and reduce excessive weight gain in children and adolescents: A systematic review. Journal of Pediatrics. 2011;87:382-392.
- 21. Singh DV, Samal A. Impact of nutrition education on knowledge of tribal women. International Journal of Food Science and Technology. 2016;6(4):1-6.
- 22. Srivastava R, Rankawat K. Impact of nutritional education on rural women of Jodhpur region. Rajasthan Journal of Extension Education. 2012;20:22-26.
- 23. Yoon HS, Yang LH. Effect of nutrition education programme on nutrition knowledge dietary diversity of elementary school children's. Journal of Communication Nutrition. 2000;5(3):513-521.