Effects of Community Based Nutrition Education Programme on Nutritional Knowledge of Rural Women in Idemili South Local Government Area

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Abstract

The study was undertaken to investigate the effects of community based nutrition education programme on nutritional knowledge of rural women in Idemili South Local Government Area of Anambra State, Nigeria. In line with the objectives of the study three research questions and two null hypotheses were postulated. Related literatures were reviewed and summarized. Descriptive survey research design was adopted. The accessible population for the study consisted of all the women in the social clubs in the 7 towns that make up Idemili South Local Government Area. The sample consisted of 204 mothers in all the nine social clubs in the randomly selected nine villages. Data were gathered by means of structured questionnaire. Data obtained were analysed using Statistical Package for Social Science (SPSS) version 15. The research questions were answered using mean gain scores. The hypotheses were tested at 0.05 level of significance using t-test. The finding among others showed that there was a significant difference (p<0.001) in the mean gain nutritional knowledge score of the respondents before and after nutrition education. Based on the findings, conclusions and recommendations were made pertinent among which is the need to include nutrition education programmes in the women annual general meeting and other women gathering in Nigeria. This is intended to expose women to accurate nutrition information which will improve their nutrition knowledge of their families.

Keywords: Nutrition; Community; Knowledge and rural women.

1. Introduction

Community is used extensively in almost all areas of lives. It is used in both our common everyday language and also by professional, politicians and corporations community as opined by Barzilai [1] means a group of interacting people living in some proximity (example in space, time or relationship). Community usually refers to a social unit larger than a household that shares common values as has social cohesion. Nutrition is the study of food and how the body makes use of it. Ewuzie [2], describe nutrition as the study of composition of food and its utilization of this food by the body. It is not only concerned with the quality and quantity of the food one eats but the processes by which one receives and utilizes the food in the body for growth and renewal as well as for maintenance of the different body functions [3].

Maynard [4], opined that nutrition education means developing a public consciousness of the importance of good nutrition and sound food policies for the promotion of national vigour and stability.

Women living in rural areas of Nigeria are generally known to be suffering from general deprivation including access to information resources and lack of education [5, 6]. Personal experience has shown that rural women most often fail to access various information resources and services even when such information and service are available. The reasons may among other factors be related to the socio-economic status of the rural women or the format in which such information programmes are packaged.

In Nigeria, the government had introduced some economic and health intervention programmes such as green revolution, poverty alleviation, health for all and so many others which the rural women could benefit from [7]. Even with all these intervention programmes, experience has shown that most Nigerians especially rural women lack adequate nutritional knowledge toward nutrition. This results in nutritional problems such as malnutrition, poor dietary practices, increased risk of chronic and oral diseases, craniofacial birth defects and negative reproductive success.

A recent [8] study in Africa noted that women very rarely participates courses on nutrition education programmes. Two notable constraints on women’s participation in such programmes that can be addressed are the duration and location of the training [9]. Also women’s occupation such as farming, civil servant, trading and being house wife among others can affect their nutritional knowledge findings from Ihediohanma [10]. On nutrition education programmes have indicated that occupation plays an important part in women involvement in nutrition education programmes [11]. According to WHO, employment and working conditions greatly affect health and involvement of women in health activities. This is because daily activities of women affect their interest in nutrition programme. Women need to empower themselves economically to meet their family obligations thus reducing vulnerability and poverty among members of their households.

It is against the background of healthy living that the researcher was motivated to determine the effects of community based nutrition education programme on nutritional knowledge of rural women in Idemili South Local Government Area of Anambra State, with a view to helping these women and their families live healthfully.
1.1. Research Questions

The following research questions were posited to guide the study:

1. What is the mean gain nutritional knowledge score of rural women in Idemili South Local Government Area after nutrition education?
2. What is the mean gain nutritional knowledge score of rural women of different age groups in Idemili South Local Government Area of Anambra State after nutrition education?
3. What is the mean gain nutritional knowledge score of rural women of different occupations in Idemili South Local Government Area of Anambra State after nutrition education?

1.2. Hypotheses

1. There is no significant difference in the mean nutritional knowledge scores of rural women in Idemili South Local Government Area of Anambra State after nutrition education.
2. There is no significant difference in the mean gain nutritional knowledge score of rural women of different occupations in Idemili South Local Government Area of Anambra State after nutrition education.

2. Methods

Quasi experimental design was used for the study. This design was considered appropriate because random assignment of subjects was not possible. The appropriateness of this research design could be adduced from the use of similar studies by previous researchers including Akubueze [12] and Araoye [13].

The accessible population for the study consisted of all the 220 women in the social clubs in the 7 towns that make up Idemili South Local Government Area. The sample consisted of 204 mothers in all the nine social clubs in the randomly selected nine villages. Multi stage sampling procedure was used.

The main instrument used for data collection was nutrition knowledge questionnaire. The questionnaire was self-developed by researcher following review of related literature. The questionnaire was in two sections. Section A contained two questions on background information of the respondents while section B contained ten questions on nutritional knowledge test and consisted of multiple choice and true or false questions.

The instrument was submitted to two experts from the department of human kinetics and health education and one from the department of educational foundation with emphasis on measurement and evaluation for validation. All their corrections were adequately affected in restructuring the instrument.

Reliability of the instrument was established by exposing the structured questionnaire twice using test-retest method. Twenty rural women from Umuoji in Idemili North Local Government Area were used for test-retest. These women were used for test-retest. These women were not part of the study population, after fourteen day a retest with the same but fresh copies of the instrument were made. The results were subjected to nutrition knowledge test using Kuder Richard (K-R20) method. This gave a value of $= 0.93$.

Two hundred and four (204) copies of the questionnaire administered were returned and used for data analysis. The responses to the structured questionnaire were collated and analyzed using statistical package for social sconce (SPSS) version 15.

3. Results

Results of the data analyses are shown in table 1 and 2.

| Study Groups | N  | X Score | Std. Deviation | Gain Mean Score |
|--------------|----|---------|----------------|-----------------|
| Pre-test     | 204| 61.65   | 16.55          |                 |
| Post-test    | 204| 71.43   | 14.71          | 9.78            |

The data above show the mean gain nutritional knowledge scores of the subjects after nutrition education. The findings of the study show that the post test nutritional knowledge mean score of the subjects was better than their knowledge before instruction by a difference of mean gain score of 9.78.

| Age Groups | N | Pre-test X Score | Post-test X Score | Gain Score | Mean Score | % Age Mean |
|------------|---|------------------|-------------------|------------|------------|------------|
| 18-23      | 48| 60.00            | 69.15             | 9.15       | 15.3       |
| 24-29      | 44| 63.75            | 73.14             | 9.48       | 14.9       |
| 30-35      | 49| 56.33            | 67.35             | 11.02      | 19.6       |
| 36-41      | 44| 60.86            | 70.91             | 10.05      | 16.5       |
| 42+        | 19| 76.53            | 85.00             | 8.47       | 11.1       |

Table 2 show that subjects aged between 30-35years recorded the highest gain mean score o 11.02 (% mean gain score = 19.6). Followed by those within the 36-41years who had a mean gain score of 10.05, which was 16.5 percent increase. Those aged 42 years and above had the lowest gain mean score of 8.47, which shows 11.1 percent increase.
Table 3 shows the t-test summary of the subjects gain scores before and after instruction. The t-value was 6.31 while the P-value was 0.0001. The independent sample t-test therefore indicated significant difference (p<0.001) in mean gain nutritional knowledge score of the subjects before and after intervention. The mean gain nutritional knowledge score after the instruction (71.43) was significantly higher compared to their knowledge before intervention, (X̄ =61.65). The hypothesis is therefore rejected.

4. Discussion

Details of the finding of the study show that the post test nutritional knowledge mean score of the subjects was better than their pre-test mean knowledge score by a difference of mean gain score of 9.78. The independent sample t-test statistic carried out showed that this difference was significant, (p<0.001). This result was expected because of the level of nutrition education the subjects were exposed to. The result is in consonance with those documented by Anetor, et al. [14], Audu [15] and Jaffer, et al. [16]. Who observed that there was improvement in knowledge and increase in good nutrition practice after educational interventions.

5. Conclusion

Based on findings, conclusions were drawn.

The study highlighted the effects of community based nutrition education programme on nutritional knowledge of rural women in Idemili South Local Government Area.

Post test mean gain nutrition knowledge scores and post test mean gain attitude scores of mother were found to be significantly higher than the pre-test mean gain knowledge scores.

Recommendations

Based on the findings and conclusion the following recommendations were made:

1. There is the need to include nutrition education programmes in the women annual general, meetings and other women gatherings in Nigeria. This is intended to expose women to accurate nutrition information which will improve their nutrition knowledge.

2. Mass media campaigns on nutrition education programme should be used and complemented with other methods that have been found to be efficacious in influencing knowledge.

3. Teaching/counseling on nutrition education should be advocated in rural areas.

References

[1] Barzilai, G., 2003. Communities and Law: Politics and Cultures of Legal Identities. Ann Arbor: The University of Michigan Press.

[2] Ewuzie, M. A., 2014. Perspectives on human nutrition. Owerri: CON Publishers.

[3] Ngwu, E. K., 2012. "Street food: Nutritional knowledge and attitudes of food vendors in Nsukka urban, Enugu State." Nigeria Journal of Nutritional Science, vol. 23, pp. 19-25.

[4] Maynard, D. C., 2015. "Factors influencing the growth and nutritional status of infants and young children in Nigerian Village." Transactions of the Royal Society of Tropical Medicine and Hygiene, vol. 121, pp. 65-73.

[5] Boroffice, O. B., 2016. "The nutritional status of rural primary school children; A Pilot Study." Nigeria School Health Journal, vol. 8, pp. 67-71.

[6] Mishra, V. K. and Retherfold, R. D., 2014. "Women’s education can improve child nutrition in India." National Family Health Survey Bulletin, vol. 15, pp. 1-4.

[7] Federal Republic of Nigeria, 2013. National policy on education. 6th ed.: Lagos Nigeria, NERDC.

[8] FAO/WHO, 2005. Nutrition and development of global assessment. Geneva: WHO Publication.

[9] Dei, G. J. S., 2015. "The food crop cultivation, preservation and storage methods of a West African community." Ecol Food Nutrition, vol. 25, pp. 1-19.

[10] Ihediohanna, N. C., 2010. "Nutrition education among rural women." Journal of Review in Physical, Health Education and Recreation, vol. 2, pp. 23-24.

[11] WHO, 2005. "Children nutrition estimates by WHO child growth standards." Available: www.who.int

[12] Akubueze, T. C., 2014. Research methods and statistics in education and social science. Owerri: Oscar Graphics.

[13] Araoye, M. O., 2013. Research methodology with statistics for health and social sciences. Ilorin: Nathadex.

[14] Anetor, G. O., Ogundele, B. I., and Ooyewole, O. E., 2014. "Effect of nutrition education on knowledge of nutrition relation to prevention of stomach cancer among undergraduates in south-west, Nigeria." African Journal of Food, Agriculture, Nutrition and Development, vol. 12, pp. 220-235.
[15] Audu, A. J., 2013. "Effect of nutrition education programme on food-related-knowledge and attitude of literate women in Pankshin Community." *Nigeria Mediterranea Journal of Social Sciences*, vol. 14, pp. 35-47.

[16] Jaffer, Y. A., Af, M., and Alouhishi, K., 2016. "Knowledge, attitude and practices of young children mother in rural areas of Tianjin Municipality." *Biomedical Research*, vol. 22, pp. 305-310.