

HOME ECONOMICS EDUCATION CLINIC FOR HELPING HOMEMAKERS COPE
WITH CHALLENGES OF CLIMATE CHANGE IN BENUE STATE

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Abstract

The study identified home economics education clinics for helping homemakers cope with the challenges of climate change in Benue state. They include home administration clinics, health care, nutrition education, family living and social work services. The study adopted research and development design too. The study was carried out in three rural communities of Benue state. The study was in three phases. phase 1 was to identify their needs, phase 2 to determine the responsibilities of home economics experts to the home makers and phase 3 to trial test the efficacy of the clinic to the community. The sample for phase 1 was 10 respondent comprising 5 home economics lecturers and 5 social work lecturers, phase 2 was 82 respondent made up of 12 lecturers of home economics, 23 social workers and 42 secondary school teachers of home economics. Phase 3- 39 comprising 36 consultants and 3 receptionists. Questionnaire was used for data collection and as a guide in counseling the homemakers. The questionnaire was validated by three experts. Cronbach Alpha method was used to determine the internal consistency of the items with a co-efficient of 0.89. The data were analyzed using, factor loading statistics selecting the clinic, mean and standard deviation for research question while analysis of variance (ANOVA) was used to test the hypotheses. It was found out among others that Home Economic Education clinic can serve as an intervention to homemakers in coping with the effect of climate change in Benue state. It was therefore recommended that such intervention should also be introduced in other poor community to help families.

Keywords: Clinic, Home Economic Clinic, Climate Change, Homemakers, Home Economics

Introduction

Home economics is a course of study designed for preparing individuals for good family living. Kamalu (2013) defined Home Economics as a field of study that strengthens individuals for good family life, help them discover their changing needs in their environment and ways of meeting them. It consists of different areas that provide services to individuals and families who experience problems in various works of life in their communities. These areas

according to Nwosu (2014) include; food and nutrition, resource and environmental management, good choice of textiles and clothing maintenance, family living for good relationship, prevention of domestic violence and conflict among others. Most families find it difficult to carry out the above responsibilities effectively to meet their needs. Therefore, require an intervention such as clinic that will be close to them.

Clinic is a meeting place where people receive advice or counseling in solving their problems. Marriam (2015) posited clinic as a group of meetings devoted to the analysis and solution of concrete problems (health) or the acquiring of specific skill and knowledge. Gale Goetz and Bernausdez (2011), viewed clinic as a care giving facility primarily devoted by professionals for counseling individuals, couples and families on possible ways of solving their problems. These care giving facilities are health care centre, (hospitals), religions houses (churches), schools, home among others. Collins (2012) stated that the primary aim of a clinic is to give therapy services to individuals and families in urban and rural communities for good life sustenance. Such services are, to provide health care, good parenting skills, prevent domestic violence, resolve family conflict, provide nutrition education, reduce malnutrition, educate individuals on resources and environmental management. Most of these services are relevant to the experiences of homemakers that require real intervention. Some of these intervention activities can be in forms of education from Home Economics Education clinic.

Home economics education clinic in the context of this study is a facility that provides solution or guide to immediate problems of individuals as an intervention to enable them cope satisfactorily with the problem in their families and the society. Some of the problems include, health problems, malnutrition, domestic violence, food and financial insecurity, migration of children, parenting skills, multiple marriages, extended family problems. These are also inline with what international Federation of Home Economics IFHE (2012), outlined as some problems that pose challenges to families in many communities in crises period. These problems could be resolved in home economics education clinic

within a community by competent home economists and specialists in related field such as (health workers and social workers). Based on this, Robbin (2013), suggested that clinics services will be more effective in solving immediate problems of the individuals in rural communities especially where the experts are part of the community. Therefore Home Economics Education Clinic become highly necessary to assist the homemakers cope presently with challenges posed by climate change in Benue state.

In Benue state, most of these homemakers are mothers, predominantly famers and have little time for homemaking. These homemakers are expected to be knowledgeable in ways of solving their problems especially in the present situation of climate change. Climate change according to Onokala (2011) is a long time shift in the expected average weather of any place over an appropriate period of time. The author further stated that climate change poses a very serious challenge on global community especially on families for sustainable development and meeting family goals. Obiora (2014) pointed out that such challenges as a result of unpleasant impact of climate change include the increased case of flooding in Benue state in 2012. Agwu and Okehuman (2014) explained that the resultant consequences of the increase flooding subjected many families to poverty, food and financial insecurity, poor health, malnutrition, poor family relationship, displacement of shelter, family crises, lack of children's education and migration of children. Nkene (2014) expressed that these family instability are mostly on women (homemakers) because they depend on natural resources for their livelihood which are threatened by climate change. The author continued that the vulnerability of these women to such challenges increased because they are usually on high risk of being placed in an unsafe condition for providing and

government was sued to inform the community members. Meetings were organized at town hall to explain the project to members and when to come. Step 3, the two assistants were trained at what to do as the community members come to them. A time was arranged for meetings between the research assistants and community leaders especially homemakers whose problems were relevant to topic covered by the researcher. The researcher administered 82 copies of the questionnaire to the respondents who are literate enough to answer with the help of 3 research assistants. 80 copies were returned and analyzed.

Factor loading analysis was used for researcher question 1. For decision rule, any item with factor loading of 0.40 and above was accepted as unit required as structure of home education clinic while any factor loading below 0.40 was not required as part of the structure of home economics education clinic in rural areas of Benue

state. Mean and standard deviation was used to answered researcher question 2. For decision making any item with a mean of 1.50 and above was accepted as responsibilities of home economics experts in home economic education clinics to attendants with reference home administration, nutrition and others. The standard deviation was used to show the spread of the mean. Percentage was used to analyze researcher question 3, for decision, rule any item with percentage of 50 and above. Indicated that the home economics education clinic is efficient but if low it is not efficient. Analysis of Variance (ANOVA) was used to test the hypothesis at $p \geq 0.05$ at no significant difference. For decision ruling any item with p-value above $p \geq 0.05$ was accepted. This indicated that there is no significant difference in the opinion of the three groups of respondent when is less than 1.50 it has significant difference.

Findings

Research Question 1

What would be the structure required for Home Economics Education Clinic in rural communities of Benue state.

Table 1: Factor loading responses of the respondents on required structure of home economics education clinic in Rural Communities of Benue state

| S/N | Structure of the Units | Factor loading | Remarks |
|-----|---------------------------|----------------|----------|
| 1 | Home administration units | 0.55 | Required |
| 2 | Nutrition education units | 0.43 | R |
| 3 | Health care units | 0.58 | R |
| 4 | Family living units | 0.60 | R |
| 5 | Social service unit | 0.44 | R |
| 6 | Marriage inheritance unit | 0.28 | NR |
| 7 | Child unit | 0.34 | NR |

Key: Factor loading of 0.40 using 00% overlapping variance variables with factor loading less

Key: Factor loading of 0.40 using 00% overlapping variance variables with factor loading less than 0.40 were not used

Table 1, showed that the factor loading of the 5 items out of 7 had their factor loading

ranged from 0.43 0.60 and are greater than a

loading of 0.40. This indicated that they are

accepted as units required as structure of home economics education clinic in rural areas of Benue state. Two out of seven items had their factor loading as 0.28 and 0.34 Research Question 2:

What are the responsibilities of home economics experts to the client/patronizers in home economics education clinic with reference to home administration?

Hypothesis 1: There is no significant difference in mean rating of the lecturers of home economics, the social workers and

respectively, these are lower than factor loading of 0.40. Therefore, are not required as part of the structure of home economic education clinic in rural area of Benue state. homemaker on what should be responsibilities of home economics expert to the patronizers of home economics education clinic with reference to home administration. The data for answering research question 2 and testing hypotheses I were presented in table two.

Table 1: Mean Rating and Analysis of Variance of the Responses of the Respondents on what should be the Responsibilities of Home Economics Experts to the Patronizers of Home Economics Education Clinic with Reference to Home Administration.

| ITEM on home administration to advice X | Mean | SD | TSS | Residual | Fr | p-value | E | Remark |
|--|------|------|--------|----------|----|---------|------|--------|
| 1 homemaker | | | | | | | | |
| 2 Find out their acceptable sources of income and guide appropriately | 3.33 | 0.69 | 161.15 | 32.06 | 2 | 0.12 | 0.81 | R,NS |
| Check their waste in managing their income | 2.45 | 0.71 | 160.27 | 22.78 | 2 | 0.69 | 0.79 | R,NS |
| Recommend to their ways of coping with the challenges in meeting their family need within the available resources. | 3.42 | 0.61 | 183.19 | 14.24 | 2 | 0.11 | 0.77 | R,NS |
| Advise them on keeping their environment clean and waste disposal that can contribute to flood disaster. | 3.01 | 0.65 | 178.35 | 25.49 | 2 | 0.80 | 0.78 | R,NS |

Key: X-Mean; SD-Standard Deviation; Fr-Degree of Freedom, E2-Correlation Ratio, p-value= $p \geq 0.05$, R-

Responsibility, NS-Not Significant

Table 2, revealed that all the four (4) items had their means ranged from 2.95-3.42 and were above 1.50 real limit. This indicated that the four items were required as responsibilities of home economics experts to the patronizers in Home Economics Education Clinic with reference to home administration. The standard deviation of

the items ranged from 0.61-0.71 and are less than 1.96 (95% confidence limit). This indicated that the respondents were not far from the mean or one another in their responses. The p-value range from 0.08-9.72 and were greater than

0.05, indicating that there was no significant difference in the responses of the three groups of respondents. Therefore opinion of no significant

difference was upheld. The E2 or (correlation ratio) of the four items ranged from 0.77-0.81, indicating that the items possessed high reliability based on the opinion of the respondents for the four items.

Research Question 3

What should be the responsibilities of home economics experts to the attendants in home economics education clinic with reference to health care?

Hypothesis 2: There is no significant difference in the mean ratings of lectures in home economics, social workers and homemakers on what should be the responsibilities of home economics experts to the attendants in home economics

education clinics with reference to health care.

The data for answering research question 3 and testing the hypotheses 2 were presented in table 3.

Table 3: Mean Ratings and Analysis of variance of what should be the responsibilities of the home economics experts to the attendants in home economics clinic with reference to health care

health care

| S/N | ITEM | Mean | SD | TSS | Res- Fr | p- | E2 | Remark |
|-----|--|------|------|--------|---------|----|------|-----------|
| | Responsibilities of the Experts in Health | | | | | | | |
| 1 | Ask homemakers the signs and symptoms of ill health they experience and advise them. | 3.24 | 0.70 | 111.53 | 28.23 | 1 | 0.17 | 0.75 R,NS |
| 2 | Tell them the preventive measure against ill health arising from uncleaned environment, protect and advice them correctly | 3.04 | 0.71 | 175.23 | 21.87 | 1 | 0.08 | 0.85 R,NS |
| 3 | Advise them that they should go for treatment when sick on time to avoid danger or death | 2.84 | 0.65 | 182.32 | 13.05 | 1 | 0.16 | 0.83 R,NS |
| 4 | Ask them about their feeling toward using orthodox and local medicine method of using them appropriately and method of preventing erosion. | 3.01 | 0.72 | 142.22 | 19.85 | 1 | 0.12 | 0.82 R,NS |
| 5 | Identify the influence of superstition, taboo and fallacy on their help care and advice appropriately | 3.11 | 0.67 | 181.45 | 25.80 | 1 | 0.15 | 0.81 R,NS |

0.05, R-
alue= $p \geq 0.05$,

Key: X-Mean; SD-Standard Deviation; Fr-Degree of Freedom, E-Correlation Ratio, p-value= Responsibility, NS-Not Significant

Table 3 revealed that the five items presented as responsibilities of home economic experts to the attendants of home economic education clinic had their mean value ranged from 2.84-3.24 and were greater than 1.50 real limit. This indicated that the five items were required. The standard deviation of the five items ranged from 0.67 to 0.72 and were less than 1.96 (95% confidence limit). This indicated that the respondents were not far from the mean and from or of one another in their opinion. The p-value of the five items ranged 0.08-0.17 and are greater than 0.05 level of

significance. This indicated that there was no significant difference in the responses of the three groups of the respondents. The E2 or the correlation on the five (5) items ranged from 0.78-0.85 indicating that the items possessed high reliability based on the opinion of the respondents.

Research Question 4

What are the responsibilities of home economics experts to the clients in home economics education clinic with reference to nutrition education clinic?

Hypothesis 3: There is no significant difference in the mean ratings of the

lecturers of home economics, the social workers and home makers on what should be responsibilities of home economics experts to the patronizers of home

economics education clinics with reference to nutrition education clinic.

The data for answering research question 4 and testing the hypotheses were presented in table 4

Table 4: Mean Rating and analysis of variance of the responses of the respondents on what should be responsibilities of home economics experts to the patronizers of home economics education clinic with the reference to nutrition care.

| S/N | ITEM | X | SD | TSS | Res- dual | Fr | p- value | E2 | Remark |
|-----|---|------|------|--------|--------------|----|-------------|------|--------|
| | Responsibilities of the Experts in Nutrition | | | | | | | | |
| 1 | Teach the homemakers on how to use cheap protein and other nutritional foods to prepare adequate diet | 2.94 | 0.82 | 133.53 | 27.10 | 1 | 0.14 | 0.81 | R,NS |
| 2 | Advise them on feeding of family members especially children | 3.14 | 0.76 | 153.14 | 28.91 | 1 | 0.13 | 0.92 | R,NS |
| 3 | Teach them food management to avoid waste | 3.45 | 0.69 | 175.31 | 32.01 | 1 | 0.19 | 0.82 | R,NS |
| 4 | Advise them on proper ways of cooking food, processing and storage to preserve nutrient in food | 3.55 | 0.66 | 185.32 | 28.231 | | 0.15 | 0.85 | R,NS |

Key: X-Mean; SD-Standard Deviation; Fr-Degree of Freedom, E-Correlation Ratio, p-value= $p \geq 0.05$, R-Responsibility, NS-Not Significant

Table 4, revealed that all the five items presented had their means ranged from 2.94 to 3.43 and were above 1.50 real limit. This indicated that the five items were required as responsibilities of home economics experts to the patronizers in home economics education

clinic with reference to nutrition. The standard deviation of the items ranged from 0.71-0.82 and are less than 1.96(95% confidence limit). This indicated that the respondents were not far from the mean or one another in their

responses. The p-value ranged from 0.13-0.19 and were greater than 0.05, indicating that there was no significant difference in the responses of the three groups of respondents. The t2 or correlation ratio of the five items ranged from 0.81-

0.92, indicating that the items possess high reliability based on the opinion of the respondents.

Research Question 5

What should be the responsibilities of home economics experts to the client in home economics education clinic with reference to family living?

Hypothesis: There is no significant difference in the mean ratings of the three groups of respondent on the responsibilities required by home economics experts to their clients in home economics education clinic with reference to family living.

The data for answering research question 5 and testing the hypothesis were presented in table five.

Table 5: Mean Ratings and Analysis of variance of the responses of the respondents on responsibilities of home economics experts to the clients in home economics clinic with reference to family living

| S/N | ITEM | x | SD | TSS | Res- dual | Fr | p- value | E2 | Remark |
|-----|--|------|------|--------|--------------|----|-------------|------|--------|
| | Responsibilities of the Experts in Health | | | | | | | | |
| 1 | Encourage harmony in the home | 3.21 | 0.74 | 162.27 | 33.52 | 1 | 0.17 | 0.86 | R,NS |
| 2 | Identify sources of family conflict, crises and domestic violence and advice for ayoidance | 3.50 | 0.62 | 172.24 | 24.78 | 1 | 0.15 | 0.84 | R,NS |
| 3 | Find out how the elderly are cared for and direct possible ways of caring | 3.05 | 0.73 | 178.41 | 13.25 | 1 | 0.16 | 0.83 | R,NS |
| 4 | Find out other areas of injury of climate change to them and suggest solution for future | 3.45 | 0.69 | 174.31 | 31.46 | 1 | 0.18 | 0.81 | R,NS |

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Key:X-Mean;SD-Standard Deviation; Fr-Degree of Freedom,E-Correlation Ratio,p-value= $p \geq 0.05$,R-Responsibility,NS-Not Significant

Table 5, revealed that all the four items presented in the table had their means ranged form 3.05-3.50 and were above the 1.50 real limit. This indicated that the four items are required as responsibilities of home economics experts to their clients in home economics education clinic with reference to family living. The standard deviation ranged from 0.62-0.74 and were less than 1.96 (95% confidence limit).This indicated that the respondents were not far from the mean and from one another in their responses. The p-value ranged from 0.15-0.18 and were greater than $p > 0.05$,this indicated that there was no significant difference on the mean responses of the three group of respondents. The E2 or (correlation ratio) ranged from 0.81-0.85;

indicated that the items posses high reliability based on the opinion of the respondents.

Research Question 6:

What should be the responsibilities of home economics experts to the client of home economic clinic with reference to social work services?

Hypothesis: There is no significant difference in the mean ratings of the responses of the three groups of respondents on the responsibilities required by home economics experts to their clients in home economics education clinic with references to social work services.

The data for answering research question 6 and testing hypotheses 6 were presented in Table 6.

Table 6: Mean Ratings and Analysis of variance of the responses of the respondents on the responsibilities of home economics experts to the clients in home economics education clinic with reference to social work services.

| S/ N | ITEM | X | SD | TSS | Res- dual | Fr | p- value | E2 | Remark |
|------|---|------|------|--------|-----------|----|----------|------|--------|
| 1 | Find out sources and effect of divorce and guide them against it | 3.23 | 0.72 | 112.32 | 19.75 | 1 | 0.12 | 0.87 | R,NS |
| 2 | Help them on widow inheritance and its effects on family | 3.17 | 0.70 | 153.22 | 22.78 | 1 | 0.17 | 0.84 | R,NS |
| 3 | Make them their problems to the community leaders and other NGO for help | 3.53 | 0.65 | 185.24 | 27.23 | 1 | 0.09 | 0.94 | R,NS |
| 4 | Advice them on social relationship with neighbors and friend to keep themselves happy | 3.04 | 0.71 | 181.23 | 13.05 | 1 | 0.15 | 0.85 | R,NS |

Key: X-Mean; SD-Standard Deviation; Fr-Degree of Freedom, E-Correlation Ratio, p-value= $p \geq 0.05$, R-ue= $p \geq 0.05$ Responsibility, NS-Not Significant

Table 6 revealed that all the four items presented on social work services on the table had the means ranged from 0.03-3.53 and were above the 1.5 real limit. This indicated that the four items were required as responsibilities of the home economics experts to their clients in home economics education clinic with reference to social work services. The standard deviation ranged from 0.65-0.72 and less than 1.96 (95% confidence limits). This indicated that the respondents were not far from the mean of one another in their responses. The p-

value of 0.09-0.17 were greater than $p \geq 0.05$. This indicated that there is no significant difference in the mean responses of the three groups of respondents. The E2 (correlation ratio) of the four items ranged from 0.84-0.92 indicating that the items possessed high reliability based on their opinion.

Research Question 7

What is the efficacy of home economics education clinic to homemaker in rural area of Benue state?

Table 6: Percentage scores of the assessment of the (consultant) home economics experts on the efficacy of home economics education clinic to home makers in rural area of Benue state

| S/N | Impact of the Clinic | Very Good | Good | Remark |
|-----|---------------------------|-----------|------|--------|
| 1 | Quality of responsibility | 76 | | VG |

| | | | | |
|---|---|----|----|----|
| 2 | Timelines | 77 | | VG |
| 3 | Problems solving capacity of the experts | | 70 | G |
| 4 | Intension of continuity | 78 | | VG |
| 5 | Intension for family timely interaction | 77 | | VG |
| 6 | Expense of the clinic to home maker(cost benefit) | 78 | | VG |
| 7 | Availability | | 70 | G |
| 8 | Reliability | | 71 | G |

Table 7 showed that the percentage scores of the assessors ranged from 70 to 87% percent and are greater than 50% percent, this indicated that home economics education Discussion

The study on structure required for home economics education clinic in rural areas of Benue state, revealed that home economic education clinic can serve as an intervention to homemaking in coping with the effect of climate change. Such structure include: home administration clinic. nutrition education clinic family living clinic and two others. The findings are inline with the view of Nwosu (2014), where it was stated that home economics consist of different areas that provide services to individuals and families who experiences problems in various works of life in their communities such as food and nutrition. home management, family living, (Duyff and Hasler, 2014). noted that an intervention clinic is very vital to rural communities because in poor environmental living which leads to complicated issues and sometimes have severe effect on individual. Abuchi (2014) opined that there exist poor condition among climate change affected areas in Benue state. Sammange (2015) lamented that the consequences of climate change in any area frustrate activities and can become fatal on individuals. Ashford (2015). suggested that since individual, face formidable obstacles for good livelihood through climate change, there is need for an intervention (clinic).

The findings on responsibilities required by home economics experts in home economics clinic to the clients in reference to home administration, nutrition, health care, family living and social work services revealed that the respondents agreed to all the responsibilities that were suggested. They include; identification of waste managing in their income; find the challenges in keeping the environment clean

clinic generally is very efficient in helping home makers solve the challenges facing them in their rural areas.

and waste disposal that can contribute to flooding, find out their challenges in keeping dirty environment, 'encourage eating of balance diet in their homes to reduce deficiencies, encourage harmony in their home'. The findings were in agreement with the suggestion of Real Back Malaria (RBM, 2012) where it was stated that, covering containers used and proper disposal of refuse can help prevent flood destruction Bienzle and Mackenhrpt (2000) noted that improved nutrition in has been identified as one of the factors that can relieve the burden of individuals in nutrition worldwide.

In assessment of the effectiveness of home economics education clinic to the homemakers in the rural community in Benue state, it was revealed that the people who attended the clinic benefited from it. Sorte, Daeschal and Amador (2011) noted that any healthful benefit of one factor brings positive outcomes in another, such as gaps and challenges in an area.

The hypotheses revealed that there was no significant difference in the mean ratings of three groups of respondents on the responsibilities required by home economic experts to the attendants or clients in home economics education clinic. The implementation of these findings in the professional experience of the individual respondents did not significantly influence their opinion on the coping strategies of home makers. Hence there responses help to enhance the importance of developing such strategies for homemakers in coping with their environment.

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It was revealed that home economics education clinic can serve as an intervention to home makers for coping with the challenges of climate change in their

Nigeria RBM Healthy Eating guidelines(2011).The besthealthy eating guidelines to follows. Retrieved 3, March. 2017 from <http://www.inforhcalthfitness.com>

Sammnang, E.(2014). Adolescents Heath issues.USA:Macmillan Publisher.

Sorte, J. Daeschel, I. & Amador, C. (2011).Nutrition, health and safely for young children.Pearson Education, New Jersey;4