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# THE RESPONSE OF WOMEN'S HEALTH STATUS TO HOME ENVIRONMENTAL MANAGEMENT IN ANAMBRA STATE: THE IMPLICATION FOR SUSTAINABLE HOME ENVIRONMENT

June, 1998

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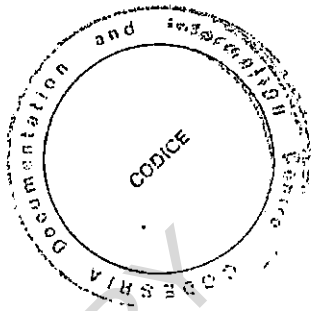


An M.ED Research Report Presented to
Department of Vocational Education
University of Nigeria, Nsukka
In Partial Fulfilment of the Requirement for Award of Masters in Education (M.ED) in Home Economics

By

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JUNE, 1998

# CERTIFICATION

Ndumnwere, Obiageli Clara, a postgraduate student in the Department of Vocational Education and with the Registration Number PG/M.Ed/95/21592 has satisfactorily completed the requirement for the degree of Master of Education in Home Economics. The work embodied in this thesis is original and has not been submitted in part or in full for any other diploma or degree of this or any other University.

5/5/98
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Prof. R. N. Oranu
(Head of Department)

21-06-98
External Examiner

## DEDICATION

This work is dedicated to all the Orphan, those that are helpless and to the glory of Almighty God.

# ACKNOWLEDGEMENT

A number of persons have been most helpful to the author during the course of this work. The author therefore, seizes this opportunity to express his profound gratitude to them for their invaluable assistance.

First, I am deeply indebted to my supervisor Prof. R.N. Oranu whose advice, attention, useful suggestions and constructive criticisms greatly encouraged me in making this work a success.

My special thanks also goes to Council for Social Science Development in Africa (CODESRIA) for their financial support. I thank them immensely for the encouragement they are giving to the development of Social Science Research in Africa.

Finally, I wish to acknowledge with thanks the various contributions and assistance of friends and relations especially my brother Adol Ndumnwere, Lilian, Emily, Madam Mbanefo and other too numerous to mention.

# ABSTRACT

The study of response of women's health status to home environmental management in Anambra State and its implication for sustainable home environment was carried out. This study was borne out of persistent problems encountered by women in home administration. To achieve the broad objective, five specific and two null hypotheses were formulated.

The sample that made up of 100 male and 100 female respondents were selected at random. Data was collected with questionnaire and laboratory analysis. The data was analysed with correlation, chi-square, descriptive statistics and Likert scale.

The result shows that social and cultural responsibilities in home management were gender stereotyped. Also women health status was affected by their home environment management. Health environmental related diseases were mostly suffered by female respondents than their male counterpart.

Based on the findings, the agencies should organize formal and informal training for women on home environmental management, women should be provided with equipment that lessens the home environmental mismanagement were among the recommendations.

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# CHAPTER ONE

# INTRODUCTION

## 1.1 Background of the Study

Health, a fundamental human right, is still denied to many women throughout the world, often because of their low social and economic status, increases their specific biological vulnerabilities (Jacobson, 1993). In many parts of the world, girl children receive less food, less education, less health care than boys. This puts them at a disadvantage both as children and later on as adults.

Despite this, women heads about 40% of African household. They supply an average of 50% of labour in domestic food storage (Morris-Hughes, 1994). Studies have also shown that women are responsible for welfare of the family and health status of the members of the family as well (Boulding, 1977). It has also been reported that the most important role played by women is their involvement in home environmental management. This has caused health problem for both the women and other members of the family. The health problem associated with home environmental management by women has reduced women productivity in general term which lessens their contribution to overall economic development

especially in developing countries. Because of this, the home environmental management and health consequence has become a point of great concern in the recent world research.

Although impressive progress has been made in improving health for the population in general, mortality rate shows that the "female" diseases relative to male not only persists but is worsening (World Bank, 1996). Caroline (1995) has reported that women's close link with environment is largely based on socio-cultural factors.

However, Graham (1993) attributed the increase in female diseases to poor home environmental management. Roberts (1992), observed that 700 million women die yearly in developing countries including Nigeria, because of home environmental hazards while majority of this death occurred in rural areas. Poor sanitation, contaminated water, water borne diseases and associated problems of food hygiene has resulted on increase in health vulnerability among women.

In view of the above, it has become very necessary to study the responses of women's health status to home environmental management and their implications for women productivity.

## 1.2 Statement of Problem

The vital roles played by women in sustainable economic development cannot be emphasized. Studies have also shown women participate in improving a healthy environment, responsible for the health status of the members of the family (World Bank, 1996; Graham, 1993). Among all these roles, home environmental management appears to be the most important (Amazigo, et al, 1993; Berio, 1984). This is because home environment affect the health and welfare of women in particular and family in general.

Attention of researcher have been drawn to environmental degradation even in home. As environmental issues increasingly appeared on the agenda, researchers fail to recognise the effect of gender inequality in home environmental management and their health implications (Munasighe and Cruz, 1995; FAO, 1995).

Graham (1993) reported that women are closely linked with home environmental management due to socio-cultural responsibility of women. Worse still, women are often equipped with low educational background due to discrimination. This low education qualification often make them ignore methods of enhancing a healthy environment (Berio, 1984; Caroline, 1995; Jacobson, 1993).

This often lead to unhealthy home environment, which in most cases culminate into health problems to women.

Therefore, women involvement in home environmental management are often associated with health hazards which affect development in developing countries (Vander and Engel, 1991). Consequently, health hazards associated with home environmental management by women have become a point of great concern in the recent world debate or research. It is estimated that 700 million women die yearly in developing countries including Nigeria, due to home environmental hazards (Roberts, 1992). He pointed out that 75% of these death occur in rural areas.

For instance, women in rural areas have been dominant on the use of traditional fuel in cooking all the year round coupled with those experienced out of home environment. Environmental health hazards associated with the use of traditional firewood are several. It has been reported that women are affected by smoke from using traditional firewood. Smoke inhaled by women is more than 3 packets of cigarettes per day (Andreae and Goldammer, 1992; Lietman, 1992).

Women's social responsibilities goes beyond cooking and shelter; it includes fetching water from streams especially in rural areas. This social responsibilities

of female exposes them to environmental related diseases such as guinea worm infestation, filariasis, river blindness, typhoid among others, than their male counterpart. In Eastern part of Nigeria, it has been reported that female are affected by water borne diseases more than male (NEST, 1991).

In general, Leitman (1992), stated that people die in developing countries largely as a result of poor sanitation, contaminated water and associated problems of food hygiene. Therefore, in order to effectively restore our environment from these problems, strategies adopted by women in home environmental management must be probed. This is because traditional knowledge and skill needed to cope with the environment are handed down from generation to generation by women.

In view of the above problems, it becomes clear that the deteriorating health status of women is closely linked with home environment. It is also clear that home environmental management are influenced by socio-cultural responsibility of women which ofcourse needs firm policy measures. Hence the study of the responses of women health status to home environmental management becomes very necessary. This will help to proffer solution to sustainable home environment safe for the entire populace.

## 1.3 Objectives of the Study

The broad objective of this study is to analyse the response of women health status to home environmental management.

Specifically, this study will seek to:

(1) Identify the social and cultural responsibilities of women in home environmental management;

(2) Examine the extent of women's environmental awareness in home;

(3) Measure gender differentials in home enviromental management;

(4) Measure the effect of home environmental management on women's health status;

(5) Identify constraints to good home enviromental management by rural women; and

(6) Make recommendations based on the findings.

## 1.4 Hypotheses of the Study

Drawing from the specific objectives of the study, this study will be guided with the following hypotheses:

(a) There is no significant difference between the responsibility of men and women in home environmental management.

(b) There is no significant influence of home environment management on women's health status.

## 1.5 Significance of the Study

Women's health concern has been increasingly appearing in global research, but what often forgotten by those researchers is that women's health status are often affected by poor home environment which is dictated by women's social and cultural responsibility. Besides women are often discriminated against health care resources coupled with their vicious cycle of poverty. A study of this nature will no doubt provide information on how to prevent environmental health hazards associated with home environment management by women, so as to improve the health status of women for greater participation in economic development.

Though, a lot of research work have been conducted on health of women (Jacobson, 1993; Amazigo et al, 1993), very little has been addressed specifically on how home environment can affect health of rural women in Nigeria. Therefore, this research will provide information on health of women where enough work has not been done. The result of this study will also be applied to other developing countries that has similar problems with Nigeria.

Information from this work will also help policy makers, environmentalists and health management expoerts towards formulating appropriate policy for health campaign in Nigeria. This work will also help towards achieving some part of objective of current campaign of "Health for All by the Year 2000 AD."

Ofcourse students and researchers will find this work useful as a reference material for further work on women's health.

# CHAPTER TWO

# REVIEW OF RELATED LITERATURE

This chapter reviews literature on the response of women's health status to home environmental management. The chapter is sub-divided into the following areas:

(1) Women in Economic Development
(2) Women and Environment
(3) Environment and Health Status of Women.

## 2.1 Women in Economic Development

Eight hundred million people in the developing world currently faced food insecurity and the challenges of meeting the food, nutritional and health needs is likely to become greater in the years ahead (Heyzer, 1995). While it is important to acknowledge the role of agriculture and other services in economic growth and the need for adequate investment in the agricultural sector, it is worthy to mention that country cannot develop without recognizing the contributions of women in economic and social development. According to UNDP (1997), women in economic and social development is a concept that has now universally been accepted as a most essential ingredient of sustainable human development.

Specifically, women's work is more noticeable in agriculture where women participate both in production and in processing of crops for subsistence. In addition, women combine their agricultural productive roles with household chores and reproductive roles (Morris-Hughes, 1994). Apart from these roles, Heyzer (1995), observed that women are also responsible for health, nutrition and sanitary practices, home improvements, household management, caring for the aged, the ill and the dependent. The most important of all these roles played by women, according to Connect (1991), is women's relationship with environment.

In another note, Morris-Hughes (1994) observed that women heads about 40 percent of African household. They supply an average of 70 percent of the labour for food production. Popkin and Judith (1988), reported that as girls grow to maturity their economic contributions to their household increase, also once girls married, the number of conflicts between women's roles increases. Evidence to support the greater impact of women's income on household food security is increasing. In Rwanda, cash income earned by women is positively and significantly associated with household calorie consumption (Braun, 1991). Female income share has been shown to have a positive and significant association

with household calorie availability, household budget shares of medical care and c ild"s schooling (important nonfood inputs into nutrition) and preschooler weight for age. The probability of preschooler fever and diarrhoea is also lower in families where women earn higher income (Garcia, 1991).

Women are responsible for household security. In fact, the third pillar of food security is the achievement of nutrition security - that is, adequate nutritional status in terms of protein, energy, micro-nutrients, and numerals for all household members. Adequate availability of food at the household level is necessary to achieve nutrition security, but it is not sufficient (Gracia, 1991). Ensuring the nutrition security of the household, through the combination of both food and other resources, is almost the exclusive domain of women. Women"s ability ability to manage these resources is especially important for the more vulnerable members of the household, such as children (Braun, 1991).

## 2.2 Women and Environment

Environment in its simplistic definition is the surrounding, including external influencing growth and development of people, animals and plants (Charles-Davis, 1992). It is thus obvious that the environment is a vital

factor in the survival of man. The environment according to UNESCO (1986) encompasses everything - living and non-living objects, the interactions between these and the products of these interactions. Both sets of "reactants" are said to be open to change as a result of their interaction. There is therefore no doubt that awakening the homemakers to the importance of their environment to their health as well as general wellbeing, and the need to manage the environment for sustainable development would arouse their interest therein and motivate them to seek ways of consciously improving their environment through various possible ways including proper management of waste informed consumption of goods and services (Judith, 1988).

According to UNICEF/UNEP (1990) true environmental appreciation means an awareness of nature's life giving and aesthetic significance. On the importance of environmental awareness, Rodda (1993) noted that most current environmental problems are essentially a result of people's activities and their attitude towards the socio-cultural and natural environment. She noted that historically, individual and social values have not always been in the best interests of preserving a high quality environmental crisis demands a change in attitude in order that initiatives can be taken to rescue the environment from destruction.

Conneet (1991) emphasized that intelligent and effective citizen participation in environmental care requires public awareness that is deepened by knowledge from the sciences and humanities. Further, it requires the development of attitudes and practical skills which aid people to live in a manner which enhances environmental quality and environmental degradation.

Women, especially those of the developing countries are known to have assiduous relationship with their environment. This relationship is necessitated by the fact that women are usually in charge of food production, processing and storage as well as the provision of their utilities in the home (Anyakoha, 1990).

In the developing countries, many women's relationship with the environment is vital to their daily lives, for example, in the provision of water, fuel, food and other basic needs. These women not only bear the brunt of environmental degradation, but also play a crucial part in environmental management (Jacobson, 1993). However, the extent of the relationship between each woman and the environment is subject to certain factors. This is so because, according to Aina and Salau (1992), the Nigerian women are not homogeneous because of the enormous variety of socio-economic and cultural situations

in which individual woman may find herself. Aina and Salau declared "the women have a close link with the protection or destruction of our environment in circumstances which are dictated by their position within the Nigerian culture. According to NEST (1991), the women's roles in shaping the environment are reflected in their participation in agricultural and postoral production, provision of food and water, meeting of energy needs and environmental sanitation.

NEST (1991) also examined the relationship between women and the environment at three levels namely, personal hygiene, the structure and maintenance of the house in terms of its design, capacity, and general cleanliness, and the external habitat or the environment surrounding the house. They thus observed that at the personal and residential levels, women in Nigeria play significant roles in maintaining the quality of the environment. And as the custodians of good house keeping, they see to the basic hygiene of the family, keeping the immediate surroundings clean. This, NEST observed involves, among other things, bathing the children, clothing them, sweeping and cleaning the surroundings, seeing to the efficient disposal of wastes, and cooking the hygienic surroundings.

Tolba (1985) pointed to the fact that the burden of environmental degradation had always fallen on women particularly in the third world, and called on women to press for "national and international actions that will bring about change for the better".

Aina and Salau (1992) observed that the better the understanding of the environment the more effectively it can be used and supported. They further posited that environmental education for women with its associated problems is required among policy makers for better integration of environmental concerns into development planning and policy. Such awareness among women they noted, also helps in creating the attitudes, motivation and commitment needed to adopt environmentally sound approaches in seeking their individuals livelihoods. These positions they further contended, underline the fact that environmental problems are essentially people-centered. The ideas, attitudes and behaviours of different sections of the population are critical variables in efforts to resolve or prevent environmental problems. UNICEF/UNEP (1990) emphasized that sensitivity to the environment is not achieved solely through book learning, rather it also requires real-life experiences. They further contended that effective environmental management will depend ultimately upon the

widespread adoption of an environmental ethic - a Code of Conduct reflecting environmental education and the need for sustainable development.

## 2.3 Environment and Health Status of Women

Despite the biological advantage that women have over men in terms of longevity, this fact is not reflected fully in life expectancy and mortality statistics for women in most developing countries. Life expectancy in these parts of the world is usually lower for women than for men in age classes below 50 years (WHO, 1980; Hamilton, et al., 1985). Studies dealing with the relationship between women's workload and health, have most often looked at how the workload influences their health (Berio, 1984). It can be assumed that the workload can affect women's nutrition and health status both in a direct and indirect way. The direct effect could be nutritionally related, as when increased energy use in heavy work not matched by a corresponding increase in food consumption.

Millwood and Gezelius (1985) observed that development efforts that aim at improving nutrition through giving women the opportunities to provide more food for themselves and their families, must also include measures that can reduce the rate of infectious diseases,

otherwise one may risk wasting their efforts to improve nutrition. Dey (1984) reported that the vicious circle between malnutrition and infection can most effectively be broken by attacking simultaneously both the food supply side and the sanitation and health side. In this respect, there is a link between home-environment and health status of women.

Environmental risks in the home and workplace may have a disproportionate impact on women's health because of women's different susceptibilities to the toxic effects of various chemicals (NEST, 1991). These risks to women's health are particularly high in urban areas, as well as in low-income areas where there is a high concentration of polluting industrial facilities. According to Anyakoha (1990) through women's management and use of natural resources, women provide sustenance to their families and educators, women play an important role in promoting sustainable development through their concern for the quality and sustainability of life for present and future generation. As mothers, women are the frontline provider of care within the family and the key to human development and well-being. Their health, in its turn, has a strong impact on that of the children they bear and raise (
He attributed this to the fact that women have different

and unequal access to and use of basic health resources, including primary health services for the prevention and treatment of childhood diseases, malnutrition, anaemia, diarrhoeal diseases, communicable diseases among others. Amsyari (1995) noted that amount and type of pollutants in homes depends on the number of person occupying the premises, kinds and duration of operation of appliance, method of cooking and heating and other activities within the structure.

Smith (1992) reported that in course of maintaining decent environment, women are faced with environmental health hazards associated with home environment. Okpukpara (1995) noted that some cultural practices which do not allow women to take their bath for at least 28 days when their husband dies as a major source of health hazards to women. Andreae and Goldammer (1992) observed that rural women are affected by smoke than the cigarette smokers during cooking. They estimated that smoke inhaled by women to be more than 3 packets of cigarettes per day. Rodda (1992) noted that most current environmental problems are essentially as a result of people's activities and their attitude towards the natural environment. He rather reported that in the case of women, environmental problem give rise to health hazards. Roberts (1990) reported that women's contribution to the provision and

maintenance of shelter may vary with socio-cultural background. He also observed that this as a result of the fact that they bear the direct negative outcome of lack of space in rural areas. In most of urban areas and squatter areas, insanitary condition increase environmental health problems of the poor, who are in most cases, women (Smith, 1992). Roberts (1990) estimated that 700 million women die yearly in developing countries including Nigeria, due to environmental hazards associated with biomass especially women in rural areas.

Blaustein (1994) reported that women in poor rural areas are disadvantaged in dealing with the environment when they have less education and training, they also are excluded from traditional rural development programmes. Beaumant (1989), concluded that a greater concerns should be addressed to women and home environmental management because of health hazard associated with it. He lamented that women suffer more than any other group in terms of environmental health hazards. In addition, NEST (1991) observed that women cultural responsibility of fetching water from streams has exposed them to guinea worm, filariasis, among other water borne diseases more than their male counterpart.

Based on the important relationship existing between women health and environment, and the need for the

environment to be effectively managed for sustainable management, it becomes necessary that meaningful efforts should be made at studying response of women's health status to home-environmental management. Consequently, it is expected that this study would provide some form of focus for enhancing the home-makers' contributions to environmental management, at least with regard to enhancing the environmental awareness of home-makers.

# CHAPTER THREE

# METHODOLOGY

## 3.1 Study Area

This study was carried out in Anambra State. Anambra State has been purposively selected because language, cultural practices and social characteristics of the people in the area are familiar with the researcher. In addition, the majority of populace lived in rural areas are mostly women.

Anambra State is located between latitude $5^{\circ}40'N$ to $6^{\circ}48'N$ and longitude $6^{\circ}35'E$ to $7^{\circ}30'E$. The State is bounded in the South by Imo State, in the North by Kogi State, on the West by Delta State, and on the East by Enugu State. The State has a total population of 2,924,242 million and total land area of 4,887 Sq.Km. The State is made up of 21 Local Government Areas and four agricultural zones and three educational zones.

## 3.2 Population of the Study

The population of the study was made up of all the women that are home-makers who lived with their husband. It is assumed that home-makers are mostly affected by the environment and in turn exercise some form of impact on the home environment. It is also

assumed that all categories of adults are affected by the environment. Therefore, the unit of observation for this study will be the household (that is, a group of people sharing common cooking and housekeeping arrangements). Consequently, the home-makers within the households in the area of study formed the major population of the study. Within each households, adults (males and females) were drawn to constitute the subjects of the study.

## 3.3 Sample of the Study

Multi-stage random sampling techniques was used to select the respondents. This technique will give every adult in Anambra State equal chance of being selected.

The local government classified as urban based on state criteria are Awka North, Awka South, Onitsha North and Onitsha South, all others are classified as rural areas.

A random sampling technique was used to select two local government areas from each urban and rural local government areas. This gives a total of four local government areas that was used. From each of the two local government areas, classified as rural areas, 25 households were drawn at random. In urban

areas, 25 households were equally drawn at random. It is expected that each household will yield two adults (a male and a female), to give a total of 200 subjects. This number is considered adequate in order to ensure the thoroughness demanded by the research procedures which included interviews and focus group discussions.

From each of the above selection, ten women and ten men will be selected at random for the purposes of pilot study.

## 3.4 Instrument for Data Collection

This study used questionnaire, interview and focus group discussions for data collection. The questionnaire which served as interview schedule for illiterate subjects will be made up of a mixture of open ended and structured items covering the specific objectives of the study. The study instruments were duly validated and pilot-tested prior to their utilization for data collection.



## 3.5 Development of Instrument for the Study

The design of the study was a survey research, and the instrument for data collection was the questionnaire. The questionnaire also served as interview schedule for illiterate subjects. The

questionaire was divided into parts according to research questions. It contained such variables as age, marital status, family size, educational status among other variables.

## 3.6 Reliability of the Instrument

Reliability of the instrument was established by a test-retest reliability method. This procedure measured the degree of consistency, the instrument was over time. Copies of the questionnaire were administered to a selected number of respondents. After three weeks, the questionnaire were re-administered on the same respondents as a retest. Their responses were subjected to reliability analysis using the Pearson Product Moment Correlation Coefficient test to determine the reliability Coefficient of the instrument.

## 3.7 Data Collection Technique

Primary and secondary data were used for this study.

The primary data was collected with the use of questionnaire, interview and focus group discussion. The questionnaire was pretested with a random selected pilot study of 20 respondents to authenticate the validity and reliability of the questionnaire.

The final draft of the questionnaire sought information on socio-economic and cultural characteristics of the respondents. It also sought information on the respondent's home environmental awareness and home management practices. Socio-cultural responsibility in home environment management also was collected. Environmental health associated diseases suffered by the respondents in the last two months and sources of such environmental health diseases was also collected. In addition, community health worker assisted the researcher in some of medical examination.

Secondary data was collected mainly from available journals, published and unpublished materials of relevance to the study.

## 3.8 Data Analysis

The data collected was analysed with descriptive statistics such as means proportions and percentages for describing data. Other statistical tools such as to test of differences between Means, Chi-square and Correlation Coefficient tests. The hypothesis was tested at appropriate level of significance with the required statistical tools. The correlation coefficient will be subjected to t-test analysis for the purpose of accepting or rejecting the null hypothesis "2".

# CHAPTER FOUR

# RESULT AND DISCUSSION

## 4.1 Socio-Economic Profile of the Respondents

Consideration is given to the socio-economic profile of the respondents basically for the fact that it is believed that they may have a lot to contribute in determining household relationship with the environment. In this regard age, educational level, income level and occupations of the respondents were considered.

### 4.1.2 Age Distribution of the Respondents

The study showed that about 73 percent of the respondents were between the ages of 21 and 56 years. This implies that the majority of the respondents are still within their productive stage in life and therefore stands a better chance of relating well with their environment. This is presented in Table 4.1.

Table 4.1: Age Distribution of the Respondents.

| Age Range | Frequency | Percentage |
|---|---|---|
| Less than 20 years | 14 | 7 |
| 21 - 30 years | 66 | 33 |
| 31 - 40 years | 50 | 25 |
| 41 - 50 years | 30 | 15 |
| Above 50 years | 40 | 20 |
| Total | 200 | 100 |

Source: Field Survey, 1998.

### 4.1.2 Level of Education

The level of education of the respondents, it is believed that this variable has obvious implication in the activities of members of household to environment. This is because the more education the respondent acquires, the better his or her relationship with the environment. The result shows that 66% of the respondents has no formal education. This was followed by those that spent between a year and six years (16%) in the formal education. Only 4% of the respondents spent between 1 and 15 years in formal education. It should be noted that the majority of farmers who spent eleven to fifteen years in formal education were mainly retired civil servants. According to UNESCO (1986), lack of education of the masses always creates a negative relationship with their home environmental management.

Table 4.2: Frequency Distribution of Respondents According to Number of Years Spent in Formal Education.

| Range (Years) | Number of Respondents | Percentage(%) |
|---|---|---|
| Zero | 132 | 66 |
| 1 - 6 | 32 | 16 |
| 7 - 10 | 28 | 14 |
| 11 - 15 | 8 | 4 |
| Total | 200 | 100 |

Source: Field Survey, 1998.

### 4.1.3 Income Level of the Respondents

Table 4.3 shows the income distribution of the respondents. From the table it was found that majority of the respondents fell within low income group. This represented 65% of the respondents. The high income group had the least share of the respondents (16%).

The fact that majority of the respondents fell within low income group in the study area may have serious effect on the type of environmental management practised among the respondents. This agrees with findings in other areas in the world (Connect, 1991).

Table 4.3: Income Distribution of the Respondents

| Income Group | Frequency | Percentage |
|---|---|---|
| Low Income | 130 | 65 |
| Medium Income | 38 | 19 |
| High Income | 32 | 16 |
| Total | 200 | 100 |

Source: Field Survey, 1998.



### 4.1.4 Occupational Distribution

Five major occupational groups were identified in the study area. These include:

(a) Farming
(b) Artisanship
(c) Trading
(d) Civil Service; and
(e) Professionals.

Table 4.4 shows the distribution of the respondents according to their primary occupations. Primary occupation as defined in this study refers mainly to one in which a respondent spends about 80 percent of his time. There were cases where the respondents did not have farming as the primary occupation in the above context, but owned farms which they manage.

Table 4.4: Distribution of the Respondents According to their Primary Occupation

| Occupation | Number | Frequency |
|---|---|---|
| Farming | 100 | 50 |
| Artisanship | 10 | 5 |
| Trading | 30 | 15 |
| Civil Service | 44 | 22 |
| Professionals | 16 | 8 |
| Total | 200 | 100 |

Source: Field Survey, 1998.

The study showed that 50 percent of the respondents took farming as their primary occupation while the others (50 percent) combine farming with other activities as shown in the table 4.4 above. The further breakdown of the table shows that the respondents that engaged in artisanship received the least share of the total respondents (5 percent) while those in civil service were relatively high (22 percent).

## 4.3 Extent of Environmental Awareness by Male and Female Respondents

The extent of environmental awareness by the respondents will determine the extent of managing home environment effectively. This is because people cannot manage what they do not know. This will also affect the health status of the respondents. This is presented in Table 4.5.

The grand mean of the causes of home environmental degradation is 2.40 among the male respondents while 2.66 is for the female respondents.

The further breakdown of the table shows that male responses for the awareness of causes of home environmental degradation was negative while that of female was positive (2.66). This implies that females were knowledgeable on causes of home environmental degradation. However the causes of home environmental mismanagement such as fuelwood

Table 4.5: The Extent of Home Environmental Awareness by Male and Female Respondents with Respect to Causes of Home Environmental Degradation

| S/No | Items | Mean Response for Male | Decision | Mean Response for Female | Decision |
|---|---|---|---|---|---|
| 1 | Fuelwood Smokes | 2.95 | Positive | 3.10 | Positive |
| 2 | Scattering of Refuse | 2.50 | Positive | 2.89 | Positive |
| 3 | Inappropriate disposal of dirty and used waters | 2.38 | Negative | 3.01 | positive |
| 4 | Inadequate provision of sanitary facilities | 2.03 | Negative | 2.00 | Negative |
| 5 | Defecating in inappropriate places | 2.98 | Positive | 3.02 | Positive |
| 6 | Overcrowding | 1.93 | Negative | 2.67 | Positive |
| 7 | Low educational status of the people | 2.05 | Negative | 1.96 | Negative |

Source: Field Survey, 1998.

smokes, scattering of refuse, and defecating in inappropriate places received positive response by male respondents. While fuelwood smokes, scattering of refuse, inappropriate disposal of dirty water, defecating in inappropriate places, and overcrowing received positive responses by the female respondents.

Inappropriate disposal of dirty water, inadequate provision of sanitary facilities, overcrowing and low educational status of the people received negative response of the causes of home environmental degradation by male respondents while inadequate sanitary facilities and low educational status of the people received negative response for female respondents. Not only that the means of items number 1 , '3' and "5" of female are more than that of male, but also, their averages are more than 3.00 indicating a strong positive response in four point likert scale. Another fact deduced from the table is that those items are mainly attributes of home environment management. This shows that women are more associated with home environment management than male. In final analysis, it can be said that male are not much concerned about the knowledge of environment, therefore are not close to home environmental management.

## 4.3 Awareness of the Consequences of Unhealthy Environment

The important concept of environment is for the users to know the consequences of mismanaged environment. This is because greater knowledge of consequences of unhealthy environment by the user will make the user imbibe those practises that will forstall a healthy environment. The response of awareness of the consequences of unhealthy environment is presented in Table 4.6.

Table 4.6: Mean Responses of Home-Makers on their Awareness of the Consequences of Unhealthy Environment

| S/No | Items | $\bar{X}$ | Decision |
|---|---|---|---|
| 1 | Unclean environment could bring about illhealth | 3.34 | Positive |
| 2 | When drinking water in impure environment it brings about diseases | 2.05 | Negative |
| 3 | Dirty environment breeds pests and parasites that can cause diseases | 3.01 | Positive |
| 4 | Inappropriate methods of waste disposal affect the health of individual | 2.59 | Positive |
| 5 | Unhealthy environment makes the inhabitant unrecognized in the society | 1.89 | Negative |
| | Grand Mean | 2.58 | Positive |

Source: Field Survey, 1998.

The result in Table 4.6 shows that three items out of five items used in testing awareness of consequences of unhealthy environment by the respondents were positive while others were not much known to be a consequence of unhealthy environment.

Specifically, item numbers '1' and '3' scored above 3 points, while item number '4' scored slightly higher than pass mark (2.50). This shows therefore that respondents were aware that illhealth, breeds of parasites and pests, and other diseases were all the outcome of unhealthy environment.

## 4.4 Social and Cultural Responsibility of Women in Home Environment in the Study Area

Culture is the totality of a people's way of life. It includes their values, beliefs, aspirations and modes of behaviour, which are learned and passed on within the group (NEST, 1991). The environment helps in shaping cultures. On the other hand, culture shape the environment in many different ways. This is why the campaign for conservation and environmental awareness has to take on a new cultural tone, calling for new ways of life and a new orientation.

In the study area there were activities that pertain to home environment that were performed by women alone. These activities are social and cultural

in nature. Women are responsible for sweeping the houses every morning, responsible for cooking, fetching water, fetching firewood, and scrubbing the floors. In cultural context of Eastern Nigeria it is a taboo for a man whose wife is still alive to perform these tasks. Men have no much responsibility in home environment management. His activities is mainly bringing resources to home which is now managed by his wife. Therefore, it can be concluded that women is closer to home environment than any other member of the household. The analyses presented above was as a result of oral interview and focus group discussion held with the respondents in the study area.

## 4.5 Gender Differential in Home Environmental Management

The home environmental management is stereotyped. This means that there are specific activities performed by different sexes in maintaining adequate home environment. However, this assertion of gender differences in maintaining home environment may be obtained more in developed countries than in less developed countries of which Nigeria is one of such countries. The result of responses by respondents on home environmental management is presented in Table 4.7.

Table 4.7: Responses of Gender Differentials in Home Environmental Management by Male and Female Respondents

| S/No | Items | Male $\bar{X}$ | Male Decision | Female $\bar{X}$ | Female Decision |
|---|---|---|---|---|---|
| 1 | We are responsible for sweeping and scrubbing the house. | 0.89 | Negative | 3.04 | Positive |
| 2 | We are responsible for fetching water, washing clothes and fetching firewood. | 1.28 | Negative | 3.31 | Positive |
| 3 | We dispose refuse at appropriate places. | 0.93 | Negative | 2.96 | Positive |
| 4 | We clear bush in our surroundings. | 2.78 | Positive | 2.05 | Negative |
| 5 | We are responsible for cleaning plates, and other things within the house. | 1.99 | Negative | 2.88 | Positive |
| 6 | We are responsible for aestethic status in and outside our surrounding. | 2.51 | Positive | 2.82 | Positive |

Source: Field Survey, 1998.



Table 4.7 shows that there was gender differences in home environmental management. The analysis shows that male are not much involved in home environmental management as they had grand mean of 1.73. Much of the environmental management are performed by female as they had grand mean of 2.84.

Specifically, out of six questions asked to different respondents, two were responded positively by male respondents while five were responded positively by female respondents. The only question which female respondents could not have a pass mark is clearing bush in surroundings. This may be as a result of the manly nature of the job. Item number Six is not for a specific gender because it involves a lot of things which are hard and soft jobs. It involves clearing bushes, planting flowers, decorating the house with flowers and chairs among others.

## 4.6 Sickness Suffered by Male and Female Respondents and their Rate of Occurrence

The type of sickness suffered by respondents has a lot to tell how healthy is the environment. For example, some environmental related diseases such as typhoid, cholera, lung cancer, bronchitis, high blood pressure and stomach ulcer has a strong correlation with filty environment. In addition, the frequency of occurrence and gender differences in occurrence will be an added confirmation of the environmental mismanagement related diseases. The response of male and female respondents on the sickness suffered and their rate of occurrence is presented in Table 4.8.

Table 4.8: Response of Male and Female Respondents on Different Types of Sickness Suffered and their Rate of Occurrence in the last Two Months

| Diseases | Male | | | Female | | |
|---|---|---|---|---|---|---|
| | Number | % Percent | Rate | Number | % Percent | Rate |
| Malaria | 114 | 57 | 1 | 106 | 53 | 1 |
| Lung Cancer | 26 | 13 | 1 | 64 | 32 | 2 |
| Body ache | 120 | 60 | 5 | 112 | 56 | 4 |
| High blood pressure | 40 | 20 | 4 | 28 | 14 | 6 |
| Headache | 136 | 68 | 8 | 130 | 65 | 6 |
| Waist pain | 18 | 9 | 2 | 86 | 43 | 3 |
| Bronchitis | 6 | 3 | 1 | 36 | 18 | 5 |
| Chest pain | 8 | 4 | 3 | 22 | 11 | 2 |
| Stomach ulcer | 2 | 1 | 1 | 6 | 3 | 1 |
| Dizziness | 44 | 22 | 2 | 34 | 17 | 1 |
| Burnt | 2 | 0.8 | 1 | 42 | 21 | 12 |
| Guinea worm infection | - | - | - | 10 | 5 | 1 |
| Typhoid | 8 | 4 | 1 | 18 | 9 | 2 |

Multiple Responses was recorded.

Source: Field Survey, 1998.

The result above shows that the indicators of home environmental health related diseases were mostly suffered by female respondents. Diseases such as lung cancer, bronchitis, chest/waist pains, burnt, guinea worm infection and typhoid are sure test of environmental

mismanagement which is mostly suffered by female respondents. This result shows that women suffer health and other hazards associated with home environmental management than men. Also the rate of occurrence shows that these environmental health related diseases occurred more by female respondents than male respondents. Those diseases that have no association with gender differences almost recorded the same number of respondents in both male and female respondents. For example, diseases such as malaria, body ache, headache, and dizziness have little or nothing to do with home environmental mismanagement. In addition, males and females suffered the same type of health environmental diseases in some type of diseases as malaria and so on. The further breakdown of the analysis shows that the rate of occurrence of home environmental related diseases occurred most in female than male respondents.

## 4.7 Nutrient Constituent of Women in the Study Area

Nutrient constituent of women in the study area are presented in Table 4.9. This table is used to measure the health status of women in the study area.

Table 4.9: Mean Nutrient Constituent of the Women and the Standard Requirement

| Nutrient | Actual Nutrient | Recommended Practice | Percent Change |
|---|---|---|---|
| Energy | 1,316.3 | 2200 | 59.8 |
| Protein | 25.6 | 45 | 56.9 |
| Calcium | 462.1 | 450 | 102.7 |
| Iron | 13.5 | 29 | 46.6 |
| Thiamin | .68 | 0.9 | 75.5 |
| Riboflavin | .31 | 1.3 | 23.8 |
| Niacin | 4.8 | 15.8 | 30.4 |
| Vit. A | 1,341 | 500 | 268.2 |
| Vit. C | 29.3 | 30 | 97.7 |

Source: Lab Analysis, 1998.
Recommended Standards from FAO/WHO.

The result in Table 4.9 shows that average nutrient constituent for calcium and Vit. A were more than 100% for the recommended standard. The average nutrient constituent of energy, protein, thiamin and Vit. C recorded 50% more than the recommended constituent for the body.

However, the average nutrient constituent of women in iron, riboflavin and niacin were below the recommended standard. This shows that women in the study area has one kind of health problem or the other.

In addition since the iron is one of those nutrient below standard, it can be concluded that environmental health problems may be the result.

## 4.8 Problems of Appropriate Home Environmental Management by Women

Some problems must have contributed to lack of good home environmental management practices. These problems may hinder women from participating effectively in home environment management even when they have resources to do so. The most important problems to this effect is presented in Table 4.10.

Table 4.10: Problems of Good Home Environmental Management by Women

| Items | Number of Respondents | Percent |
|---|---|---|
| Finance | 64 | 32 |
| Lack of knowledge | 58 | 29 |
| Low educational status | 102 | 51 |
| Lack of support from husband | 46 | 23 |
| Increase in family size | 20 | 10 |
| Lack of time | 110 | 55 |

Multiple Responses were recorded.

Source: Field Survey, 1998.

The result in Table 4.10 shows that the most important problems that contributed to inappropriate home environmental management by women were their low educational status (51%) and lack of time (55%). This may be attributed to the fact that most women in rural areas are less privileged to attend schools, thereby contributing to their inadequacy in reading or being educated on appropriate environmental management. Also because of numerous works women do in and outside the home, they may have less time to plan appropriately for good home environment. Unfortunately, finance got less than 50% of the total respondent. Finance suppose to be one of the most important factors that contribute to inadequate home environment. This is because money is needed to buy equipment that could enhance adequate home environmental management. However the low score of this factor could be attributed to the fact that in rural areas, people are de-emphasize money from majority of their activities. Most of the respondents believed that family size has little or nothing to do with home environmental management as it scored only 10%. This is contrary to the findings by Amsyari (1995), that amount and type of pollutant depends on the number of person occupying the premises.

## 4.9 Hypotheses Testing

Two hypotheses were stated for this study. The two were in null form of hypothesis.

The first hypothesis: There is no significant difference between the responsibility of men and women in home environmental management.

Chi-square was used in testing this hypothesis. The result shows that Chi-square calculated (20.31) is greater than Chi-square in the table (11.0705). Based on this result we reject the null hypothesis and accept that there is a significant difference between the responsibility of men and women in home environmental management.

The second hypothesis: There is no significant influence of home environment management on women's health status. The diseases suffered by female respondent were assigned figures and correlated with the mean nutrient constituent in the body. This is done in two parts. The first part is correlated with those that have common measurements such as protein, calcium, iron, thiamin, riboflavin, niacin, Vit. A and Vit. C. The second part is correlated with energy.

The result shows that the first part t-cal = 7.69 which is grecter than the critical t (1.96). Also the

second part followed the same trend except that the t-cal (18.56) is greater than the former. Based on these two results, the second part of the hypothesis is rejected. Thus we accept that home environmental management affect the health status of the women.

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1 Summary

A study of response of women's health status to home environmental management was conducted in Anambra State. The study was as a result of the increasing importance of educating women on the need for environmental friendliness practices. Five specific objectives and two null hypotheses were constructed in order to achieve the broad objective.

Literature was reviewed under the following headings (a) Women in Economic Development (b) Women and Environment (c) Environment and Health Status of Women.

Multi-stage random sampling techniques was used to select 100 male and 100 female respondents for the study. Data were sourced from both primary and secondary sources with questionnaire. Appropriate data were collected to realize the specific objectives and null hypothesis of the study. Data were analysed with descriptive, Chi-square and Spearman's Correlation Coefficient tests to achieve the objectives and hypotheses. In addition, the hypothesis was tested at appropriate degree of freedom (i.e 0.05 probability level).

The result shows that majority of the respondents are poor and fall between 21 and 50 years of age. The result also shows that majority had no formal education and are mostly farmers. Further, the result also shows that majority of the respondents are aware of causes of home environmental management especially among female respondents. Also majority are aware of the consequences of an unhealthy environment.

The result also shows that there are gender differences in social and cultural responsibility of women and men. The null hypothesis stated to test this fact was rejected, showing that there is different social and cultural responsibilities of men and women. It was also found that the real test of environmental health related diseases shows that women suffer these diseases more than their men counterpart. The rate of occurrence of those environmental related diseases was more in female than male.

The mean nutrient constitution in the body shows that calcium, and Vit. A were more than the requirement of FAO/WHO while all other nutrient were less than the required intake. The nutrient that were prominent were riboflavin and Niacin. These two nutrient were not upto 50% of the requirement. The problem that contributed to the low practices of good home environmental

management were lack of education and lack of time to perform such tasks.

## 5.2 Conclusion

This study has shown that home environmental management affects the health status of home-makers. Therefore appropriate institutions should be put in place to reduce the chore and health effects of home environmental management by sharing home management responsibility of male and female in household.

## 5.3 Recommendation

Based on the result of this study, the following recommendations are made:

(1) Improvement of the women status especially as it concerns the decision making in the family will be beneficial to improving their health status through controlled work activities in the environment.

(2) The disparity between sexes in the social and cultural responsibility is great and should be reduced. If this is done, most work in the home will be shared between sexes to avoid stressing women much.

(3) Government, non-governmental organizations and other agencies should organise either formal or informal education for women on how to manage their home environment. It is believed that some of the home environmental related diseases could be avoided with little knowledge about them.

(4) Provision of adequate health care services in rural communities can help to reduce the rate of disease infection. This is because most of the environmental health related diseases are communicable.

(5) Improving women's income earning ability so that they can not only be less dependent but also will be able to use their money for treatment of diseases.

(6) Women should be taught on how to avoid the diseases associated with water. Since they are mostly involved in fetching and washing water.

(7) Modern tools should be provided for women to perform most of the home activities. For example purchasing smokeless stoves among others.

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