

## The Influence of Nutrition Education on the Health of Women in Moyamba Town, Southern Region of Sierra Leone

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### Abstract

The research work investigated the influence of nutrition education on the health of women in Moyamba town. The investigation adopted a descriptive design of a survey in this town. The study used a target sample population of twenty-five (25) women, lactating mothers, five (5) pregnant women, elderly five (5), aged women five (5). Adolescent five (5). Random sampling technique were used to select these women at various areas, schools, ante natal, post-natal clinics and outpatient department. Questionnaires were administered and interviews conducted. The result analyzed revealed that, tradition, poverty, negligence and inadequate logistics, illiteracy and other social factors such as poor education on good health leads to the risk of nutrition disorders in women such as mal-nutrition, diabetics, obesity, underweight, overweight, heart failure, complicated labour and infant and maternal mortality. another factor was Lack of proper nutrition education in schools. Nutritionist should be given special allowance in order to motivate them. Facilitate nutrition education at clinics, hospital radio and television discussions, postal and sign board with nutrition messages to the public as well as school , administrators should make it a point of duty that students are

exposed to nutrition messages and that food and nutrition be a core subject in schools in order to prevent diet related diseases. This will enhance healthy environment and nation.

## Introduction

Nutrition Education is the process of teaching the science of nutrition to individuals or group. Health professionals in their own ways have different roles in educating an individual in the clinics, communities and hospitals. Nutritionist – or dieticians serve to assist or enable individual to incorporate changes in eating patterns and behavior into their lives. Nutrition is an important issue in the health sector of any nation.

Nutrition education needs to be a much more comprehensive enterprise than information dissemination in order to be effective. Nutrition education needs to address food preferences person related factors such as perceptions, beliefs, attitudes, and social norms; and environmental factors. Nutrition education has been defined as “any combination of educational strategies, accompanied by environmental supports, designed to facilitate voluntary adoption of food choices and other food and nutrition- related behaviors, conducive to health and well-being nutrition education is Corresponding Author: Dr. IR, Program in Nutrition, Department of Health and Behavior Studies.

Nutrition education is vital in the prevention of obesity, hypertension, diabetics and other cardiovascular diseases, complicated labour, infant and maternal mortality. The lack of information, leads to poor and inadequate food habits and therefore there will be swelling limbs. Faces, complied with odema of the esctremities obesity and overweight. Women in Africa lived more on energy food as their staple food such as carbohydrate food, starchy foods, saturated fats and oil with less exercise and consume less fruits and vegetables and protein.

Traditionally, nutrition education is scanty amongst these people in rural areas, they plant these foods, rare animals and find it difficult to eat them. They prefer selling them in the market. Being knowledgeable of health risks of different food nutrient does not lead to a change in the consumption of them.

What people eat depends on so many factors, the health effect of food may have influence. The media (television). The media can have influence on the choice of food consumed. It is important that both men and women enjoy variety of healthy foods from all food groups (balanced diet) and they should be in their right proportion. Grains fruits and vegetables, fats and oil protein foods like eggs, fish, meat, sea foods, oyster crabs etc. and beans, Peas, Bennie water and exercise etc. women at certain age such as puberty (adolescent pregnant and lactating women, adulthood aged at all time needs these foods in their life time.

Iron is essential for good health and every level in women during child bearing age (puberty to adulthood) prior to menopause E.g. Food that provide iron are fish, meat, chicken turkey, fork, beans, Bennie and other sea foods. Women should avoid excess sugar saturated fat and alcohol, soft drinks, candy, cookies, pastries, confectionaries. iron Intake is recommended at every stage of women's life; calcium intake is importance at every women's life staged, needs to consume lot of water to flush out harmful toxic from the body in the form of sweat or urine magnesium levels lead to PMS osteoporosis migraine so it is advised to take enough of magnesium in the diet, protein also protects from muscle loss (body building block of muscle tissues).

Every human being needs food daily in order to survive and maintain good health. Nutrition improves individual feelings of wellbeing improved weight control and appearance, know ledge, skills, motivation and physical fitness. In the southern part of Sierra Leone, people do meet priorities time of eating food, and meals time amongst them varies, poverty is

a leading factors of time meals are taken, some take just one meal a day (evening or after) and some twice a day morning and evening, normally those who take meals twice a day are people who can afford. menu in Sierra Leone is schedules as

101 – Meal in morning (breakfast) one in the afternoon(lunch) and one in the evening (dinner)

010 – None in the morning (breakfast) a meal in afternoon (lunch) non evening (dinner)

001 – No (breakfast, non-lunch and dinner.

100 – just a breakfast and no other meal till the next day.

All these have effect on the healthy living of individuals and can lead to underlying diseases such as peptic and duodenal ulcers. Good nutrition is of paramount important to healthy living and it should be important that one include physical activity which can maintain healthy weight and reduce risks of diet related disease to boost immunity, and increase energy levels. It is important that women in all levels to have fair knowledge about nutrition in other prevent diet related disease throughout their life, combine with active physical exercise.

#### Research Question

- i. Identify the occupation of respondent interviewed
- ii. Identify the qualification of Nutritionist and dieticians providing Nutrition education at Primary Health Unit (PHU)/ Ante Natal, postnatal and outpatient clinics (department) which deals mostly with medical cases (hypertension diabetic, obesity, cardiovascular/ disease.
- iii. Access the technique used in providing nutrition at PHU
- iv. Identify challenges affecting proper education nutrition

- v. Identify most commonly diet related diseases
- vi. Food mostly consume
- vii. Strategies and solutions that can be used in delivery nutrition Education throughout the lives of women.

## Methodology

The study was carried out in Moyamba town, the district head quarter of Moyamba district in the southern region of Sierra Leone. The section in Moyamba town selected were Salina section, Sembahun road section, Yeyema road section, Giblehun section.

A total of twenty five (25) women comprising of five(5) pregnant women, five(5) lactating women, five(5) aged women five(5) and adult women five(5) were targeted from the different section stated above. These women provided the necessary information on nutrition education provided to them respectively.

The data collection tools used were questionnaires and face to face discussions. The questionnaire developed contained items on the different aspect of the objectives of the investigation outlined in the study of Nutrition Education and the different category of respondents received . questionnaires on the above study. A face to face conversation, discussions were held in a focus group discussion at the different sections selected for the study. This was done to get a first hand information on the effectiveness of nutrition education amongst women in Moyamba township. The result was analyse and presented in table, histogram and foot notes explanation.

## Results and Discussion

Table I - Occupation of Respondent

| <i>CATEGORY</i> | <i>TRADER</i> | <i>STUDENT</i> | <i>HOUSE WIFE</i> | <i>TEACHERS</i> | <i>HEALTH WORKER</i> |
|-----------------|---------------|----------------|-------------------|-----------------|----------------------|
| Adolescent      | 8             | 5              | 4                 | 2               | 1                    |
| Pregnant Woman  | 7             | -              | 10                | 2               | 1                    |
| Lactating woman | 9             | -              | 8                 | 1               | 2                    |
| Adult Woman     | 10            | -              | 7                 | 2               | 1                    |
| Aged            | 12            | -              | 8                 | -               | -                    |
| <i>Total</i>    | <i>46</i>     | <i>5</i>       | <i>37</i>         | <i>7</i>        | <i>5</i>             |

*Source: Field Data 2020*

Table one (1) above shows the occupation of women interviewed in Moyamba township 44% traders, 5% student, 37 house wives 7% teachers and 5% health workers

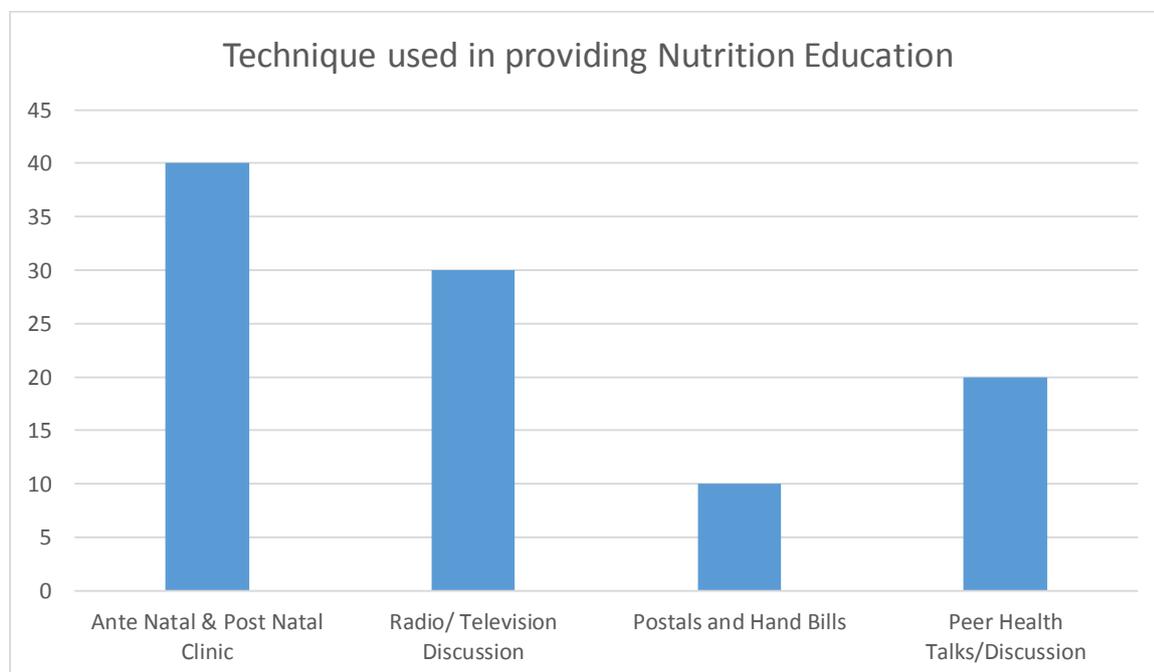
Table II: Qualification of Respondent

| Category of respondent                          | Qualification (Nutritionist/Dieticians) |            |           |            |
|---|---|------------|-----------|------------|
|   | Trained                                 | Percentage | Untrained | Percentage |
| Adolescent                                      | -                                       | -          | 5         | 20         |
| Pregnant women (providing nutrition education)  | 1                                       | 4          | 4         | 16         |
| Lactating women (providing Nutrition Education) | 1                                       | 4          | 4         | 16         |
| Adult women providing Nutrition Education       | 2                                       | 8          | 3         | 12         |

|                                    |    |   |   |    |
|------------------------------------|----|---|---|----|
| Aged providing Nutrition Education | 0  | - | 5 | 20 |
| Total                              | 16 |   |   | 84 |

The table above shows the qualification of respondent who provide Nutrition Education. It was found out that 84% were untrained or provide nutrition Education and 16 % are trained and provide nutrition Education

Figure I- Technique Use in Providing Nutrition Education



The chart shows the different techniques use in providing nutrition Education information. 40% get nutrition Education information when they attend ant natal clinic, and postnatal clinic , normally these clinics are attended by pregnant and lactating women. That is the time they are privilege to listen to nutrition Education and demonstration of the type of food that should be eaten and the reasons for eating them 30% listen and contribute to radio discussion and it is seldomly done by the Ministry of Food directorate, 10% get information from

postal and hand bills with diagrams of food to be eaten and the effect of not eaten them. 20% get nutrition education from peer health talks during privilege discussion.

Table III -Factors Affecting Nutrition Education

| FACTORS                          | FREQUENCIES | PERCENTAGE |
|----------------------------------|-------------|------------|
| Illiteracy /poverty              | 8           | 32         |
| Religious Believes               | 5           | 20         |
| Traditional Believes<br>(taboos) | 8           | 32         |
| Health Status                    | 4           | 16         |

Source2020

The table above indicate the most prevalent factors affecting Nutrition Education 32, Illiteracy and poverty 20% religious believes, traditional believes (taboos) 32%, health status 16%. In Sierra Leone and in Moyamba in particular, illiteracy, Religious believes, traditional believes (taboos) and the health status and the factors affecting nutrition Education.

Table IV - Food Mostly Consume By Respondent

|   | FREQUENCY | PERCENTAGE |
|---|-----------|------------|
| Carbohydrates- while<br>grains/cereals/<br>yam/cassava, potatoes,<br>Gari | 15        | 60         |
| Minerals – calcium,<br>potassium, magnesium,<br>Zinc, phosphorus          | 2         | 08         |
| Protein – fish, egg, meal,<br>beans, nuts                                 | 4         | 16         |

|  |   |    |
|--|---|----|
| Fat& oil – palm oil,<br>vegetable butter | 2 | 08 |
| Vitamins- fruits &<br>vegetable          | 2 | 08 |

The table above illustrate the food mostly consume by respondent in my study , looking at these foods consume it was found out that 60% of their food eaten are mostly carbohydrates and it is there staple food, they regard themselves not eaten food, if they don't consume any of these carbohydrates food, rice, cassava, potatoes, yams. 08% consume foods that contain minerals, 16% foods, that contain (protein e.g., fish, meat facilitating production and mostly eat second class protein foods. Beans 08% eats foods that contain most protein foods are regarded to be forbidden either because of religious believes, or traditional believes, fats & oils (e.g. palm oil, vegetables oil, butter 08% vitamins (fruit and vegetables) eating if fruits and vegetables. Eating of fruits and vegetables is like nothing eating.

Table V -Most Commonly Diet Related Diseases Found in The Community

|               | FREQUENCY | PERCENTAGES |
|---------------|-----------|-------------|
| Hypertension  | 5         | 20          |
| Diabetic      | 3         | 12          |
| Obesity       | 2         | 08          |
| Anemia        | 6         | 24          |
| Malnutrition  | 8         | 32          |
| Skin disorder | 1         | 04          |

The table above indicate the most common diet related diseases found in the community. It was found out that 20% Hypertensive , 12% Diabetic, 08% Obesity, 24%, Anemia, 32% malnutrition and 04% Skin disorders .these diet related diseises causes a lot of treat as the

community is not fully informed about the right type of food to be eaten in order to prevent the occurrences of these diseases

Table VI- Food Mostly Consume By Respondent

|   | FREQUENCY | PERCENTAGE |
|---|-----------|------------|
| Carbohydrate – white grains/ cereals/ yam/ cassava potatoes, gari | 15        | 60         |
| Minerals – Calcium, potassium, magnesium, zinc                    | 2         | 08         |
| Protein – Fish, eggs, meat, beans, nuts                           | 4         | 16         |
| Fat& Oil- Palm oil, vegetable oil, butter                         | 2         | 08         |
| Vitamins – Fruits & Vegetables                                    | 2         | 08         |

The table above illustrates the food mostly consumed by respondents in the study. Looking at the foods consumed, it was found out that 60% of their food eaten are mostly carbohydrates and it is their staple food, they regard themselves not eaten if they do not consume any of the carbohydrates e.g. food, Rice, cassava, potatoes, yams. 8% consume foods that contain minerals, 16% foods that contain protein e.g. fish, meat, poultry product and mostly eat second class protein foods in higher amount than the first class protein (Beans, peas) most protein foods are regarded to be forbidden either because of religious beliefs, or traditional beliefs. 8% include Fats & oils in their diet (eg. Palm oil, vegetable oil, butter, 8% of vitamins (fruit and vegetables), Eating of fruits and vegetables. Eating is like nothing eating. These selections of their food lead to suffering from diet-related diseases.

## Strategies That Can Be Used in Delivery Nutrition Education Through Out the Lives of Women

The following strategies were suggested in disseminating Nutrition Education information at category in life

| CATEGORY                     | STRATEGIES TO BE USED   |
|------------------------------|---|
| Adolescent                   | <ol style="list-style-type: none"> <li>I. Mobile technology (social media radio, television, YouTube ,face book page</li> <li>II. Curriculum (food and nutrition in schools, colleges and universities</li> <li>III. School garden programs               <ul style="list-style-type: none"> <li>- School assemblies</li> </ul> </li> </ol> |
| Pregnant and lactating women | <p>Health talks and demonstration of food items both ante natal and post-natal clinics</p> <ul style="list-style-type: none"> <li>- Clinic gardens</li> <li>- Charts, picture postal</li> <li>- Pyramid of food displayed on walls</li> <li>- Home visit</li> <li>- Sharing of food aid foods</li> </ul>                                    |
| Adult and aged Women         | <ul style="list-style-type: none"> <li>- Technology/social media</li> <li>- Radio/ Television discussion</li> <li>- Workshops</li> <li>- Backyard garden</li> <li>- Postal, hand bills of different food items</li> <li>- Parent teaching meetings</li> </ul>   |

## Risk Factors Common among Women

The major nutritional problems caused in under develop countries like Sierra Leone, is the excess intake of macro nutrients, such nutrient included carbohydrates which is the

main staple food eaten in excess, saturated fat, sugar and proteins, they most of the time take insufficient fibres, fruits and vegetables legumes in their diet.

These over intake of starching foods leads to over nutrition especially during pregnancy and lactating. They usually eat for two, pregnant woman for the unborn child and the lactating women for both the mother and the baby (breast feeding.) Excess of these food during pregnancy might lead to excessive weight gain and might have difficulty during labour for the pregnant woman. and cause complication such as caesian section, forceps delivery, vacuum extraction etc., prolong labour and loss of child (infant mortality). During breast feeding with consumption of starchy foods, without the food being balanced the child may suffer from anemia and a risk of obesity or develop kwashiorkor and marasmus and to extreme infant mortality. A lactating mother should be taught at post-natal clinic about the diet to be taken when breast feeding to prevent these complications.

Adolescent girls also take a lot of carbohydrate food which provide them with energy (Rice, cassava, potatoes, yams, sweets, candies, sugars and fatty foods may cause an increased weight. this doesn't mean that the child is growing faster, but it leads to obesity, diabetic, heart failure. At this stage they fail to take essential nutrient. There are also some adolescent at this stage who decides to check on their weight and they do not consume more food (dieting) but they prefare eating sour foods , Adult women are also in the habit of consuming a high percentage of energy foods, such as carbohydrates, sugars and fats and take less fibers and protein, fruit and vegetables in Sierra Leone Rice being the Staple food is being taken in larger quantities in the diet and as a result of consuming these food they suffer from diet related disease such as obesity, diabetic, hypertension, Skin disorders cardiac ,failure and cancer and this lead to greater premature mortality (death) of most adult women. Forceps delivery, and vacuum extraction. warrant that one should include both macro and

micro nutrient in the diet (have a balance diet). The b aged (elderly adult). 50-70yrs requires less energy than younger individuals.

Iron 8mg per day, the reasons are that they have decrease of iron in post-menopausal stage as compared with younger women.

## Conclusion

Nutrition education is of paramount important for all stages of development of a woman, ranging from adolescent, pregnant, lactating, elderly and aged women. With nutrition education amongst women it will helps to eradicate diet related diseases amongst them such as obesity, Anemia hypertension, diabetic skin dieses etc. problem in giving birth, e.g. caesian section, infant and maternal mortality. Africans relay on more of energy foods (stable food)mainly carbohydrates, foods saturated fats and sugar and less exercise. This education will help in healthy life styles of women.

## Recommendation

- Based on the conclusion the following recommendation were made.
- The ministry of health and sanitation train more nutritionist to be given health messages at ante natal clinics, post-natal clinics and outpatient department
- Sign post or postal of diet related messages with pictures for all women showing the deficiencies, sources and functions of different food groups
- Student expose to nutrition messages at schools and can even introduce foods and nutrition as a core subject in the curriculum by the ministry of Education Science and Technology

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