

Assessing Food Taboos and Their Nutritional Implications on Pregnant Women in Sierra Leone.

A Case Study of Six Sections In The City Of Kenema

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ABSTRACT

Poor maternal nutrition, especially in rural settings, adversely affects pregnancy and birth outcomes. In many local communities, pregnant women have food taboos with consequent depletion of vital nutrients. To facilitate early identification and prompt counselling, this study aimed at assessing the nutritional implications on pregnant women. With convenient sampling, data was collected from 150 respondents including pregnant women. Lactating mothers and elderly men and women using a structured questionnaire. The participants were from six sections in City of Kenema, Sierra Leone. Strength of beliefs in food taboo practices among pregnant women was almost similar between sections. The majority of food enlisted as taboos was that breaking them away to the reasons given in the results. The participants demonstrated a low knowldg level in nutrition, which in conjunction with restrictive food taboos led to suboptimal dietary practices. My result recommended that communication on nutrition should be emphasized in both formal education and an anti-natal care education. Subptimal nutritional practices by pregnant women might have contributed to the high rate of maternal and infant mortality in the country.

INTRODUCTION

Background to the Study

The full practices of humans are determined by values, beliefs, religious and some environmental circumstances, all of which are the product of tradition, culture and contacts. Food values represent the standards or principles that the individual or group holds about the desirability of food, which is not, in most cases, necessarily related to the nutritional value. For instance, most Sierra Leoneans prefer white rice, whether enriched or not, to brown or parboiled rice which is more nutritious than white rice. Food beliefs represent the ideas about food and nutrition that the

individual or group accept as true. Food attitude defines the manner in which people act, feel or think about food and this may be influenced by the environment or advertisement, especially by radio and TV. Food habits and beliefs represent the ideas about food and nutrition that the individual who holds them, because these habits and beliefs affect the selection of their diet. Sometimes, malnutrition occurs where there is enough food but the food items which make up a balanced diet are forbidden outright or are not consumed by some social groups within the community (Obert, 1978).

Pregnancy, a period of tremendous physiological changes, demands healthy dietary and lifestyle practices. The need for all food nutrients increases with a Recommended Daily Allowance (RDA) about 20-mg higher than for a non-pregnant woman (Freisling et al, 2006). Proper nutrition during pregnancy is considered important for the well-being of both mother and foetus. A balanced diet supports maternal health during pregnancy, delivery and breast feeding. Under – nutrition's most damaging effect occurs during pregnancy and in the first two years of life, and the effects of this early damage on health, brain development, intelligence, educability and productivity are largely irreversible (Gokhan et al., 2008).

Food taboos and taboo practices generally have great impact on the health of people, especially pregnant women; the city of Kenema is no exception. These practices have their roots in traditional and cultural beliefs. Food taboos are also connected with secret societies and their membership. Most of the food taboos may work against the least privileged in society such as pregnant and lactating mothers, children and even the unborn child, thereby compromising their immunity. These practices have a number of negative effects on pregnant women and their foetus especially in rural communities. They have adverse effects on the least privileged because they may sometimes be deprived of the cheapest source of protein and other essential nutrients. The effects may cause or continue to cause food deficiency diseases and illness which may result in maternal and infant mortality in the affected communities. Although lots of efforts have been applied by the government of Sierra Leone to minimize the increased rate of maternal and infant mortality through the introduction of Free Health Care for pregnant women, lactating mothers and children less than five years of age, something needs to be done to change the attitude of people towards food taboos and taboo practices, otherwise deficiency diseases and malnutrition illness and consequent high mortality rates would continue to plague the people. Community

education on health and nutrition of pregnant women and child rearing practices must be articulated to change the harmful traditional, cultural and religious beliefs which are very much harmful to them and the developing foetus. Not until nutrition education is considered a priority will maternal and infant mortality rates drop and Sierra Leone be a better society to live in.

This research aims at collecting information on the food tabooed and the reasons why these foods are avoided. For some of the foods, where the avoidance is rampant, the research shall indicate the implications of such food deficiency.

STATEMENT OF PROBLEM

Food taboos and taboo practices have a number of nutritional implications on the lives of people. One such nutritional implication is that it prevents them from eating some essential food nutrients that are required to build up the body and repair worn out tissues. The quality of women's diet during pregnancy has a profound influence on positive foetal and maternal outcomes. Dietary quality particularly during the first trimester of pregnancy exerts a strong influence on foetal and placental development and on subsequent foetal growth and maternal well-being. Food taboo practices prevents pregnant women in a number of cases from eating essential food nutrients required for their health, development and growth and that of their unborn babies. This may result in malnutrition and a lack of natural immunity in children after birth. Adequate maternal nutrition and understanding the importance of visiting antenatal clinics, where pregnant women learn how to choose the appropriate foods and correct meal patterns are essential components of the intrauterine during the critical period of foetal development.

RESEARCH QUESTIONS

This research investigated the nutritional implications of food taboos on pregnant women, focusing on the following research questions:

1. What is food taboo?
2. Why do people practice food taboos?
3. What effects do food taboo practices have on pregnant women?
4. What strategies could be adopted to improve on the health problems associated with food taboo practices?

AIM AND OBJECTIVES OF THE STUDY.

AIM

The aim of this study was to access the nutritional implications of food taboos on pregnant women in the city of Kenema with the following specific objectives.

SPECIFIC OBJECTIVES

The specific objectives were as follows:

1. Identify food taboos in the study area.
2. Checking the effects of food taboo practices on pregnant women;
3. Analysing the nutritional implications of food taboo practices on pregnant women;
4. Providing recommendation improve the nutritional status of people affected by food taboo practices.

SIGNIFICANCE OF THE STUDY

A number of pregnant women may be deprived of eating certain food that serve as essential nutrient sources for their growth and that of their unborn babies. This is likely because some foods are considered as taboos during pregnancy and even before they become pregnant. Adequate maternal nutrition helps to prevent certain foetal malformation or spontaneous abortions. Nutrition during pregnancy is therefore considered vital practice because the developing foetus and the expectant mother depend on the quality of food the mother eats during pregnancy. Abstinance from some foods during pregnancy is the name of taboo therefore does not help the pregnant woman to meet her nutritional requirements. What is important to understand is that eating for two means eating correctly and ensuring that both the mother and the baby are getting the required diet needed. The child's physical development begins at the time of conceptions; it continues through pregnancy and birth and is also evident in childhood. Lots of factors linked to poor dietary intake can negatively or positively tell on the developmental stages of the child. In suburban communities like Gombu, Burma, Nyandeyama, Lekpetei, Koyagbema and Tissor in the city of Kenema, abstinance from certain food items contributes to underweight mothers and babies whose immune system fails to combat diseases. This work shall therefore investigate the extent to which food taboos and food taboo practices in

Kenema are affecting members of the community understudy in getting the required nutrients needed for good health and sustainability of life for pregnant women. It shall show how food taboos and their practices cause nutritional imbalance in families and suggest a way forward. Such knowledge shall be of help to medical practitioners, nutritionists and the community at large. This study shall also serve as a resource material for colleagues who wish to undertake further research in related areas.

LIMITATIONS AND DELIMITATIONS OF THE STUDY

LIMITATIONS

The researcher was faced with the following during the course of the study which impeded the smooth running of the investigations.

1. Financial constraints.
 2. Prompt retrieval of questionnaire from some respondents was a problem;
 3. Availability of up to date information;
 4. Time management
 5. The Ebola crisis.
1. Financial constraints created a lot of obstacles in the smooth running of the research. The researcher had to seek the financial assistance in one way or the other to facilitate the work.
 2. To retrieve questionnaire back from some respondents was another problem. Some were not even retrieved.
 3. Lack of availability of up to date information relating to the study created a lot of problems in getting access to the correct information. Some people would name foods they hold as taboos but would not say why they practice such abstinence.
 4. Time constraint was a major factor, both on the part of the researcher and the respondents. The study was conducted while the researcher had to attend to classes.
 5. The emergence of the Ebola plaque in the country, particularly in the city of Kenema which is the study area significantly delayed progress with the design and administration of the questionnaire affected by the researcher in distributing and

collecting questionnaire and with gathering of information other important relating to the study.

DELIMITATION

It was difficult to include all sections in the City of Kenema or whole of the Sierra Leone in this study. This is because of the time and cost involved in collecting and analysing the relevant data for such work. As a result, a random sample comprising of six sections were selected in the City of Kenema for the study.

DEFINITION OF TERMS

The following definitions will apply for the purpose of this study

1. **Beliefs:** Principles or ideas considered to be true.
2. **Circumstances:** Conditions, facts, etc. connected with an event or person.
3. **Culture:** The customs, beliefs, social forms and material traits of religious, social or racial groups.
4. **Deficiency:** Lack.
5. **Desirability:** Worth having.
6. **Diet:** The food eaten by a person by a person or an animal every day.
7. **Forbidden:** Not acceptable or allowed
8. **Immunity:** Resistance to or protection against a specific disease; or a power to resist infection.
9. **Implication:** Something hinted at or suggested but not expressed.
10. **Imbalance:** Lack of proportion
11. **Intrauterine:** Within the uterus
12. **Irreversible:** Something that cannot be reversed or turned the other way.
13. **Lactation:** Breastfeeding
14. **Mortality:** Death on a large scale as a result of disease.
15. **Nutrients:** Food substances that nourishes the body.
16. **Parboiled:** Boil food until partially cooked.
17. **Pregnancy:** State of being pregnant.
18. **Standards:** Regulations, norms etc.

19. **Taboo:** Something which religion or custom regard as forbidden not to touched, eaten or spoken of.
20. **Tradition:** Options, beliefs, customs of people.
- 21 **Values:** Worth of something as compared to another.

ACRONYMS

1. **CRS:** Catholic Relief Services.
2. **EVD:** Ebola Virus Disease
3. **IRC:** International Rescue Committee
4. **NMJD:** Network Movement for Justice and Development.
5. **RDA:** Recommended Daily Allowance
6. **SLRCS:** Sierra Leone Red Cross Society.
7. **UNCDF:** United Nations Capital Development Fund.
8. **UNICEF:** United Nations Children’s Fund.

METHODOLOGY

Preamble

This chapter represents the methodology or procedure used in carrying out the study. The chapter is set out under the following headings, research design, study site, population and sampling, research instruments, procedure and method of data analysis.

RESEARCH DESIGN

This was designed to collect information that will identify food taboos and their nutritional implications for pregnant women in six sections in the City of Kenema. The study is a quantitative descriptive survey, designed to investigate the foods pregnant women hold as taboos and the extent to which these practices affects their dietary intake.

THE STUDY SITE

As spelt out in chapter one, this investigation was done in six sections in the City of Kenema. The sections include: Gombu, Burma, Nyandeyama, Lekpetei, Koryagbema and Tissor. Few years ago, these communities were villages around Kenema, but they have now been amalgamated with the city. However, their inhabitant still hold on to their former practices in almost every aspect of life including food taboos practices which are to a greater extent, a national harm to those that indulge in them. Kenema is the third largest city of Sierra Leone (after Freetown and Bo) and the largest city in the Eastern Province, a gap town partially cut off from the rest of the country towards the Southern regional headquarters of Bo by the Kamboi hills except for the small opening close to Bandama. The city is a major trading centre. It is the capital and largest city of Kenema District. The municipality of Kenema had a population of 128,402 in the 2004 census, with a more recent estimate of 188,463. Kenema lies approximately 298 kilometres South-east of Freetown and about 64 Kilometres South of Bo. Kenema is one of most ethnically diverse cities of Sierra Leone and it attracts people of other ethnic groups from the sub-region, Africa and the Western world. The people engage in commerce, transportation, construction and mining activities.

The Krio language is by the most widely spoken language and is the primary language of the community in the city. Both Christianity and Islam practiced in Kenema though the number of Muslims outweighs the Christians at the moment. One reason for the high number of Muslims is that Islam has a number of things in common with the traditional practices of the people; Kenema is blessed with a myriad of opportunities ranging from health to education, communication and a host of others. In addition to the government hospital, there are private hospitals like the Arab hospital, the Chinese hospital, the Ralph mini- hospital, the Banya hospital, many pharmacies and drug stores. The quality of health personnel is also better than in many other areas in the region as there are good number of trained and qualified medical personnel in the hospitals and health centres. There are many educational institutions ranging from Pre- Nursery Schools to primary, Junior and Senior Secondary School, Vocational institutions and the Eastern Polytechnic, the only institution of higher learning in the entire region.

There are three (3) cell phone companies (Sierratel, Airtel and Africel) and eight radio stations (Eastern Radio, Nongowa, SPIN Radio, City Radio, Starline Radio, Gola Radio, Radio Islam and the Sierra Leone Broadcasting Cooperation (SLBC) Radio). A television station, SLBC TV is also on the air in Kenema. The British Broadcasting Cooperation (BBC), World Services, CNN International, Aljazeera and several other international stations are on the air in Kenema on satellite TV. The presence of these cell phone companies and radio and TV stations has immensely eased communication in the community. Non-Governmental Organizations, including Internal Rescue Committee (IRC), GOAL Sierra Leone/Ireland, Sierra Leone Red Cross Society (SLRCS), Network Movement for Justice and Development (NMJD), Catholic Relief Services (CRS, United Nations Capital Development Fund (UNCDF), United Nations Children’s Fund (UNICEF) and has a host of others are present.

POPULATION AND SAMPLING

The population for the study comprised of pregnant women, lactating mothers and elderly men and women. The participants were issued with questionnaire in a bid to solicit information on a first-hand basis. The questionnaires were administered to both literate and illiterate members of the study area. The number of respondents selected in the individual communities differed. The variations were based on the size of the population of the communities.

TABLE 1: POPULATION SIZE FOR THE QUESTIONNAIRE

COMMUNITY	PREGNANT WOMEN	LACTATING MOTHERS	ELDERLY WOMEN	ELDERLY MEN	TOTAL
GOMBU	16	8	4	3	31
BURMA	16	8	4	3	31
NYANDEYAMA	15	7	4	3	29
LEKPETEI	11	6	3	2	22
KORYAGBEMA	10	6	3	2	21
TISSOR	8	4	3	1	16
TOTAL	76	39	21	14	150

RESEARCH INSTRUMENTS

Data was obtained from the responses to the various questionnaires that were administered to the target groups. The researcher personally administered and collected the questionnaires to ensure that information collected was treated with confidentiality. Relevant data were also obtained from observation and non-formal interviews. Up –to-date information on the topic was accessed through internet. Libraries were also utilized where books, research reports, journals and magazines formed the basis of the broad and relevant review of literature.

METHOD OF DATA ANALYSIS

The data collected during this research were collected and displayed in appropriate statistical tables. They were then analysed for judicious interpretation of the research findings. The researcher endeavoured to use both descriptive and inferential statistics in the treatment of the data.

DATA PRESENTATION AND ANALYSIS

INTRODUCTION

Data to investigate food taboos and their nutritional implications on pregnant women in the city of Kenema were gathered through questionnaires and personal interviews. The result of the findings are presented and analysed in this chapter.

AGE BRACKET OF FEMALE RESPONDENTS

Pregnancy comes at specified age bracket in women- i.e. their reproductive years from menarche to menopause. As such, the implications of food taboos during pregnancy are bound to be envisaged by women in the reproductive age bracket of 15-45 years. Table 2 shows the age bracket of the female respondents of this research.

TABLE 2: AGE BRACKET OF FEMALE RESPONDENTS

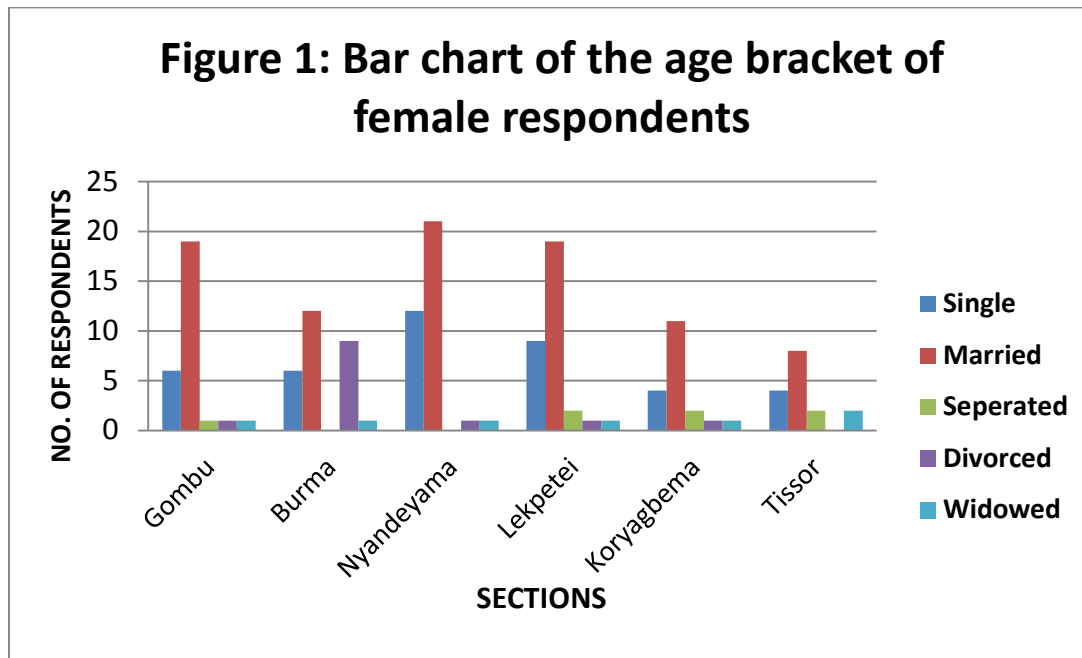
AGE	COMMUNITY													
	Gombu		Burma		Nyandeyama		Lekpetei		Koryagbema		Tissor		Overall	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%

15 - 25	10	20.4	12	24.5	11	22.4	9	18.4	4	8.2	3	6.1	49	36.0
26 - 35	8	22.9	7	20.0	4	11.4	3	8.6	7	20.0	6	17.1	35	25.7
36 - 45	6	19.4	5	16.1	7	22.6	5	16.1	5	16.1	3	9.7	31	22.8
46- 55	3	23.1	2	15.4	1	7.7	2	15.4	3	23.1	2	15.4	13	9.6
56+	1	12.5	2	25.0	3	37.5	1	12.5	0	0.0	1	12.5	8	5.9

Source: Compiled from data collected 2015.

The table shows that 84.5% of the total female respondents were in their reproductive years while 15.5% were elderly women. The greater percentage of women in their reproductive age bracket were selected mainly because they are the ones that are directly affected by the implications of food taboos during pregnancy.

Figure 1: AGE BRACKET OF FEMALE RESPONENTS



Source: Compiled from data collected 2015.

TABLE 3: AGE BRACKET OF FEMALE RESPONDENTS

AGE	COMMUNITY													
	Gombu		Burma		Nyandeyama		Lekpetei		Koryagbema		Tissor		Overall	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
15 - 25	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
26 - 35	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
36 - 45	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00	0	0.00
46- 55	2	13	3	2,0	1	0.00	0	0.00	1	0.7	1	0.7	8	5.3
56+	1	0.7	0	0.00	2	1.3	2	13	1	0.7	0	0.00	6	4.0

Source: Compiled from data collected 2015.

Table 3 shows the age bracket of men that responded to questionnaire in the six sections under study. The elderly men and women were included in the study because they most times influence the women of child bearing age in lots of practices during pregnancy including food taboo practices. The second reason is for them to share their experiences of what they felt are the implications of food taboos on pregnant women. This was so because it is said that he/she who wears a shoe knows where it hurts. The two tables (2&3) further shows that research was carried out at the periphery of Kenema City in communities that are governed by cultural norms and values. The issues relating to food taboos are to a greater extent cultural in nature. People who are culturally oriented hold their cultural practices in awe and would not like to break the norms for fear that resultant effects might be adverse.

MARITAL STATUS OF RESPONDENTS

Marriage is a universal culture as it cuts across all cultures though the type may vary as one move from one culture to another. Marriage plays a key role in the observance of food taboos by pregnant women. Table 4 shows the marital status of the respondents.

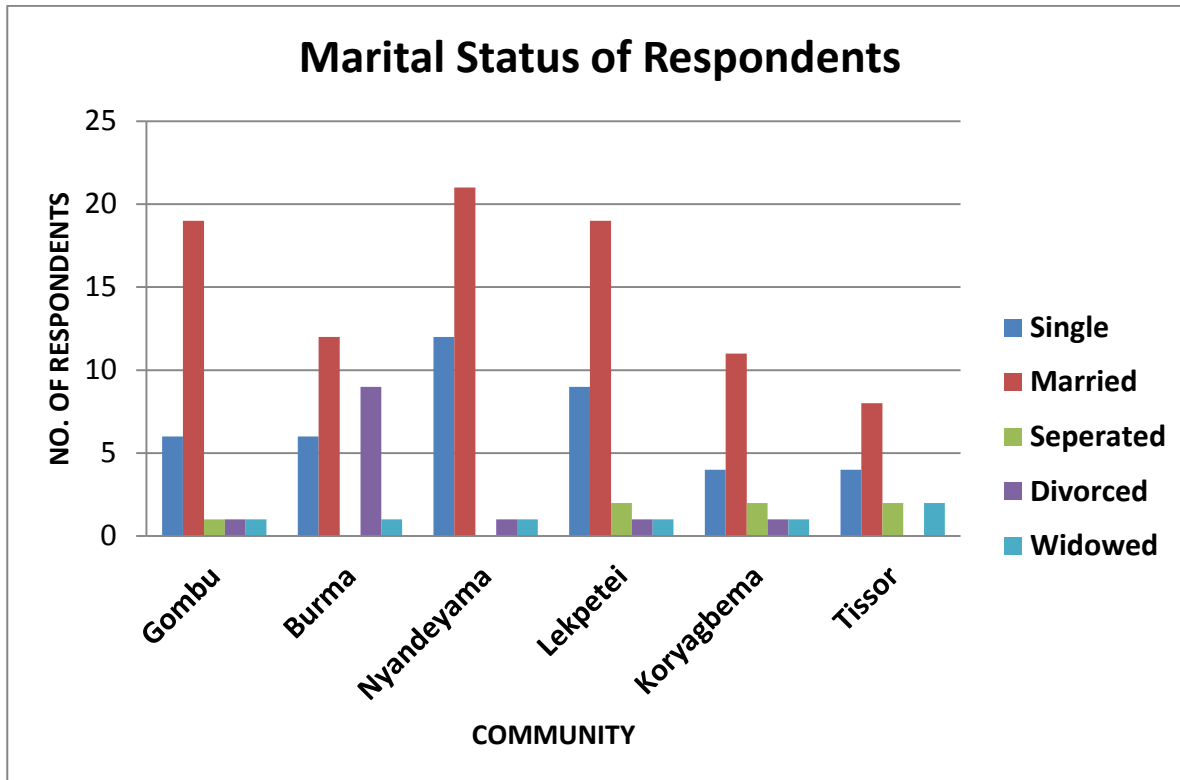
TABLE 4: MARITAL STATUS OF RESPONDENTS

AGE	COMMUNITY													
	Gombu		Burma		Nyandeyama		Lekpetei		Koryagbe		Tissor		Overall	
	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%	Freq	%
15 - 25	6	31.6	6	31.6	12	34.2	9	28.1	4	20.0	4	25.0	41	27.3
26 - 35	19	57.9	12	63.1	21	60.0	19	59.3	11	55.0	8	50.0	90	60.0
36 - 45	1	3.6	0	0.0	0	0.0	2	6.3	2	10.0	2	12.5	7	4.7
46-55	1	3.6	0	0.0	1	2.9	1	3.1	2	10.0	0	0.0	5	3.3
56+	1	3.6	1	5.2	1	2.9	1	3.1	1	5.0	2	12.5	7	4.7

Source: Compiled from data collected 2015. Table 4 shows that 60% of the respondents were married. The increases their compliance level with food taboos. Men are usually curious about the welfare of their family members because in the event of any problem, they are the first point of contact. Certain food taboos in the cultural realm hinge a lot on the health of pregnant women and their babies and so men almost always ensure that pregnant women abstain from eating foods that the thought to be inimical to their health and their babies. As would be seen later, food taboos are enshrouded in a host of myths with no scientific proof. However, people

consider them to be true because of cultural and religious perceptions. For example, pregnant women are prevented from eating plantain because it is believed that if they do the penis of the baby if a male would be long and big. As, such, women who holds this notion do not eat plantain or are not allowed by their spouses who believe such a view to eat when pregnant

FIGURE 2: MARITAL STATUS OF RESPONDENTS



Source: Compiled from data collected 2015.

RELIGIOUS BACKGROUND OF RESPONDENTS

Sociologist holds view that religion is borne out of culture to control the excess of man. Religion creates a link between man and a supernatural being. Sierra Leone is a religious country in the sense that almost every Sierra Leonean belongs to a religion of his/her choice. Religious beliefs influence almost every aspect of life ranging from dress code, food to eat and not to eat, marriage system and so forth. Table 5 shows the religious background of the respondents reached during the course of this research.

TABLE 5: RELIGIOUS BACKGROUND OF RESPONDENTS

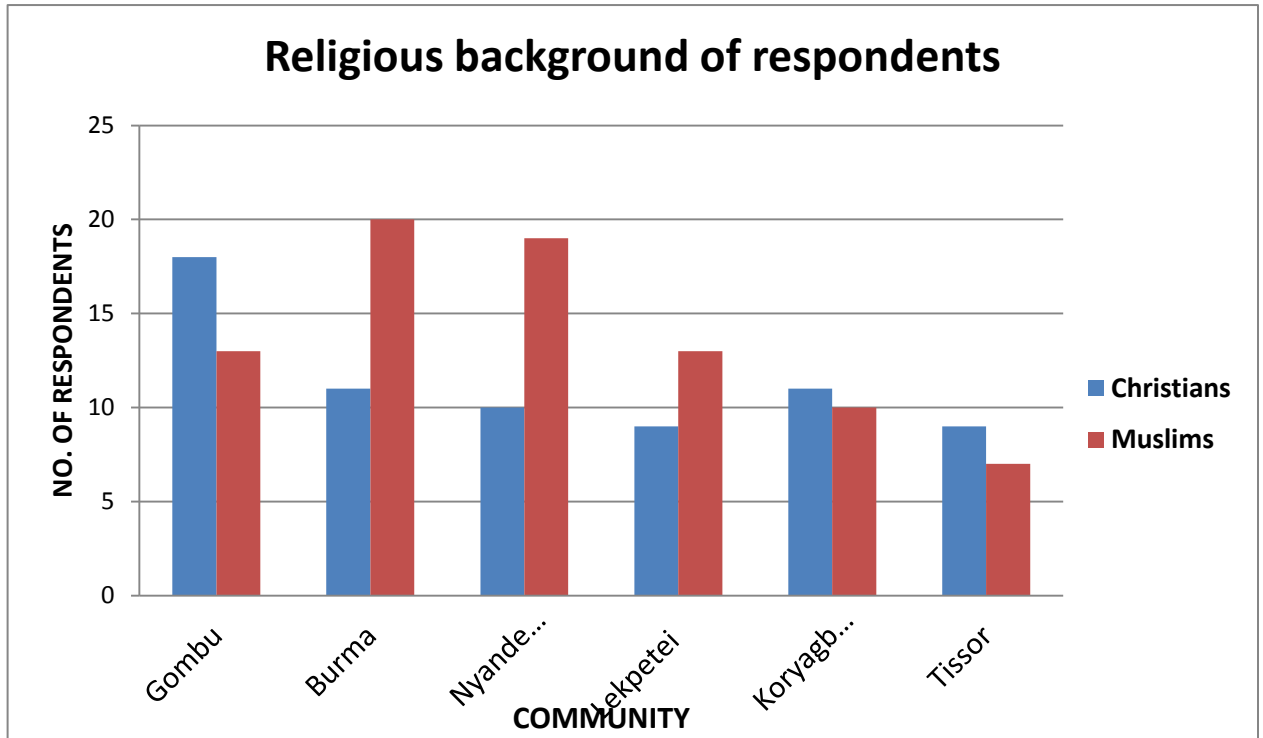
COMMUNITY	NO. OF RESPONDENTS	RELIGIOUS BACKGROUND	
		Christian	Muslims
Gombu	31	18	13
Burma	31	11	20
Nyandeyama	29	10	19
Lekpetei	22	9	13
KKoryagbema	21	11	10
tTssor	16	9	7
TOTAL	150	68	82

Source: Compiled from data collected 2015.

Table 5 shows that 55% of the respondents reached during the course of the research are Muslims. The remaining 45% are Christians. Both Islam and some Christian denominations have regulations about what is fit to eat and what is not right to be eaten. In fact some of the laws about food taboos in the two religions are similar. For example, Leviticus laws permit the eating of animals with split hoof completely divided and that chew the cud, and creatures of the seas and streams that have fins and scales but forbid the eating of animals with split hoof, but do not chew the cud those that chew the cud, but do not have split hoof, creatures in water that do not have fins and scales, all flying insects that walk on all four and so on.

The observance of such food taboos has significant consequences on pregnant women and their babies. This is so because most if not all of the creatures listed above are rich sources of protein which is an important part of man’s diet. Abstaining from eating them by pregnant women is bound to have adverse consequences on them and their babies.

FIGURE 3: RELIGIOUS BACKGROUND OF RESPONDENTS



Source: Compiled from data collected 2015.

EDUCATIONAL AND OCCUPATIONL BACKGROUND OF RESPONDENTS

Education, like religion, influences various aspect of human life. It is worth noting that the level of formal education acquired by an individual can determine the kind of job he/she does. Education enlightens the individual and helps him/her to break traditional cultural barriers. Many educated people do not adhere to the restrictions imposed on them by their backward looking cultural practices like food taboos, most of which are not backed by any scientific explanation. Table 6 shows the educational and occupational background of the respondents.

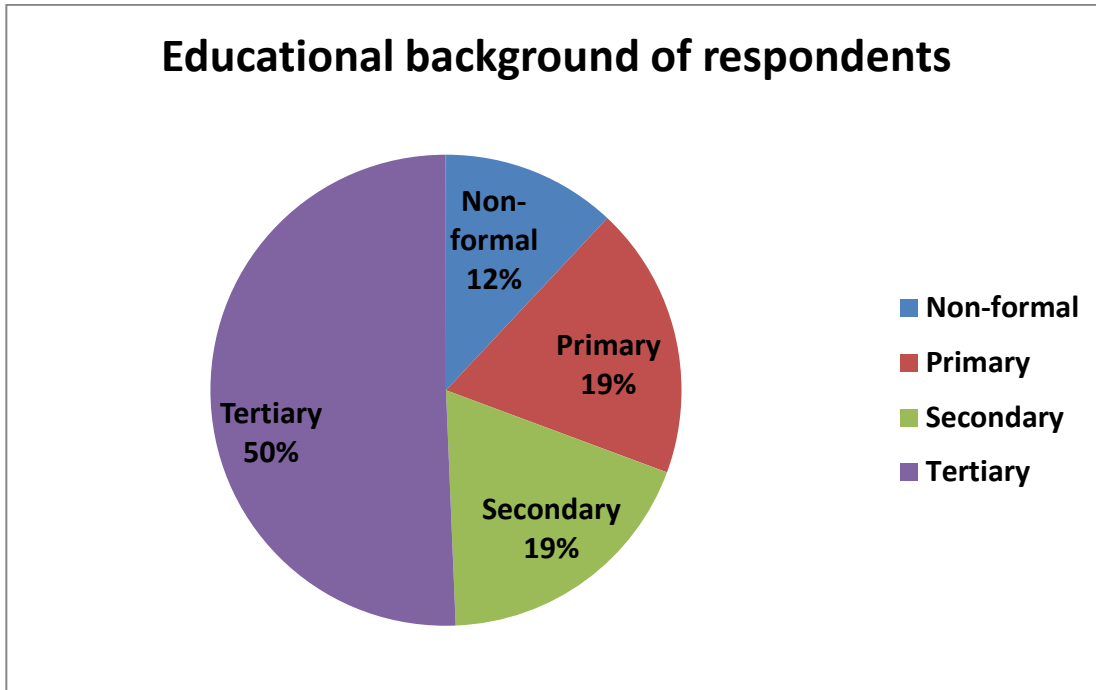
TABLE 6: EDUCATIONAL AND OCCUPATIONAL BACKBGROUND OF RESPONDENTS

NO. OF RESPONDENTS	EDUCATIONAL BACKGROUND				OCCUPATIONAL BACKGROUND	
	Non- formal	Primary	Secondary	Tertiary	Formal Sector Employe	Non-formal Sector Employment
150	18	28	28	76	90	60

Source: Compiled from data collected 2015.

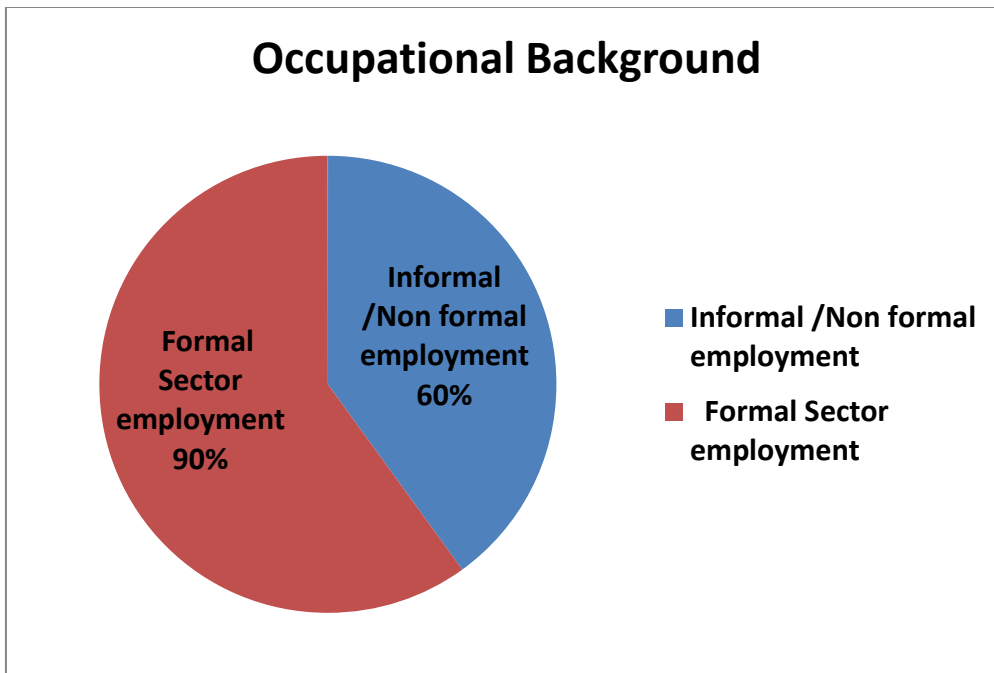
Table 6 shows that about 51% of the respondents in this investigation acquired a tertiary level of education. As already stated above, education has a reforming effect on the educated person. Some of the respondents stated that they are not tied to food taboos because there is no justification of why such foods should not be eaten. Some others said that even where they are convinced to abide by such taboos, there can always be alternative foods which can be eaten in their stead. However, some 49% did not acquire tertiary education. They are usually the ones that are most likely to yield to cultural and other demands. There is a very strong correlation between education and the kind of job one does. Usually people who are better educated have better jobs, except in societies rocked by corruption and cronyism. All things being equal, ones’ occupation determines the salary one is paid. People who are paid better salaries are not usually affected by food taboos. This is so because even when they adhere to the taboos, they can go in for alternative foods. Tables 6 shows that a good number of the respondents reached in the exercise acquired an appreciable level of formal education. Their educational and occupational backgrounds protect them from the problems posed by adherence to cultural taboos.

FIGURE 4: EDUCATIONAL BACKGROUND OF RESPONDENTS



Source: Compiled from data collected 2015.

FIGURE 5: OCCUPATIONAL BACKGROUND OF RESPONDENTS.



Source: Compiled from data collected 2015.

REACTION OF ETHNIC GROUPS TOWARDS FOOD TABOOS

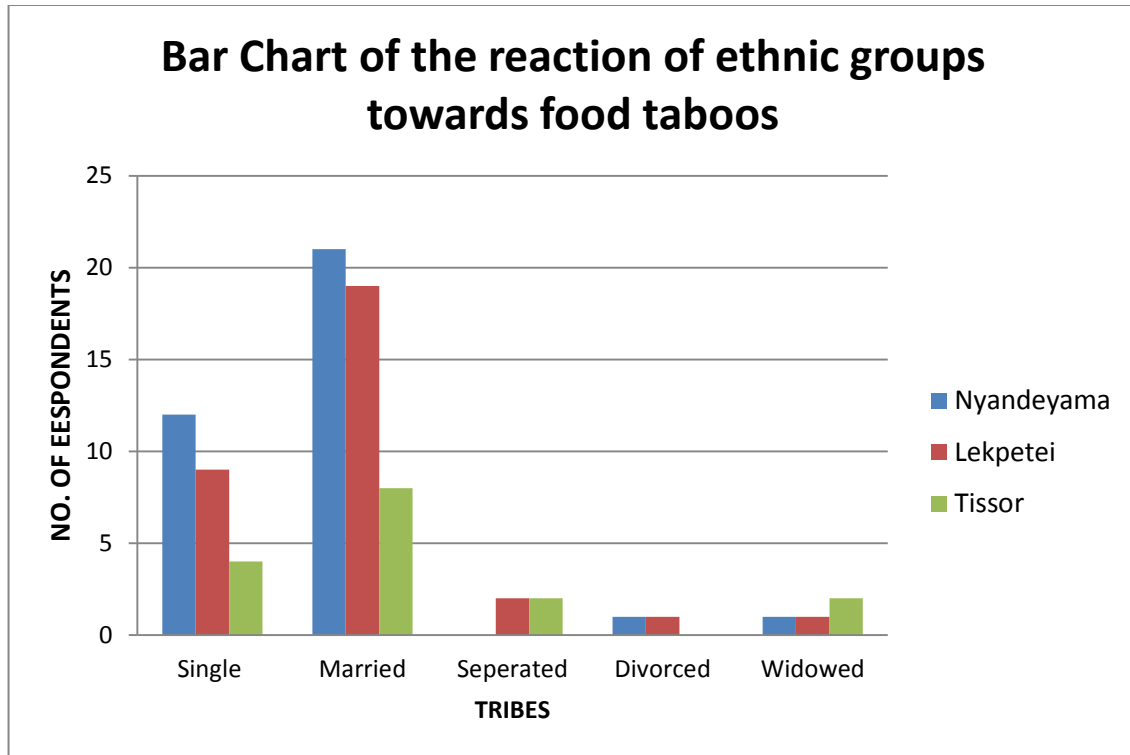
The question of food taboos is as much a cultural issue as it is religious issue. The respondents drawn in this research were from five different backgrounds as shown in the table below.

TABLE 7: REACTIONS OF ETHNIC GROUPS TOWARDS FOOD TABOOS

Ethnicity	Strongly agree		Reaction of ethnic group					
			Agree		Disagree		Total	
	Freq	%	Freq	%	Freq	%	Freq	%
Mende	9	6.0	35	23.3	60	40.0	104	69.3
Temne	9	6.0	15	10.0	10	6.7	34	22.7
Limba	3	2.0	2	1.3	1	6.7	6	4.0
Loko	3	2.0	1	0.7	0	0.0	4	2.7
Sherbro	1	0.7	1	0.7	0	0.0	2	1.3
Total	25	16.7	54	36.0	71	47.3	150	100

Source: Compiled from data collected 2015.

Table 7 shows the level of agreement and disagreement on food taboos among the respondents hangs in the balance. This was so because while some of the respondents yielded to the demands of food taboos for various reasons ranging from cultural considerations to religious and personal, others did not simply yield to it because of the lack of any convincing reasons. The table further shows a preponderant disagreement level among members of the Mende ethnic group more than members of any other ethnic groups drawn in the sample. This was mainly due to the fact that those who were included in the sample has as appreciable level of education and so ignored adhering to food taboos without any reasonable justification.



Source: Compiled from data collected 2015.

KNOWLEDGE ABOUT FOOD TABOOS

It is said that knowledge is power. One’s knowledge about a particular thing determines what he/she or does not do about that thing. Table 8 shows the knowledge level of respondents about food taboos. Knowledge here is not simply about telling what food taboos are, but also the implications of adherence to them or not.

TABLE 8: RESPONDENTS’ KNOWLEDGE ABOUT FOOD TABOOS

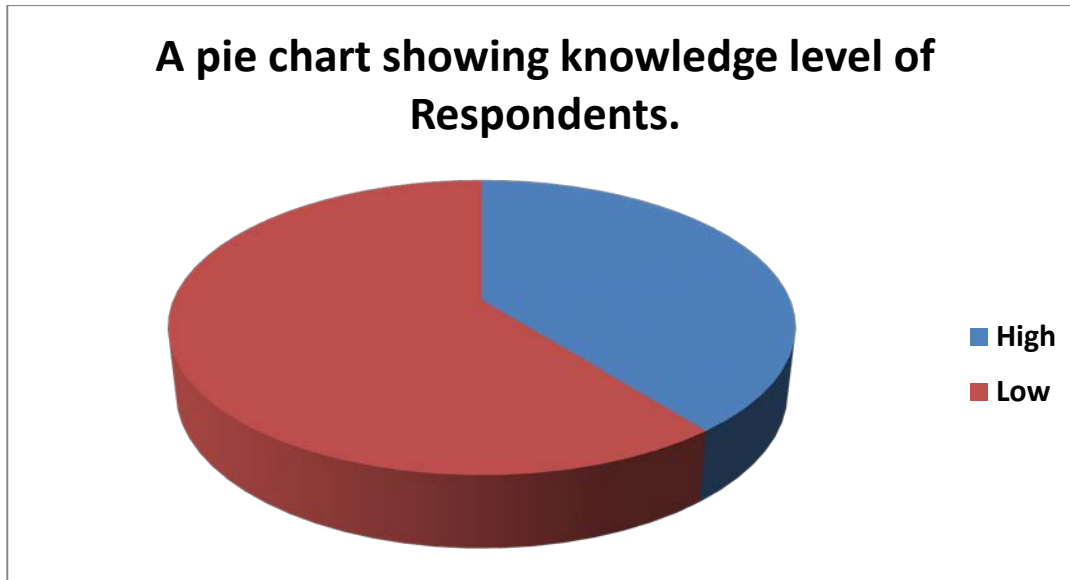
Respondent	Knowledge level			
	High	%	Low	%

Source: Compiled from data collected 2015.

The table shows that those with a shallow knowledge about food taboos outnumber those with a high knowledge level. This is the precursor to adherence to food taboos as those who are not properly informed about food taboos are more likely to abstain from eating tabooed food for cultural and religious reasons irrespective of the implications. On the other hand, those who are better informed

ignore adherence and refer to justification as myths. From the responses in the questionnaires, some of the respondents stated that they eat African and European dishes available with no regard for any taboo.

FIGURE 7: KNOWLEDGE LEVEL OF RESPONDENTS



Source: Compiled from data collected 2015.

FOOD TABOOS FOR PREGNANT WOMEN.

In cultural and religious settings, various foods ranging from animals, fish, fruits and vegetables can be taboos, for pregnant women for diverse reasons. Table 9 and 10 show the various food taboos for pregnant women that were identified by respondents during the course of this investigation.

TABLE 9: FOOD TABOOS IDENTIFIED BY RESPONDENTS

Food taboos identified	Respondents	Average
Meat(pork, monkey, reptiles		
Fish		
Egg		
Snail		
Duck		

Snake		
Salt		
Ferns		
Garden eggs		
Okra, pepper		
Pumpkin		
Beans		
Cereals with excess starch		
Cigarette		
Alcohol		
Animals not slaughtered by cutting of throat		

Source: Compiled from data collected 2015.

TABLE 10: FOOD TABOOS FOR PREGNANT WOMEN IDENTIFIED BY RESPONDENTS

Food taboos identified	Respondents	Average
Meat		
Fish		
Egg		
Duck		
Snake		
Snail		
Plaintain		
Garden eggs		
Ferns		
Pepper		

Source: Compiled from data collected 2015.

The tables above shows the various foods pregnant women are forbidden to eat. It further shows that though respondents were chosen from diverse ethnic backgrounds even as the Mendes were in majority, food taboos for pregnant women are similar and are adhered to for similar reasons. Various

reasons were advanced for which pregnant women should eat the foods, reflected in the table as follows: Meat, fish and egg with the same respondents figure were treated as one category, being sources of protein and that pregnant women should not eat them because they would make the baby grow big while in the womb and would cause birth complications which may lead to a caesarean operation and if care is not taken to the death of the mother or child or both.

Snails, ducks and snakes, though sources of protein were identified for other reasons. It was stated that pregnant women are not allowed or should not eat snails because if they do, their babies would spit out a lot of saliva. The babies would have speech problems when they grow up if their mothers eat ducks and that they would crawl on their bellies like snakes, wriggle if their mothers eat snakes during pregnancy. They also went further to say that the baby’s penis if boys would grow big and long if their mothers eat plantain; their skin would peel off if their mothers eat garden eggs and that they would be hairy if their mothers eat ferns. Babies were also said to cry a lot if their mothers ate a lot of pepper during pregnancy.

IMPLICATION OF FOOD TABOOS IN PREGNANT WOMEN AND THEIR UNBORN BABIES

Adherence to food taboos by pregnant women has significant implications for them and their babies. Though some of the respondents were ignorant about such implications, others highlighted them as reflected in Table 11.

TABLE 11: IMPLICATIONS FOR FOOD TABOOS ON PREGNANT WOMEN AND THEIR UNBORN BABIES

No of Respondents	Implication for pregnant women and their babies			
	Poor health of mother	Birth complications	Low birth weight	Infant and maternal mortality
150	60	58	67	61

The ignorance level of respondents about the implication of food taboos on pregnant women and their unborn was high, that is why the response figures on each of the following implications is even below the average. However, they are worthy to note. As seen from the table, The respondent’s figure are in a close range. 44% of the respondents stated that adherence to food

taboos can lead to low birth weight of babies. During pregnancy, the baby's nutrition is dependent on the mother's. If the mother does not eat a balanced diet, it will result in a low birth weight. 41 % of the respondents stated maternal and infant mortality as another effect has a bearing on poor health of the mother which equally leads to birth complications. It should be unequivocally made clear that good health depends on proper nutrition. If a pregnant woman is not properly fed because of food taboos, her health will be poor. Also, child birth requires strength for the woman to be able to push the baby out during labour. The required strength would be available if the woman had had good food to eat. When that is not the case, the tendency to face complications during child birth would be high. This would lead to caesarean section and if care is not taken, it would lead to the death of mother or baby or both.

SUMMARY, CONCLUSION, RECOMMENDATIONS AND SUGGESTIONS FOR FURTHER STUDIES.

INTRODUCTION

An overview of the research findings on food taboos and their nutritional implications on pregnant women, recommendations and suggestions for further studies are presented in this chapter.

SUMMARY OF RESEARCH FINDINGS

The research findings revealed that food taboos have nutritional implications for pregnant women and unborn child. Adherence to the taboos was found to be more prevalent among individuals and families who are less literate and tied to cultural and religious norms, values and practices. Respondents' knowledge of such implications as poor maternal health, low birth weight of babies, complications during labour, still birth, miscarriage, stunted growth, mental retardation, premature aging, intrauterine growth retardation, leading to deformities, infant and/or maternal death is important.

CONCLUSION

Over the years, Sierra Leone has been placed at the bottom of the United Nations Human Development Index (HDI). This could to some extent be attributed to the poor nutritional status

of pregnant women arising from adherence to food taboos which is believed to have led to infant and or maternal death.

RECOMMENDATIONS

In the light of the findings of this research, the following recommendations are made for reducing the nutritional implications of food taboos on pregnant women and by extension, their unborn babies.

1. Health workers should provide nutritional education to pregnant women during pre-natal visits.
2. Nutritional education should be emphasized in the education curriculum for schools and colleges. It should be made compulsory especially for girls and women.
3. Adult education institutions should also make it part of their course content.
4. Men who make women pregnant should ensure that they are provided with the right type of food that can ensure their health and that of their babies.
5. Some sensitization should be done in various communities about adherence to food taboos and their nutritional implications especially for pregnant women and their unborn babies.
6. Some food taboos cannot be ignored. Where that is the case, pregnant women and their families must ensure that alternative foods are provided to ameliorate the negative effects of adherence to such taboos.
7. Government and non-government organizations and various public associations such as Farmers associations and Women's association should also be actively involved in endeavour aimed at eliminating these harmful practices.
8. Since the study was limited only to some sections in Kenema because of time, finance and the state of emergency due to Ebola outbreak, a more in-depth investigation was not done. Secondly, this research was mostly limited to pregnant women. I therefore recommend further investigation especially in other parts and in different areas like tribe and culture of the country.

SUGGESTIONS FOR FURTHER STUDIES

1. Impact of exclusive breast feeding for the first six months on the intellectual development of children.
2. Assessment of protein intake by family members in rural communities.
3. The role of the free health care initiative in reducing infant mortality in Sierra Leone.
4. The impact of the Ebola Virus Disease (EVD) outbreak on household family income.
5. Assessment of the level of appreciation of protective foods in rural communities
6. Assessment of the knowledge level of nutrition among women of child bearing age.
7. Assessment of level of pregnancy during the Ebola Virus Disease (EVD) out break
8. Assessment of the relationship between income level and nutritional status of families/households.

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