Malnutrition During Pregnancy among Child Bearing Mothers in Mbaitolu of South-Eastern Nigeria

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Abstract: This study examines consequences of malnutrition during pregnancy among child bearing mothers in Mbaitolu Local Government Area of Imo State, Nigeria. The study also identifies the cause of consequences among child bearing mothers. The population of the study comprised 200 child bearing mothers who registered with the Primary Health Centres. The whole population was used as sample. Hence, there was no sampling technique used. A questionnaire was used for data collection. Data collected were analyzed applying frequency counts and mean statistic. Findings revealed that abortion and premature delivery can be as a result of malnutrition. The finding of the study also revealed that malnutrition in pregnancy result in offspring with low birth weight and high risk of prenatal mortality. The study of the finding further showed that socio economic factors, cultural beliefs are some of the causes of malnutrition in pregnant mothers. Based on the findings the following recommendations were made. That adult educators, midwifes, medical doctors should assist in educating the child bearing mothers on how to eat balanced diet. This will help to reduce problems of malnutrition in childbearing mothers.

Key words: Childbearing · Malnutrition · Mothers · Pregnancy

INTRODUCTION

Malnutrition is inadequate intake of nourishing food or consumption of a particular type of food item that has little or no nutritional value. Malnutrition has been a number one problem of Nigerian child bearing mothers. This is due to some people who are of low income class who find it difficult to meet their ends. What matters to them is something to fill their stomachs and not about the value of the food. The people that suffer most are the pregnant mothers and children. Pregnant women need adequate nourishing food for the fetus to develop well if not, the result will lead to low birth weight.

Marshall and Buffington [1] stated that sometimes, a pregnant woman does not know that she needs to eat a greater amount of quality food. For a healthy pregnancy, steady supplies of micro nutrients are essential both for the mother and the growing baby. Modern research has proven that from the very start, having the right balance of key micronutrients is the best way to ensure the long term health of mothers and their infants.

Malnutrition according to Sweet [2] is a condition where nutrition is defective in quantity or quality. This condition is a worldwide problem especially in the developing countries where starchy tubers and cereals form the staple food. Udoh [3] stated that malnutrition is the shortage of a nutrient which leads to malnutrition of one form or another. On the other hand, the excessive consumption of some nutrients may also be harmful to the body and could lead to metabolic disorders or as in case of excessive consumption of fat as carbohydrate lead to obesity.

Atinmo and Akinyele [4] observed that the major nutritional problem almost every where in Africa is that of protein energy malnutrition, this particularly affects infant, pre school children and pregnant mothers. Majority of the rural dwellers do not know the quantity and quality of food to be taken. As a result, they continue to take a
particular type of diet which may not be enough to satisfy their body build.

**Statement of the Problem:** The recent increase in number of pregnant mothers suffering from malnutrition is giving a concern to those in adult education, women leaders, health care services and others. The case of malnutrition is so high that about 55~70% of pregnant mothers are suffering from malnutrition. To some people, it is difficult to afford three square meals a day, take varieties of food and some do not know the content of food that they eat everyday. They may be eating carbohydrate food morning and night everyday without knowing the consequences especially among pregnant mothers. Malnutrition has caused a lot of problem during pregnancy especially during the first period of pregnancy. This prompts the researchers to carry out a study on consequences of malnutrition during pregnancy among child bearing mothers in Idume in Mbaitolu Local Government Area of Imo State.

**Purpose of the Study:** The general purpose of the study is to find out how far the child bearing mothers are aware of the consequences of malnutrition during pregnancy. Specifically, the paper sought to

- Determine the consequences of malnutrition during pregnancy
- To what extent do pregnant women know the causes of malnutrition.

**Research Questions:** The following research questions guided the study:

- What are the consequences of malnutrition during pregnancy?
- What are the causes of malnutrition during pregnancy?

**Method:** The design of the study was a descriptive survey design. The population of the study consisted of 200 child bearing mothers in Idume in Mbaitolu Local Government Area of Imo State. They are made up of all those who registered for the ante natal in Primary Health Care Centres. The sample of the study was 200 child bearing mothers. Hence there was no sampling technique. The instrument used was a structured questionnaire used for collecting data. The questionnaire was divided in two sections namely: Section A and Section B. Section A was on the consequences of malnutrition during pregnancy and section B was on the causes of malnutrition during pregnancy. Their responses were elicited using a four point Likert scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The researchers went personally to collect the data. The instrument was validated by two experts in measurement and evaluation. The two experts were requested to validate the instrument in terms of:

- Clarity of instruction to the respondents,
- Proper wording of the items and
- Appropriateness and adequacy of the items in addressing the purpose of the study. Their recommendations served as guide to modification of items in the instrument.

The reliability of the instrument was determined utilizing Cronbach alpha method. The coefficient alpha for the two sections were 0.86 and 0.86. These values indicate that the instrument was highly reliable. The method adopted for analyzing data include frequency counts and mean scores in respect of the research questions. Decision was taken. Any mean score of 2.5 and above was regarded as Agreed while those below 2.5 were regarded as disagreed.

**RESULTS**

The findings of the study are represented in accordance with the research questions that guided the study.

**Research Question 1:**
What are the consequences of malnutrition during pregnancy?

Answer to this research question is presented in Table 1. Table 1 shows the responses of child bearing mothers on consequences of malnutrition. In items 1, 2, 3, 4 and 5, the mean scores are above the decision rule of 2.5. This means that the respondents agreed that all the items in the table are consequences of malnutrition.

**Research Question 2:**
What are the causes of malnutrition during pregnancy?

Answer to this research question is presented in Table 2. Data in table 2 shows that the mean score of the respondents involved in this study indicate agreement. This implies that the respondents are of the opinion items 6 to 10 are causes of malnutrition to pregnant women.
Table 1: Mean Responses of Child Bearing mothers on consequences of malnutrition during pregnancy

<table>
<thead>
<tr>
<th>S/No</th>
<th>Items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Malnutrition in pregnancy result in offspring with low birth weight and high risk of prenatal mortality and neonatal morbidity</td>
<td>96</td>
<td>74</td>
<td>16</td>
<td>14</td>
<td>200</td>
<td>3.26</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>384</td>
<td>222</td>
<td>32</td>
<td>14</td>
<td>652</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Tiredness with dizziness can result from malnutrition</td>
<td>88</td>
<td>70</td>
<td>30</td>
<td>12</td>
<td>200</td>
<td>3.17</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>352</td>
<td>210</td>
<td>60</td>
<td>12</td>
<td>634</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>Malnutrition will result in a decrease volume of breast milk</td>
<td>79</td>
<td>76</td>
<td>40</td>
<td>5</td>
<td>200</td>
<td>3.15</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>316</td>
<td>228</td>
<td>80</td>
<td>5</td>
<td>629</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Malnutrition pregnant mothers have less immunity</td>
<td>66</td>
<td>55</td>
<td>48</td>
<td>31</td>
<td>200</td>
<td>3.15</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>264</td>
<td>165</td>
<td>96</td>
<td>31</td>
<td>556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>Abortion and premature delivery can be as a result of malnutrition</td>
<td>57</td>
<td>68</td>
<td>40</td>
<td>35</td>
<td>200</td>
<td>3.24</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>228</td>
<td>204</td>
<td>80</td>
<td>35</td>
<td>547</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 2: Mean Responses of Child Bearing mothers on consequences of malnutrition during pregnancy

<table>
<thead>
<tr>
<th>S/No</th>
<th>Items</th>
<th>SA</th>
<th>A</th>
<th>D</th>
<th>SD</th>
<th>Total</th>
<th>Mean</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>6.</td>
<td>Cultural belief can expose the woman to malnutrition</td>
<td>61</td>
<td>58</td>
<td>40</td>
<td>41</td>
<td>200</td>
<td>2.70</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>244</td>
<td>174</td>
<td>80</td>
<td>41</td>
<td>539</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>Ignorance can lead to malnutrition</td>
<td>52</td>
<td>61</td>
<td>41</td>
<td>46</td>
<td>200</td>
<td>2.60</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>208</td>
<td>183</td>
<td>82</td>
<td>46</td>
<td>519</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>Poverty can cause malnutrition</td>
<td>66</td>
<td>33</td>
<td>52</td>
<td>49</td>
<td>200</td>
<td>2.58</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>264</td>
<td>99</td>
<td>104</td>
<td>49</td>
<td>516</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>Pregnant women who eat only carbohydrate food suffer from malnutrition</td>
<td>66</td>
<td>55</td>
<td>48</td>
<td>31</td>
<td>200</td>
<td>2.78</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>264</td>
<td>165</td>
<td>96</td>
<td>31</td>
<td>556</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>Malnutrition is seen more in low income mothers with five children and above than those with less number of children</td>
<td>57</td>
<td>68</td>
<td>40</td>
<td>35</td>
<td>200</td>
<td>2.74</td>
<td>Agree</td>
</tr>
<tr>
<td></td>
<td></td>
<td>228</td>
<td>204</td>
<td>80</td>
<td>35</td>
<td>547</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Summary of Major Findings: The summary of the findings are stated below:

- There are consequences of malnutrition during pregnancy.
- There are some causes of malnutrition during pregnancy.

DISCUSSION

In answering the research question 1, the analysis revealed that related conditions result from malnutrition among women. The findings of the study revealed that abortion and premature delivery is as a result of malnutrition, offspring with low birth weight and high risk of pre natal mortality and morbidity, less immunity which facilitates the entry and multiplication of infection can also result in decrease volume of breast milk. This is in line with Philip [4] who observed that inadequate diets during pregnancy are associated with a higher incidence of compilation and difficulty deliveries, still birth premature and infant with unusual conditions. When there is poor feeding or nutrition on pregnant mother, there is general weakness, tiredness during some activities like walking long distance, weight loss, loss of appetite, anaemia and reduced immunity, mental and physical weakness. The findings of the study revealed that malnutrition affect the brain development of the fetus. This findings corroborates with what Morley [6] stated that malnutrition affects brain development of the fetus. A lot of babies are malnourished before birth. Udoh [3] also stated that brain growth retardation occurs as a result of malnutrition. He stated that adequate fetal growth and development depend on a steady nutrition from the mother. The availability of nutrients to the fetus will depend upon the concentration of nutrients in maternal blood, the rate of maternal blood through the placenta and the rate of transfer of nutrients across the placenta to the fetal circulation.

The findings of the study showed some causes of malnutrition to child bearing mothers. These causes involved cultural belief. Many of the respondents agreed that cultural belief is one of the causes of malnutrition. In Nigeria like many developing countries of the world,
people may abstain from eating certain food items of high nutritive value simply because of their ethical or religious beliefs and taboos. Atinmo and Akinyele [4] said that socio cultural factors are important factors in considering the quantity of food. Usually the family head receives the largest portion of food in the family resulting in children having the smallest portion but mothers do share their reserved meal for the children. It is a taboo amongst some rural communities to give snail to pregnant mothers or meat and egg to children. Some people believed that when you give a child egg or meat, the child will start stealing. In some places, the forbidden meats are the major available sources of animal protein hence people suffer in the midst of plenty. The findings of the study also showed that socio economic factor is one of the causes of consequences in pregnant mothers. This finding supports what Atinmo and Akinyele [4] stated that there is high inequality in income distribution in the country. While few earn very high, others earn moderately and very low. With over increasing cost of living, most people cannot feed well hence malnutrition set in. This finding also supports Omolewa [1] who quoted a young Nigerian writer to summarise the chronic problem of poverty in Nigeria:

- Poverty
- Poverty, oh! Poverty!
- Your letters themselves are sadly spelt!
- Distress and sorrow
- Waking up in the morning I see your face.
- When I see you before going to bed, I have a sleepless night
- Sleeping on my bed, I groan and cry
- Dear children whom I carried are in the process of dying
- Before my helpless eyes
- My kids are all bones
- They shiver and groan when they see some food
- The younger one lies beside me
- So very pale,
- Repeating “I am hungry!, I am hungry!”
- Oh! I see the hands of death coming
- To take my child.
- But all I can say is
- Poverty, oh poverty, why are you treating me so

[Ubong Jonathan Okan, Nigeria(UNESCO, N.D.:14)]

The finding of the study further revealed that some families are over crowded and equally belong to low income group. Such families find it difficult to make ends meet. They can hardly afford three square meals a day not to talk of varieties and food values thereby leading to malnutrition. In such a situation, Marshall and Buffington (1998) observed that people who most affected are the pregnant women.

**CONCLUSION**

During pregnancy, babies are fed by their mothers, receiving all their nourishments through the placenta and umbilical cord. In this way the mother’s body will supply her baby with everything it demands and thus the mother’s micronutrients level directly affects her baby’s development. When it comes to eating and drinking, what is good for a mother also benefits her child. This natural fact therefore helps mothers to positively influence their baby’s growth and development as well as baby’s long term health and well being. This study has tried to examine the consequences of malnutrition among child bearing mothers in Idume in Mbaifu Local Government Area of Imo State.

**Recommendations:** Based on the findings of the study, the following recommendations are made:

- The general masses should be educated on the need for adequate intake of balanced diet to help supply the necessary nutrients in the body. This should be done by then whole adult educators and health officers.
- The government should encourage agriculture by giving more loans to farmers so that their production will be on a large scale and the masses can feed well.
- Pregnant women should always attend the ante natal clinics to learn more about what to eat.
- Government should establish more primary health centres especially in the rural areas so that pregnant women could attend.
- Government should also sensitize pregnant women through the radio, television about the importance of attending ante natal clinics.

**REFERENCES**


