

*Full Length Research Paper*

# Mothers perceived cause and health seeking behaviour of childhood measles in Bayelsa, Nigeria

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## Abstract

The need for intensive health education activities to mothers about childhood measles is a priority assignment in Africa as childhood measles is a common cause of a serious vaccine preventable disease. This is why the numerous health providing bodies and groups focus on the appropriateness of seeking health care at health facilities. This study assessed mothers' perceived cause and health seeking behaviour when their under five years old children present with measles with a view to determine whether mothers socio-demographics, perceived cause of childhood measles, factors that delays mothers from seeking prompt and appropriate care of measles and how perceived cause of childhood measles all affect health seeking behaviour. Mothers who have visited Amassoma general hospital and had their children treated at least once for measles were assessed using a descriptive survey design employing convenience sampling technique for selecting the sampling frame of 100 respondents. Data were analyzed using both descriptive and inferential statistics. The results showed that subjects' age ranged from 16-40 years with a mean age of 28.55 years. Fifty one percent of the respondents were single parents, 32% were married. Eighty two had formal education. Regarding their occupational state, mothers showed that 51% were students, 27% were housewives and 17% were self-employed. Seventy three percent of the respondents think measles is caused by too much heat and their sources of information were older women (50%) or self generated (10%). Factors that delayed the mothers from seeking prompt and appropriate care are that mothers do not think lack of immunization is responsible for measles (68%) and that they take their children to older women 65% in addition to lack of finance. Health seeking behaviour of mothers showed that 56% go to herbalist/traditional healer, 25% to a vendor shop and 13% to clinic/hospital with 69% using modern method for treatments. However, 62% described it as an ineffective treatment. It is concluded that mothers perceived cause and health seeking behaviour in childhood measles is far from adequate and hence efforts should be geared towards mothers to put to an end the change in mortality and morbidity rate we observe for this disease.

**Keywords:** Measles, health seeking, behaviour, childhood, mothers, Bayelsa- State.

## INTRODUCTION

Measles is a highly contagious and infectious disease (WHO, 2007). It remains the fifth leading cause of death among children less than five years of age in many sub Saharan African countries (Strebel et al, 2003) whereas, it is a vaccine preventable disease with cheap curative

measures (Okonko et al., 2009; Washington State Department of Health, 2006). These infections were estimated to cause more than two million deaths and between 15 000 and 60 000 cases of blindness annually worldwide (Semba and Bloem, 2004). Children under five years old account for 90% of measles deaths (WHO, 2007) with 37% representing 126,000 of these under five aged children dying from measles annually in Africa (WHO, 2007).

Infant mortality rate reached 138 per 1000 live births

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in Nigeria (Federal Ministry of Health, 2010). Improving measles vaccination coverage and reducing measles-related deaths is a global imperative, particularly as it relates to the United Nation's Millennium Development Goal 4 (MDG4), which aims to reduce the overall number of deaths among children by two-thirds between 1990 and 2015 (The millennium development report, 2009). In developed countries like America and part of Europe Measles is uncommon and taken as not very serious childhood illness. The situation in developing countries is different; although substantial progress has been made in reducing deaths among children aged, 5 years, yet it is still insufficient to reach the Millennium Development Goal 4 (MDG4) by 2015, particularly in sub-Saharan Africa and South Asia (You et al., 2010; UNICEF, 2010). Measles accounts for the greatest Immunization targeted disease with the greatest impact on child health ranking top, remaining a leading cause of childhood morbidity and mortality (Adeoye et al., 2010; WHO/UNICEF, 2007; Dubrey et al., 2005). Appropriate care-seeking requires that a household-mother recognizes when a child is ill, can interpret when an illness needs to be treated outside home and seeks timely and appropriate medical care (Hill et al., 2003). Childhood mortality due to measles has been attributed to poor health service delivery associated with ignorance and cultural beliefs (Feyisetan et al., 1997), delay in seeking appropriate care and not seeking any care (Sustrisna et al., 1993; D'Suoza, 2003). It is further related to the mothers ability to recognize symptoms (Hill et al, 2003), the perceived signs and symptoms, the importance attached to the signs and symptoms and understanding of the cause as well as expected outcomes of childhood illness (WHO/TDR, 1995; Amarasiri et al., 2001; D'Souza, 1999; Yoder and Hornik, 1996; Goldman and Heuveline, 2000). Additionally, health beliefs have been pointed out as another important barrier to health care seeking together with costs of care and time, health care services availability, poverty and access to health care as found by, Salako et al. (2001) to influence Nigerians in their procurements of care. Finally, self care with the use of home remedies or over the counter drugs among mothers have been documented as care seeking behavior in treatment of their childhood illness (Goldman and Heuveline, 2000; Chandrashekhar et al., 2006; Jimba et al., 2003; Pillai et al., 2003).

There is a need therefore, to intensify health education messages to mothers on ways of preventing childhood diseases like measles, explaining the importance of seeking care at health units /facilities in child care practices early enough, as these measures could reduce child mortality and morbidity in Amassoma, Bayelsa State, Nigeria. Since prompt access to early diagnosis and effective measles treatment at health facilities is one of the major strategies for reducing the burden of measles. Therefore, effective information strategies which access understanding and beliefs about the

disease are necessary. Early treatment of childhood measles in children depends upon mothers' perceived cause of measles and prompt recognition of signs and symptoms of measles in the child in addition to accessibility and utilization of the appropriate health care services (UNICEF, 2010).

The study aims is to find out mothers' perceived causes of measles and their health seeking behaviour when their children under age five years old presents with measles. With specific objectives as follows: To determine whether socio demographic factors of the mother affects health seeking behaviour during childhood measles; To determine the mothers' perceived causes of childhood measles. To determine if the mother's perceived cause of childhood measles affects the health seeking behaviour and To determine the factors that militates / delays the mothers from seeking prompt and appropriate care when their children presents with measles. Therefore the following corresponding questions addressed:

1. Does socio demographic status of the mother affects her health seeking behaviour during childhood measles?
2. What are the mothers' perceived causes of measles in their children?
3. How does mothers' perceived cause of childhood measles affect their health seeking behavior?
4. What are the possible factors that delay the mothers from seeking prompt and appropriate care when their children presents with measles?

## MATERIALS AND METHODS

This study was carried out in Amassoma Community in Southern Ijaw Local Government Area of Bayelsa State, Nigeria. This community has an estimated population of 20,000 peoples. A descriptive survey design was utilized to gain mothers' perceived causes of measles as well as their health seeking behaviour when their children present with measles. Thus, a population of mothers and their under five year's children that have suffered measles in the past were those that met the inclusion criteria for the study from mothers visiting Amassoma General Hospital. A Convenience sampling technique was employed for data collection from mothers that have treated their children of measles in the past and were able to answer the questionnaire at the time of the study.

A structured questionnaire written in English Language developed for the purpose of the study consisting of 3 sections; sections A, B and C were distributed to the mothers in the present of one of the researchers for prompt gathering of data.

Validity of the instrument was ascertained based on previous research works gathered from literature and experts recommendations on the questionnaire suitability and its applicability for the study. Whereas, the reliability

**Table 1.** Distribution of demographic variables of the respondents.

<b>Variable</b>	<b>frequency (N)</b>	<b>percentage (%)</b>
<b>Age in years</b>		
16-20	50	50
21-25	20	20
26-30	8	08
31-35	13	13
36-40	9	09
<b>Marital Status</b>		
Single parent	51	51
Married	32	32
Widow	11	11
Divorced	06	06
<b>No. of children</b>		
One or Two	20	20
Three	53	53
Four or Five	22	22
Above five	05	05
<b>Occupation</b>		
Civil servant	05	05
Self employed	17	17
House wife	27	27
Student	51	51
<b>Educational Qualification</b>		
No formal education	18	18
Primary education	52	52
Secondary education	27	27
Tertiary education	03	03

of the instrument was determined through a test- retest method from Primary Health Centre.

The researchers administered a total of 110 questionnaires face to face to mothers that have children who had suffered measles in the past from a total of 250 mothers attending the hospital on regular basis. The 100 retrieved and completed questionnaires were analyzed using simple percentage, with descriptive and inferential statistics calculated for demographic, perception and treatment seeking behaviour.

Ethical clearance was administered from the authorities of Niger Delta University who issued a letter of introduction which was submitted to the paramount ruler the king of Amassoma through the office of the PRO-public relation officer for permission to conduct the research. All information about the research was explained to the respondents and all information collected treated confidentially to protect the subject's right as an individual in line with Helsinki's Declarations'.

## RESULTS

The data collected from the various respondents are

analyzed and presented answering the research questions raised earlier in this research study.

Table 1 show that half of the respondents (50%) were between ages of 16-20 years, (20%) were between ages of 21-25 years, (8%) were between ages 26-30, and (13%) were of ages of 31-35 while (9%) were between the ages of 36-40. The majority (51%) were single parents, (32%) were married, and (11%) were widowed while (6%) were divorced. Most respondents (53%) had three children, (20%) had two or three children, (10%) had five children; and (5%) had more than five children. The majority of the respondents (51%) were students, (27%) were housewives, and (17%) were self employed while (5%) were civil servants. Majority (52%) of the respondents had primary education, (27%) had secondary education (3%) reported tertiary educational background while (10%) had no formal education.

Table 2 reveals that 73% of the respondents perceived too much heat to be the cause of measles, 14 believed it was caused by a virus, 14% said it was due to evil deeds from witches and enemies while only 1% perceived the cause to be a punishment for breaching of taboo.

On review of their source of information, 50% got their

**Table 2.** Respondents Perception on the cause of measles.

<b>Questions/ statements</b>	<b>(%)</b>
<b>What do you think is the cause of measles?</b>	
Too much heat	73
Punishment for breaching taboo	1
Evil deed from witches and enemies	12
Germs (viruses)	14
<b>What is the source of your information?</b>	
Older women	50
Relative/ neighbor	8
Television and radio	1
Health professional	10
Self generated	31
<b>Do you think that lack of immunization is responsible for measles?</b>	
Yes	32
No	68

information from the older women, 31% said it was self generated, 10% got their information from health professionals, 8% were from relatives or neighbours and only 1% got their information from television/radio. Also rating the impression the mothers had on the effect of immunization on measles, 38% agreed that lack of immunization is responsible for measles in children while 68% disagreed with that.

Table 3 revealed that 45% of the mothers have treated their three children of measles, 22% treated 2 children, and 15% treated four children while 18% treated only one child. Review of their first action in treating their children for measles, 56% went to vendor shop at first, 25% used self care treatment, 13% visited the clinic, and 5% went to an herbalist/traditionalist while only 1% visited faith healer. As regards the type of treatment they used, 69% used modern drugs, 25% opted for home remedies and 5% used herbal treatment while 1% used faith healing method. The table shows that 65% of the choice of treatment was made by the older women, 18% by relatives, 10% by neighbours, their partners made 5% of treatment choice while 2% took decision on their own. As regards rating the effectiveness of the treatment their children received at first, 62% said treatment was not effective, 25% agreed that treatment was fair and 12% said it was good while only 1% said it was very effective.

Reviewing their reason for not going to the hospital at first, majority of the mothers 38% said lack of finance, 31% said that measles are not supposed to be treated in the hospital, 17% are of the view that hospital treatment is not effective while only 1% said it was due to health workers attitude towards parents. The table shows that 43% of the respondent latter took their children to hospital after using other remedies while 44% did not take their children to hospital at last, 43% of the

respondent who took their children to hospital said the child did not respond to their initial.

## DISCUSSIONS

This study showed that majority of the respondent (50%) was between the ages of 16-20 years. Respondents were predominantly Christians (91%) and were single parents (53%) and completed only primary education (52%), and were mainly Ijaws (79%). The findings of this study confirms that majority of the respondents were young adult who are less educated and might not have adequate knowledge on the cause of measles and this may affect their health seeking behaviour. This fact is in agreement with similar study in Guatemala where maternal age and education were found to be consistent determinants on health seeking behaviour among mothers. This result also concurs with the view of Thind et al (2003) who suggested that younger mothers often face multiple barriers and challenges such as being unprepared for parental responsibility, lacking experience, and depending on guardians for financial support thus may have negative attitude to health care seeking. In addition, the result of our findings is similar to argument put forward by (Jones et al., 2003) who suggested that mothers from lower socio-economic groups tend to be younger and less educated and less confident (D' Souza, 1999) so are likely to depend on family and older adult for advice and support and less likely to go against their wishes and traditions and as such may exhibits poor health care seeking behaviour.

This study showed that majority of the respondents (73%) perceived too much heat to be the cause of measles and their sources of information are mainly by

**Table 3.** Health seeking behavior of mothers.

<b>Questions/ statements</b>	<b>(%)</b>
<b>How many of your children have you treated For measles before?</b>	
1	18
2	22
3	45
4	15
<b>What was your first action in trying to treat Your child of measles?</b>	
Self care	25
Go to vendor shop	56
Go to herbalist/ traditional healer	05
Go to faith healer	01
Clinic/ hospital	13
<b>What type of treatment did you use?</b>	
Modern	69
Herbal treatment	05
Home remedies	25
Faith healers	01
<b>The choice of treatment was made by whom?</b>	
Self	02
Relatives	18
Partner	05
Older women	65
Neighbor	10
<b>How would you rate the effectiveness of treatment Your child received at first?</b>	
Not effective	62
Fair	25
Good	12
Very effective	01
<b>What was your reason for not going to the clinic Hospital at first?</b>	
Measles is not suppose to be treated in the clinic	31
Lack of finance	38
Hospital treatment is not effective	17
Hospital workers have bad attitude to mothers	01
<b>Did you later take the child to the hospital?</b>	
Yes	43
No	57
<b>What prompted you to take the child to the clinic Later or after self care treatment?</b>	
The child did not respond to the initial treatment	43
No specific reason	57

older women (50%). This is in congruous with Jones et al., 2003 who suggested that younger uneducated mothers depends on the older women for their source of information, advice and support. Majority of the respondent 62(62%) were of the opinion that lack of

immunization is not responsible for measles. This showed that majority of the respondent have not immunized their children of measles which is in contrast with W.H.O (2001) statement that all children of 9 months should be immunized with measles vaccine.

This study showed that majority of the respondents 45(45%) have treated three of their children for measles and 56(56%) of all respondent visited medicine vendor shop at first to buy over the counter modern drugs and only 13 (13%) of the respondent sought treatment in the hospital or clinic. This is in contrast with the study conducted by Vander Stuyft et al. (2006) which reveals that majority of the mothers took their children to the clinic.

The difference in the health seeking behaviour could be the perception of the mothers on the cause of measles. In the study conducted by Vander Stuyft et al., It was recorded that most mothers perceived the cause of measles to be a germ which can only be treated by a qualified health professionals. But the second priority according to this study is self care which is in congruous with Vander Stuyft et al research. This study is in congruous with another research conducted in 3 rural communities in the South Western Nigerian which revealed that the most common form of first line treatment among mothers is a patent medicine vendor and drug hawker (Salako et al., 2001).

The similarities of this study with that of Salako et al., 2001 might be attributed to the fact the both respondent perceived the cause of measles to be too much heat and believed that over the counter drugs can take care of the presenting fever until the dry season is over and measles stops.

The majority of the respondents in this study 65% said that the choice of treatment for their children was taken by older women and 38% gave the reason for not going to the clinic as lack of finance. This is in congruous with the study by Thund et al 2003, which suggested that younger single mothers depend on guardians for financial support and also Jones et al., 2003 study which suggest lower socio-economy as a prevailing factor.

Papia (2005) suggested a positive relationship between educational background of mother and the health seeking behaviour of mothers and the health seeking behaviour. This conforms to this study because majority of the mothers who do not seek adequate treatment were illiterates. According to

Belief which is another dominant factor in this study is congruous with the studies conducted by Peter et al., 2007, Iwundu (2004) and Feyisetun et al., 1997. Majority of the respondents in this study believe that measles is not supposed to be treated in the hospital. Goldman et al. (2000) suggest that poverty is the major factor that militate mothers from seeking appropriate health care and this is in congruous with this study.

### **Implication for nursing practice**

The findings of this study have implications in various fields of nursing. For instance nursing education emphasizes on preparing dedicated nurses to impact

health education both in community setting and clinical areas by using various methods of educational technology to implore the knowledge and appropriate care. Nurses in carrying out their functions and activities in the community play an important role in community health practice, through health education programmes, Nurses can help to implore the knowledge of mothers on the cause of deadly diseases such as measles and also where to seek prompt and appropriate treatment when the need arises. They can also educate the community on adolescent reproductive health which will lower the incidence of single parenthood and implore the socio-economic state of the community.

Furthermore, we can bring about a tremendous improvement in the health status of children through research.

### **CONCLUSION**

For the research embarked upon, it is not out of place to conclude that most mothers in Amassoma do not have adequate knowledge of the cause of measles. Also being single parents and adolescents, they have a very low socio-economic status and not confident enough to take decisions for their children's health. Therefore, they are dependent on the older women, who are illiterates and do not have adequate knowledge of the killer disease or choice of treatment.

### **RECOMMENDATIONS**

Based on the findings made, the following recommendations were made:

- Seminars on awareness programs should be organized for the adolescent on reproductive health to minimize teenage pregnancy.
- Government and Non-governmental Organization should help in health educating the communities on immunization preventable diseases.
- Health workers should provide good counseling and be available to those who seek it.
- Orientation programmes should be carried out to create awareness by health personnel concerning measles.
- Government should subsidize pediatrics health service cost to enable the poor be part of it.

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