Utilization of Child Health Care Services by Female Teachers in Public Secondary Schools in Enugu State, Nigeria

Okafor, Chinedu Lebechi
Department of Health Education Enugu State University of Science and Technology, ESUT, Enugu state, Nigeria.

ABSTRACT
The study ascertained the utilization of child health care services by female teachers in public secondary schools in Enugu State, Nigeria. The study specifically sought to ascertain the extent of utilization of child health care services by female teachers in secondary schools in Enugu state based on parity. Descriptive survey research design was adopted. The population for the study consisted of all the 7419 female teachers in the 291 public secondary schools in Enugu State. A sample of 440 female secondary school teachers were selected using Taro Yamen formula. A self-structured instrument developed by the researcher which was validated by three experts - one in Measurement and Evaluation and two from Health and Physical Education was used to collect data for the study. The instruments reliability coefficient was ascertained using Cronbach Alpha reliability estimate. 440 copies of the instrument were administered to the respondents and collected on the spot. The data collected were analyzed using mean and standard deviation to answer the research question. The hypothesis was tested using t-test statistic. The result obtained showed that child health care services are utilized by female teachers in public secondary schools in Enugu state based on parity to a great extent. Hence, the study, by implication, revealed also that parity influence the health status of the respondents. Based on the findings, the researcher recommends among others, that government should ensure the availability of skilled midwives at health centers within the health work force development plan in Enugu State to ensure that knowledge of child health care services are spread across to humanity.

Keywords: Safe, Motherhood Initiative, Child Health and Care Service

INTRODUCTION
Child health care services aims to promote the health of children to ensure that they achieve optimal growth and development both physical and mental. The child health care practices improve the health of infants and children throughout the world. [1], summarized service and interventions in child care to include growth monitoring and oral rehydration, breastfeeding and specifically exclusive breastfeeding, immunization, family planning, female education and supplementary feeding of pregnant women. According to report, the under-five mortality ratio in the developed world is put at 10 per 1000 live births while the developing countries ratio is 100 per 1000 the report stated that many of the diseases that cause severe illnesses and death in children in developing countries can be prevented by simple affordable measures provided through simple efficient child health care Utilization. Similarly, if mothers teaching in secondary schools in Enugu state should adopt child health care measures approved by UNICEF and WHO, the under-five mortality ratio of their infants and children may reduce. According to [2], it also involves protecting children from major hazards through specific measures immunization, chemoprophylaxis,dietary supplements and through improvement in the level of care provided by the mother and the family. The authors further stated that it also include treating diseases and disorders with particular emphasis on
early diagnosis all of which aims at providing an effective remedy at an early stage before dangerous complications occur. The implementation of these laudable objectives by mothers ensures that children are adequately protected to achieve optimal growth and development. This possible suggest utilization initiative bundles by teaching mothers. Feeding the infants especially preterm infants is another essential child health care service. A child can be fed either through breast feeding exclusively or through supplementary feeding. However, one way of ensuring good nutrition for a child is through breast feeding. Breastfeeding is a natural process of infant feeding. The term exclusive as an adjective means not admitting other things or limited to person, group or something. According to [3], exclusive breastfeeding meant that breastfeeding was the infant only source of milk. Exclusive breastfeeding is a practice whereby infants receive only breast milk and not even water, other liquids, tea, herbal preparations or food during the first six months of life, with exception of vitamins, mineral supplements or medicines [4]. Virtually all mothers can exclusively breastfeed with adequate and accurate information and support. [5], in a report noted that the infant/child has received human milk (including expressed milk, donor milk) and water based drinks, fruit juice ritual fluids or any other liquid including non human milk or solids. [6], in a report stated that EBF refers to when infants are not given any other food or liquid including water during the first six months after delivering. The infants of teaching nursing mothers in Enugu state secondary schools being fed with breast milk for the first six months after delivery without solid food or liquid including water signifies the practice of exclusive breastfeeding. According to [7], exclusive breastfeeding is infant feeding with human milk without addition of any other liquids and solids except drops of syrups consisting of vitamins, minerals or medicines. The report subsequently recommends that for the first six months of life, infants should be exclusively breastfed to achieve optimal growth, development and health. In a jointly published report [8], defined exclusive breastfeeding as breast milk with no additional food or drinks. According to the report, mothers are to breastfeed their babies eight times per day in the first 3 months of an infant life. In a related report, the Academy of [5], defined EBF as feeding with no other liquids or solids food to the infants. The practice of EBF by nursing mothers teaching in secondary schools in Enugu State requires feeding their infants with breast milk alone without addition of solids or liquids including water. Literature evidence has shown various patterns of child health care utilization among women. [9], observed that women in rural Vietnam were not comprehensively utilizing child care services. Education background, maternal age, occupation and ethnicity had strong association with women utilization of child care services. Women may be keeping a positive disposition towards utilization of child health care services but the provision may be poor. [10], reported that women in Philippines showed positive utilization of safe motherhood components including child health care services but their provision was poor. To this end, the author demanded a probe of the trend. A similar trend could be playing out among mothers in Enugu State which may as well deter them from utilization services provided. [11], reported that majority of Chinese women did not breastfeed any of their children even though they had intended to do so during at least one of their pregnancies. Exclusive breastfeeding has been perceived by authors in different ways. According to [12], EBF means the practice of feeding infant only breast milk without adding water, breast milk substitutes, other liquids or solids. Exclusive breastfeeding is recommended for the first six months of life, as it provides all the nutrients, growth factors and immunological components a healthy term infant needs. To this end breastfeeding activities are carried out worldwide in order to fulfill the WHO and
UNICEF recommendation that infants be breastfed exclusively for six months and thereafter until 24 months. However, the extent of compliance to this globally accepted practice of infant feeding among nursing mothers teaching in secondary schools in Enugu State has not been successfully established hence the need for the present study.

Research findings have successfully established that EBF is beneficial to infants and mothers. [13], in a study on breastfeeding and child spacing found that EBF provides low cost, complete nutrition for the infants protects them against infections, lactation and amenorrhea, thereby increasing birth spacing. EBF plays a pivotal role in determining the optimal health and development of infants, and is associated with a decreased risk for many early life diseases and conditions, including Otitis media, respiratory tract infection, diarrhea and early childhood obesity. It has been estimated that EBF reduced infant mortality rates by up to 13% in low-income countries [14].

Similarly, reviews of studies from developing countries show that infants who are not exclusively breastfed are 6 to 10 times more likely to die in the first months of life than infants who are exclusively breastfed [15]. If the mothers teaching in secondary schools in Enugu State should adopt EBF for their infants, they may likely avoid diseases and health conditions associated with non-adoption of it.

In addition, [16], posited that optimal growth and successful feeding in the neonatal intensive care unit (NICU) are difficult to achieve, infants especially premature continue to struggle after discharge due to slow in the development of eating skills. This tends to compel parents to introduce solids to their infants earlier than recommended [16]. This is termed supplementary feeding. According to the source, food supplementation is the introduction of other food apart from breastfeeding to forestall malnutrition.

[17], recommends that supplementary feeding should start at six months of age. [18], warned that commencement of supplementary feeding before six months of life is tantamount to malnutrition as whatever that is given cannot be digested or absorbed. The mothers teaching in secondary schools in Enugu State may be having challenges feeding their infants and may be compelled to introduce solid foods earlier than normal this may affect the growth and development of the child, therefore the need to monitor their growth.

Growth monitory (GM) is perhaps another aspect of care giving to the infants by the mother. It is a component of CHS aspect Of SM. It portends regular visits to the health care centre for regular weighing of the child for possible improvement upon his or her nutrition. It has been seen as one of the effective, simple and inexpensive method of preventing most childhood malnutrition, illnesses and diseases [19]. Growth Monitoring is used for early dictation of childhood problems hence it fosters good childhood development. Consequently, GM has been widely accepted and strongly supported by health professionals, this involves weighing and charting the growth of the child, this is important as weight gain in children serves as an indicator to growth. According to [20], GM is done periodically at monthly intervals during the first one year; bi monthly during the second year and every three months thereafter up to the age of five to six years, also, the child’s height and head circumference is also measured.

Furthermore, GM has been described as the process of following the growth rate of a child in comparison to a standard by periodic, frequent anthropometric measurements in order to assess growth adequacy and identify faltering early and subsequently recommend growth reference chart as a tool for assessing the health and development of a child [21]. The above authors also asserted that GM charts allow the parents to be well informed about the growth and development of their child. Also, it give the child health care providers the opportunity to assess and monitor the growth and nutritional status of the
children. Growth monitoring as a SMI service and activity requires that these measurements must be accurately taken using reliable equipment and correct measuring techniques and must be recorded in the growth charts. [22], reported that Ethiopian families (fathers and mothers) had low dispositions to routine child care such as growth monitoring. Whether mothers teaching in secondary schools in the study area utilization GM as a SMI, is yet to be empirically ascertained.

The manner in which a new baby is welcomed into the world during the first hours after birth may have short and long term consequences. [23], observed that normal, term newborns who are placed skin to skin with their mother immediately after birth make the transition from fetal to newborn life with greater respiratory, temperature, and glucose stability and significantly less crying inducting decreases stress. The report maintained that mothers who hold their newborns skin to skin after birth have increased maternal behaviours, show more confidence in caring for their babies and breastfeed for longer durations. Aside other skin to skin contact with the mother protects the newborn from the well-documented negative effects of separation, supports optional brain development and facilitates attachment, which promotes the infants’ self-regulation over time [24]. [25], argued that normal babies are born with instinctive skill and motivation to breastfeed and are able to find the breast and self-attach without assistance when skin-to-skin. The report subsequently recommended that hospital protocol be modified to support uninterrupted skin-to-skin contact immediately after birth vaginal and cesarean births according to the report, this is a once-in-a-lifetime experience and should not be interrupted unless the baby or mother is unstable and requires medical resuscitation hence it is a “sacred” time that should be honoured, cherished and protected wherever possible [25]. If the mothers teaching in secondary schools in Enugu State keep their newborn babies close to themselves shortly after delivering skin-to-skin, it will ensure optimal growth and development of their infants both physically and mentally irrespective of number of deliveries or where they reside.

In Enugu State, child health care services seems to be elusive. It has been claimed that most of the pregnancy complications and problems being experienced are deeply rooted in poor utilization of child health care services. Poor utilization of qualitative health service continues to contribute to maternal morbidity and mortality in Enugu State [26]. When expectant women arrive at the hospital, certain preparations are made to make the delivery safe. This also means that child health care services are carried out by the nurses. The desire and confidence to continue the utilization of nurses and midwives as well as other health personnel may be largely dependent on these health personnel. This possibly suggests that utilization of these personnel by the female/teachers mothers may be high or low with far reaching health implications. Perhaps, understanding the preferences of the people and the various factors that influence their preferences will help to improve the utilization of child health care services and thereby reduce unnecessary loss of lives. As a result of the foregoing, the researcher is poised to ascertain the extent child health care services are utilized by female teachers in public secondary schools in Enugu State, Nigeria.

**Statement of the Problem**

Complications of pregnancy and childbirth are the leading causes of maternal mortality and morbidity in women in developing countries of the world. Observations of women in rural and urban settings of Enugu State revealed that some of them appear to patronize traditional birth attendants (TBAs) more than having to seek expert advice in Maternal Care Hospital (MCH); maternities and hospitals. This invariably means that some aspects of safe motherhood initiative (SMI) such as child health care services care are neglected by
female teachers teaching in public secondary schools in Enugu State as such increases mortality rate. However, it has not been established whether women are differentiated in attendance to these facilities by any recognizable criteria. It is therefore likely that such criteria may be based on attitudinal inclinations. For instance, could the preference to use any health facility of choice be based on location or parity or could it be that the more the inclination to utilize it, the more child health care services are prevalent?

Recent report indicates that Nigeria is one of the six countries of the world that account for 50% of global maternal deaths [27]. These observations are indeed the motivation or problem and crux of this study. The problem of this study, posed as a question, is: what is the extent of utilization of child health care services by female teachers in public secondary schools in Enugu State?

**Purpose of the Study**

The study sought to examine the utilization of child health care services by female teachers in public secondary schools in Enugu State. Specifically, the study sought to:

1. Ascertained the extent of utilization of child health care services by female teachers in public secondary schools in Enugu State.

**Research Question**

The following research questions were raised to guide this study.

1. To what extent do female teachers in public secondary school utilize child health care services in Enugu State?

**Research Hypothesis**

The following null hypothesis was formulated and tested at .05 level of significance.

\[ H_0 : \text{There is no significant difference between the mean ratings of primiparous and multiparous female teachers in public secondary schools in Enugu State regarding their extent of utilization of child health care services.} \]

**Methodology**

The study adopted a descriptive survey design. The area of the study was Enugu State, Nigeria. The population for the study consisted of 7419 female teachers in the 291 public secondary schools in Enugu State. In all, we have 4491 female teachers are in urban public secondary schools and 2928 serve in rural public secondary schools. In accordance with parity, 1307 female secondary school teachers are primiparous (those that have given birth only once) while 2112 are multiparous (those that have given birth more than once). A total of 440 female teachers in public secondary schools in Enugu state were used for the study. The sample size was determined using Taro Yamane formula. The sample size consisted of 264 urban and 176 rural female teachers in public secondary schools in Enugu State. In accordance with parity, the sample size was 153 for primiparous (ie those that have given birth only once) and 287 for multiparous (ie those that have given birth more than once) female secondary school teachers in public secondary schools in Enugu State. The instrument used for data collection was a 18 items questionnaire called Child Health Care Services of Female Teachers (CHCS-FT). The instrument had a 4-point response scale with response category of very great extent (VGE 4Points), great extent (GE - 3 points), little extent (LE - 2) and very little extent (VLE - 1 Point). The instrument was validated by three experts; two from Health Education Department and one from measurement and evaluation, all from Faculty of Education Foundation, Enugu State university of Science and Technology (ESUT), Enugu. The internal consistency of the instrument was determined using Cronbach Alpha reliability estimate and it yielded a reliability coefficient of .73. The study was carried out among the female
secondary school teachers in all the secondary schools in the six education zones of Enugu state. The researcher and the research assistants administered the questionnaire to the female secondary school teachers. The administered copies of the questionnaire were collected on the spot. This helped to minimize interference which may substantially influence the outcome of the study. Through this a 100% return rate was recorded. Data collected were analyzed using mean, standard deviation and grand mean. The mean rating numerical value was added up and divided by the number of response items. This is referred to as the cut-off point which the researcher used to make inferences for the study. For the research question, any item below 2.50 signifies low extent while items equal to or above 2.50 signifies high extent.

The hypotheses was analyzed using the t-test. Nominal values were assigned to different scaling options as follows;

<table>
<thead>
<tr>
<th>Very great extent (VGE)</th>
<th>4 points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Great extent (GE)</td>
<td>3 points</td>
</tr>
<tr>
<td>Low Extent (LE)</td>
<td>2 points</td>
</tr>
<tr>
<td>Very little extent (VLE)</td>
<td>1 point</td>
</tr>
</tbody>
</table>

The decision rule for the null hypothesis is that if \( t_{\text{calculated}} \) is equal to or greater than \( t_{\text{critical}} \) at the chosen confidence level (.05) and degree of freedom \((n_1 + n_2 - 2)\) the null hypothesis is rejected; if on the other hand, the calculated \( t \)-value is less than the value of the \( t \)-critical from the table value, then the null hypothesis is accepted.

**Presentation of Results**

This section presents the results of the study according to the research question that guided the study.

**Analysis of Data**

The data analyzed was presented in Tables 1

**Research Question 1:** To what extent do female teachers in public secondary schools utilize child health care services in Enugu State?

**Table 1:** Mean (\( \bar{X} \)) Ratings of the Extent to which Female Teachers in Public Secondary Schools Utilize the Child Health Care Services in Enugu State

<table>
<thead>
<tr>
<th>S/N</th>
<th>Items</th>
<th>VGE</th>
<th>GE</th>
<th>LE</th>
<th>VLE</th>
<th>( \bar{X} )</th>
<th>SD</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Immunized my child/children with DPTI, &amp; III against diphtheria,</td>
<td>133</td>
<td>119</td>
<td>107</td>
<td>81</td>
<td>2.93</td>
<td>1.01</td>
<td>GE</td>
</tr>
<tr>
<td></td>
<td>pertussis and tetanus</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Immunized my baby against poliomyelitis</td>
<td>203</td>
<td>107</td>
<td>67</td>
<td>63</td>
<td>3.02</td>
<td>1.09</td>
<td>GE</td>
</tr>
<tr>
<td>3.</td>
<td>Immunized baby against Hepatitis type A and B and Yellow fever</td>
<td>157</td>
<td>131</td>
<td>83</td>
<td>69</td>
<td>2.85</td>
<td>1.07</td>
<td>GE</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>Immunized my baby against maternal neonatal tetanus</td>
<td>87</td>
<td>101</td>
<td>109</td>
<td>143</td>
<td>2.30</td>
<td>1.12</td>
<td>LE</td>
</tr>
<tr>
<td>5.</td>
<td>Immunization baby against whooping cough</td>
<td>81</td>
<td>89</td>
<td>93</td>
<td>177</td>
<td>2.16</td>
<td>1.14</td>
<td>LE</td>
</tr>
<tr>
<td>6.</td>
<td>Immunized my baby against</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

89
Table 1 indicated that of the 18 items on the extent to which female teachers in public secondary schools utilize child health care services in Enugu State. The respondents agreed to a great extent with 10 items 1, 2, 3, 7, 9, 10, 11, 12, 15 and 17 as their recorded mean scores of (2.93, 3.02, 2.85, 3.20, 3.12, 2.90, 2.73, 2.85, 3.40 and 2.75) are above the cut-off point of 2.50. They however disagreed to a low extent with 8 of the items (4, 5, 6, 8, 13, 14, 16 and 18) with mean scores of (2.30, 2.16 and 1.71, 1.99, 2.13, 2.26, 2.24 and 1.99). The standard deviation for all the items are small signifying that there is homogeneity in the responses of the respondents. The table also shows that the respondents grand mean score on the extent to which female teachers in public secondary schools utilize child health care services in Enugu State is 2.58. Based on the decision rule for the interpretation of the respondents data, the answer to research question is that female teachers in public secondary schools utilize child health care services in Enugu State to a great extent.
Hypothesis 1
There is no significant difference between the mean ratings of primiparous and multiparous female teachers in public secondary schools in Enugu State regarding their extent of utilization of child health care services.

Table 2 t-test Analysis of the Difference Between the (\(\overline{x}\)) Mean Scores of Primiparous and Multiparous Female Teachers in Public Secondary Schools in Enugu State regarding their Extent of Utilization of Child Health Care Services.

<table>
<thead>
<tr>
<th>Parity</th>
<th>N</th>
<th>(\overline{x})</th>
<th>SD</th>
<th>df</th>
<th>t-cal</th>
<th>t-crit</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>Primiparous</td>
<td>153</td>
<td>2.58</td>
<td>0.96</td>
<td>338</td>
<td>1.31</td>
<td>+1.96</td>
<td>NS</td>
</tr>
<tr>
<td>Multiparous</td>
<td>287</td>
<td>2.51</td>
<td>1.07</td>
<td></td>
<td></td>
<td></td>
<td>Do not reject (H_0)</td>
</tr>
</tbody>
</table>

Significant at P < .05, df = 338, critical t-value = +1.96

The t-test analysis in table 2 above indicates that the calculated t-value is 1.31 while the critical t-value is +1.96 at .05 level of significance. This implies that the calculated t-value is less than the critical t-value. Thus, going by the decision rule, there is no significant difference in the mean scores of primiparous and multiparous female teachers in public secondary schools in Enugu State regarding their extent of utilization of child health care services.

DISCUSSION OF FINDINGS
For the discussion of the findings inherent in this study, research question and research hypothesis that are related was treated together. The research question sought to ascertain the extent to which female teachers in public secondary schools utilize child health care services in Enugu State. The hypothesis ascertained if there is a significant difference in the health care services utilization by female teachers in public secondary schools in Enugu State based on parity. Thus, going by the decision rule, there is no significant difference in the child health care services by female teachers in public secondary schools in Enugu State based on parity. The findings is consistent with [2], who found that protecting children from major hazards through specific measures (immunization, chemoprophylaxis, dietary supplements lead to improvement in the level of care provided by the mother and the family. The finding is at variance with those of Hong, Dibley and Tuan (2003), who found that women in rural Vietnam were not comprehensively utilizing child care services.

CONCLUSION
Conclusively from the above analysis and interpretations done and the information from related literature, it implies that female teachers in Enugu State secondary schools utilize child health care services to a great extent.

Educational Implication of the Finding
This study has revealed that Ministry of Health is to be commended for the outstanding accomplishments made to date in the establishment of relevant, appropriate, and forward-looking policy in relation to the health of mothers and children, in general, and to Safe Motherhood specifically child health care services.

Recommendations
At the end of the study, the study recommended that:

i. State government should ensure the availability of skilled midwives at health
centers within the health work force development plan in Enugu State to ensure that knowledge of child health care services are spread everywhere.

REFERENCES


