ROLES OF BREAST FEEDING AND BOTTLE FEEDING PRACTICES IN CHILD REARING BY THE WOMEN IN IKOT EKPENE SENATORIAL DISTRICT

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ABSTRACT

The study investigated the child rearing and knowledge of feeding practices among women in Ikot Ekpene Senatorial District. The population of this study comprised all women in Ikot Ekpene Senatorial district of the Akwa Ibom State. The study adopted Expost-Facto research design while simple random sampling technique was used in selecting the respondents. The instrument for data collection which was tagged "child rearing and knowledge of feeding practices questionnaire (CRKFPO) was administered to the respondents and used for the study. The instrument was vetted by expert in home economy and test and measurement before the reliability test was conducted with 30 women which produced the reliability coefficient of 0.86 proving the instrument to be reliable for the study. Data collected were analyzed using descriptive statistics and Pearson Product Moment Correlation Analysis. From the results of the data analysis, it was observed that there is significant relationship between knowledge of each of these feeding practices (breast feeding, bottle feeding) and solid food feeding) and child rearing. The conclusion was that child rearing is dependent on knowledge of feeding practices among women in Ikot Ekpene Senatorial District. It was therefore recommended that women should feed their babies mostly with milk to be sure of hygiene. It was also recommended that bottle food should strongly be discouraged from babies unless it is recommended by a medical doctor or a nutritionist.

INTRODUCTION

Proper feeding practices during infancy are essential for attaining and maintaining proper nutrition, health and development of infants and children. Nutrition plays a key role in health and development of an individual. Good nutrition protects the infants, the children and the mother, strengthens the immune system and reduces the risk of non-communicable diseases related to foods. It also enhances the productivity of the population and can help to get out gradually from the vicious circle of poverty and hunger (UNICEF, 2011).

For years anthropologists, sociologists, and psychologists have been providing descriptions of how children are raised within cultures around the world. The care that children receive has powerful effects on their survival growth, and development. Care refers to the behaviours and practices of caregivers (mothers, fathers, and childcare providers) to provide the food, health care, stimulation, and emotional support necessary for children's healthy survival, growth, and development. These practices translate food security and health care resources into a child's wellbeing. According to Gregory (2010), the nutritional status of children mainly depends on feeding practices in the community. It is seen that child rearing practices vary among people and regions of districts and provinces. Feeding practices refer generally to nutritional and immunological needs of the baby at different stages of child growth.

On the other hand, child rearing practices refer generally to overall care of the child as an individual who is not merely possessing a physique but also feelings, desires and needs. There are various child rearing practices, out of which feeding practices are of vital importance. Breast milk is vital for better child survival. The composition of breast milk undergoes change in quality to meet the nutritional and immunological needs of the baby at different stages of child growth. However, inappropriate feeding practices are largely socioeconomic. Breast feeding is an example of a practice that provides food, health, and care simultaneously. Breast feeding has been recognized as a means of ensuring optimal nutrition for the infant. Furthermore, it is known also to protect against infections thus reducing morbidity and mortality in young children.

Feeding practices are mainly influenced by customs, superstitions, and socioeconomic status. But the effects of infant feeding practices are largely socioeconomic. These factors must be given due importance in planning and developing a secured future for infants. It is believed that the awareness of mothers regarding feeding practices affect nutritional status and health of infants which can be vastly improved through nutrition education, health related awareness and cooperation of mothers. This study therefore determines child rearing and knowledge of feeding practices among women in Ikot Ekpene Senatorial District.

Statement of the problem

Children are more than the object of their parent's attention and love; they are also a biological and social necessity. The human species perpetuates itself through children; cultural, religious and national groups transmit their values and traditions through children; families maintain their lineage through children; and individuals pass on their genetic and social heritage through children. The ultimate value of children is the continuity of humanity.

Parents have been said to be the most critical factor in the growth and development of children. There is a general agreement among experts around the world from developing as well as developed nations that early childhood rearing and training are not only desirable but essential for personality development among children, there are a range of behaviours and associated emotions exchanged between mothers and their offspring: some of these exchanges involve positive and healthy behaviours and others involve the opposite; Many parents today have deviated from the traditional ways of caring for their children as compared to what used to be obtainable in the traditional society. Every society has its unique cognitive and normative cultural components that guide the mode of conduct of every member of the society. This is why in some societies, a practice is seen as being better than those of modern child rearing method. Though, many reasons have been adduced for this preference, the most germane reason has been the collective effort of the entire family members. However, all these have been affected by the advent of social change, structural shift in the society and the culture of poverty. But when parents fail to fulfill these fundamental responsibilities, their children often suffer the consequences. In fact, the evidence is overwhelming. Sequel to the foregoing, the question to be raised is: to what extent does child rearing and

knowledge of feeding practices among women in Ikot Ekpene Senatorial District influence the growth and development of children.

Purpose of the Study

The general objective of this study is to examine the nexus of interaction between, child rearing and knowledge of feeding practices among women in Ikot Ekpene Senatorial District. The specific objectives therefore include to:

- i. Examine the relationship between breast feeding practices and child rearing among women in Ikot Ekpene Senatorial District.
- ii. Examine the relationship between bottle feeding practices and child rearing among women in Ikot Ekpene Senatorial District.

Research Questions

The following research questions will be answered:

- i. What is the relationship between breast feeding practices and child rearing practices among women in Ikot Ekpene Senatorial District?
- ii. What is the relationship between bottle feeding practices and child rearing practices among women in Ikot Ekpene Senatorial district?

Research Hypotheses

The following null hypotheses were postulated to guide the conduct of the study:

- Ho1: there is no significant the relationship between breast feeding practices and child rearing among women in Ikot Ekpene Senatorial District.
- Ho2: there is no significant relationship between bottle feeding practices and child rearing among women in Ikot Ekpene Senatorial District.

Literature Review

Child development

Child development has been defined by different scholars as growth and increase in body size, mental capacity, understanding and acquisition of new skills. The development occurs in series and at different stages one after the other. This process needs stimulation. Werner (1988) has argued that, stimulation means the variety of opportunities which a child can get to experience, explore and play with things around her. It involves body movement and touching. Every society has different child rearing practices used to facilitate child development. The practices depend on cultures, beliefs, and socio-economic as well as environmental factors. These different factors influence child development as societies at the same time have different perceptions and expectations on child development.

UNESCO (1995) defined child development as a process of change in which the child learns to handle more complex levels of moving, thinking, feeling and interacting with people and objects in the environment. Holt (1993) added that the term applies to global impression of the child and encompasses growth, increase in understanding, acquisition of new skills and more sophisticated response and behaviour. Many authors have summarized child development as an increase in size and in the mental, physical and social functions of the child. The term also means growth and development whereby the two go together but in different speed. The whole process of development occurs in series of stages where each stage builds on the preceding one. This is a continuous process where the whole process of development is affected if one stage does not occur. There are internal

and external factors which determine the development. The internal factors are mainly the genes which the child inherits from the parents, while the external factors are environmental like health, socioeconomic surrounding, family and the stimulation given. All these factors interact together and each depend on or influence the other.

Child development is multidimensional as social and environmental conditions can restrict child's development. Lack of primary health care such as vaccines, clean, and safe water, or presence of diseases can hinder the development. The development is multi-determined as genes which a child inherits from the parents play a very big role in determining the functions of the body and mind. The child's body depends on micro/macro nutrients for functioning and growth. Malnutrition or poor nutritional status can cause a developmental delay or impairment. Cultural practices, child rearing, family responsibilities and priorities can determine the well being of the child.

Breast feeding and Child Rearing

Child rearing practices are embedded in the culture and determine to a large extent, the behaviours and expectation surrounding a child's birth and infancy. They also influence childhood, adolescence and the way these children parent as adults. Child rearing consists of practices which are grounded in cultural patterns and beliefs. Studies from different part of the world reveal that all young children need adequate nutrition, health and care form birth on wards. Lack of these supports during the infant years has permanent negative effects on later development. In addition, these variables interact with and have an impact on the child's social and cognitive development. While these factors are influenced by the economic and political context within which the child's lives, they are mediated through the family's child rearing practices (Richard, (2008).

According to Grobman (2003), the type of child rearing practices required at a given point in time depends to a large degree on the child development age and the health and nutritional risks the child is facing. At birth and during the first year of life, the child is at the greatest risk of mortality. It is recognized as a critical time for both the child and the mother. During the early infancy stages the child is completely dependent on considerable support from others for care. Generally, the mother is the primary caregiver, from others and sometimes alone, she is responsible for providing all the things an infant needs: protection from physical danger, adequate n utrition and health care, an adult who can understand and respond to signals; things to look at, touch, hear, smell, and taste, opportunities to explore the world, appropriate language stimulation, and an adult with whom to form an attachment.

It is widely believed that poorly nourished women produce an insufficient quantity of breast milk or breast lacking in energy or other critical nutrients, although evidence suggests that women must experience severe nutritional stress before the quantity and overall quality of breast milk output are affected. Breast milk is a nutritional complete food for human infants. Estimates of the nutrient requirements of the full-term infant during the first 6 month of life are largely based on the composition of human milk. Postponing the introduction of non-breast milk foods and liquid until at least 4-6 months of age dramatically reduces infant risk of exposure to environmental contamination while assuring the nutritional and immunological benefits of breast milk through this period. The evidence over whelming indicates that on a population level, breast feeding is positively correlated with lower morbidity and mortality rates and with shorter and milder illness (Rhoda, 1999). Exclusive breast feeding is associated with the lowest mortality rates. This means that breast fed infant have fewer and less severe infections and lower mortality rates. The common practice of giving infant water may expose them to the environmental pathogens that breast feeding precludes. In addition, extra water displaces infant demand for human milk, which may cause the mother to provide less breast milk. Thus, giving water may indirectly lower the infant's long-term total fluid intake. Breast milk contains adequate levels of necessary electrolytes. As a result, infants do not require extra sources of electrolytes, nor do they require any extra water for hydration or excretion.

According to Wardle (2010) offering high calorie liquids such as juices, cereal-based beverages and artificial formulas generally reduces the infant's intake of breast milk with negative impacts on the infant's nutritional status and growth. High calorie liquids may satisfy the infant's caloric needs and hunger without providing protein, fat and other nutrients required for proper mental and physical growth and development. In addition, a decrease in demand for breast milk by the infants results in a decrease in maternal supply and shortening of the period of lactational amenorrhea. Thus, giving the infant anything other than breast milk for the first 4-6 month of life is generally contraindicated.

Bottle feeding and child rearing

Rhoda (1999) asserts that bottle feeding are nutritious alternatives to breast milk and nutrients that breastfed babies need to get from supplements. For some women, breast feeding may be too difficult or stressful. Here are some reasons for which women chose bottle feeding:

Convenience: Either parent (or another caregiver) can feed the baby at any time. This allows mothers to share the feeding duties and helps her partner to feel more involved in the crucial feeding process.

Flexibility: Once the bottles are made, the mother can leave her baby with a caregiver or partner and know the child's feeding is taken care of.

Diet: Women who opt to bottle feeding don't have to worry about the things they eat or drink that could affect their babies. On the other hand, there are some challenges associated with bottle feeding. Among these are lack of antibodies. None of the antibodies found in breast milk are in manufactured or bottle feeding. As such, bottle feeding cannot provide a baby with the added protection against infection and illness that breast milk does. Unlike breast milk which is always available, unlimited, and served at the right temperature, using bottle feeding requires planning and organisation to make sure that you have what you need when you need it. Babies/ infants raised by bottle feeding is a manufactured food designed and marketed for feeding to babies and infants. It is a food which purports to be or is represented for special dietary use solely as a food for infants by reason of its stimulation of human milk or its suitability as a complete or partial substitute for human milk.

Rudy (2000) opine that the most commonly used bottle feeding contains purified cow's milk, a blend of vegetable oils, lactose, a vitamin-mineral mix, and other ingredients depending on the manufacturer. Bottle feeding gives your baby less control over his milk intake. Milk flows easily from a bottle nipple even when the baby is not actively sucking, and the faster flow can cause a baby to continue feeding after he is full. When using the bottle-fed strategy, babies may drink more than they need because the care-provider may encourage the baby to finish the content in the bottle rather than waste the milk inside. The significant part of bottle feeding is that it enhances rapid growth of the child. One of the harmful effect/ consequences of this feeding practice is teaching children to

ignore their internal cues and eat beyond satiety. It can also lead the child to get higher energy intake at a meal and gain weight.

METHOD

Research Design

The research will adopt an Ex-post Facto research design, since the research seeks to examine the interplay of variables that have already occurred. The design is suitable because the research will only examine the phenomena (variables) as they have occurred without manipulating them.

Area of study

The study was carried out in Ikot Ekpene Senatorial district of Akwa Ibom State. Ikot Ekpene Senatorial districts comprises of local government areas that speak mostly Annang languages. The people are Annang whose major occupation is farming, fishing and trading.

Population of the Study

The population of this study comprises all women in Ikot Ekpene Senatorial district of the Akwa Ibom State. They are 503,489 in number.

Sample and Sampling Technique

The sample of 200 parents was selected from the population and used for the study. This sample size was selected using simple random sampling technique where 5 local government areas were selected for the study. From each local government area, 40 women were chosen.

Instrumentation for Data Collection

A research questionnaire instrument tagged "CHILD REARING AND KNOWLEDGE OF FEEDING PRACTICES QUESTIONNAIRE (CRKFPQ) was used in this study. The instrument is combination of the instrument adapted from the eminent scholars in the home economy. Section A is made up of the personal data of the respondents while section B measured the variables of the objectives of the study.

Validation of the Instrument

The adapted instrument was further subjected to the scrutiny of three experts. Each of the three experts was obtained from the following departments: "the departments of home econo my and that of the department of Educational Foundations Department of Test and Measurement".

Reliability of the Instrument

The questionnaire was subjected to a test re-test method in order to determine its reliability index. The test, re-test took a three weeks interval with 30 women who did not form part of the main work. The technique helped in subjecting the scores to Crombach Alpha type in order to ascertain the level of reliability of the research instrument named "CHILD REARING AND KNOWLEDGE OF FEEDING PRACTICES QUESTIONNAIRE (CRKFPQ). The test gave 0.86 reliability coefficient which was considered substantially high enough to justify the use of the instrument.

Administration of the Instrument

The data for the study was collected through the administration and scoring of the instrument. The researcher with the aid of one research assistant per ward administered the instrument on the spot, waited and collected the completed questionnaire from parents, but for those who were not chanced for the exercise, a questionnaire was given to them individually for the research assistant and retrieve few days after. The exercise was successful.

Data Analyses and results

Research Question One

The research question sought to find out the relationship between breast feeding practices and child rearing practices among women in Ikot Ekpene Senatorial District. In order to answer the research question, descriptive analysis was performed on the data collected as shown in table 1.

Table 1.

Descriptive analysis of the relationship between breast feeding practices and child rearing practices among women in Ikot Ekpene Senatorial District.

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Breast Feeding Practices	200	15.24	12.5	0.88*	*Strong to perfe relationship
Child Rearing Practices among women		17.40	12.5		

Source: Field Survey

Table 1. presents the result of the descriptive statistics of the relationship between breast feeding practices and child rearing practices among women in Ikot Ekpene Senatorial District. The two variables were observed to have strong to perfect relationship at 88%. The arithmetic mean for breast feeding practices 15.24 was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards to the child bearing practices among women 17.40 was observed to be higher than the expected mean score of 12.5. The result therefore means that there is remarkable relationship between breast feeding practices and child rearing practices among women in Ikot Ekpene Senatorial District.

Research Question Two

The research question sought to find out the relationship between bottle feeding practices and child

rearing practices among women in Ikot Ekpene Senatorial district. In order to answer the research

question, descriptive analysis was performed on the data collected as shown in table 2.

Table 2.

Descriptive analysis of the relationship between bottle feeding practices and child rearing practices among women in Ikot Ekpene Senatorial district.

Variable	N	Arithmetic mean	Expected mean	R	Remarks	
Bottle feeding practices		13.52	12.5			
	200			0.75*	*Strong perfect relationship	to
Child Rearing Practices among women		17.40	12.5			

Source: Field Survey

Table 2.0 presents the result of the descriptive statistics of the relationship between bottle feeding practices and child rearing practices among women in Ikot Ekpene Senatorial district. The two variables were observed to have strong to perfect relationship at 75%. The arithmetic mean for bottle feeding practices 13.52 was observed to be greater than the expected mean score of 12.5. In addition to that, the arithmetic mean as regards to the child bearing practices among women 17.40 was observed to be higher than the expected mean score of 12.5. The result therefore means that there is remarkable relationship between bottle feeding practices and child rearing practices among women in Ikot Ekpene Senatorial district.

HYPOTHESES TESTING

Hypothesis one

The null hypothesis states that there is no significant relationship between breast feeding practices

and child rearing among women in Ikot Ekpene Senatorial District. In order to test the hypothesis,

two variables were identified as follows:-

1. Breast feeding practices as the independent variable

2. Child rearing among women as the dependent variable

Pearson Product Moment Correlation analysis was used to analyze the data. (see Table 3).

Table 3

Pearson product moment correlation analysis of the relationship between breast feeding practices and child rearing among women in Ikot Ekpene Senatorial District.

Variable	∑x	$\sum x^2$ $\sum xy$	r
	$\sum \mathbf{y}$	$\sum y^2$	
Breast feeding practices (x)	3048	46984 53464	0.88*
Child rearing practices (y)	3480	61000	

* Significant at 0.05 level; df = 198; N = 200; Critical r-value = 0.139

The table presents the obtained r-value of (0.88). This value was tested for significance by comparing it with the critical r-value (0.139) at 0.05 level with 198 degree of freedom. The obtained r-value (0.88) was greater than the critical r –value (0.139). Hence, the result was significant. The result therefore means that there is significant relationship between breast feeding practices and child rearing among women in Ikot Ekpene Senatorial District.

Hypothesis Two

The null hypothesis states that there is no significant relationship between bottle feeding practices

and child rearing among women in Ikot Ekpene Senatorial District. In order to test the hypothesis,

two variables were identified as follows:-

- 1. Bottle feeding practices as the independent variable
- 2. Child rearing among women as the dependent variable Pearson Product Moment Correlation analysis was used to analyze the data. (See Table 4).

Table 4

Pearson product moment correlation analysis of the relationship between bottle feeding practices and child rearing among women in Ikot Ekpene Senatorial District.

Variable	∑x	$\sum x^2$	∑xy	r
	$\sum \mathbf{y}$	$\sum y^2$		
Bottle feeding practices (x)	2704	36976	47376	0.75*
Child rearing practices (y)	3480	61000	11370	0.70

* Significant at 0.05 level; df = 198; N = 200; Critical r-value = 0.139

The table presents the obtained r-value of (0.75). This value was tested for significance by comparing it with the critical r-value (0.139) at 0.05 level with 198 degree of freedom. The obtained r-value (0.75) was greater than the critical r –value (0.139). Hence, the result was significant. The result therefore means that there is significant relationship between bottle feeding practices and child rearing among women in Ikot Ekpene Senatorial District.

Discussion of the findings

The result of the data analysis in table 3 was significant due to the fact that the obtained rvalue (0.88) was greater than the critical r –value (0.139) at 0.05 level with 198 degree of freedom. The result implies that there is significant relationship between breast feeding practices and child rearing among women in Ikot Ekpene Senatorial District. The result therefore is in consonance with the view of Brown (1998), who stated that it is widely believed that poorly nourished women produce an insufficient quantity of breast milk or breast lacking in energy or other critical nutrients, although evidence suggests that women must experience severe nutritional stress before the quantity and overall quality of breast milk output are affected. He also said that breast milk is a nutritional complete food for human infants. Being that estimates of the nutrient requirements of the full-term infant during the first 6 month of life are largely based on the composition of human milk. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

The result of the data analysis in table 4 was significant due to the fact that the obtained r-value (0.75) was greater than the critical r –value (0.139) at 0.05 level with 198 degree of freedom. The result implies that there is significant relationship between bottle feeding practices and child rearing among women in Ikot Ekpene Senatorial District. The result therefore is in agreement with the view of Grobman (2003), who stated that bottle feeding gives your baby less control over his milk intake. Milk flows easily from a bottle nipple even when the baby is not actively sucking, and the faster flow can cause a baby to continue feeding after he is full. When using the bottle-fed strategy, babies may drink more than they need because the care-provider may encourage the baby to finish the content in the bottle rather than waste the milk inside. He also mentioned that the significant part of bottle feeding is that it enhances rapid growth of the child. The significance of the result caused the null hypotheses to be rejected while the alternative one was accepted.

Conclusions

Based on the findings of the research work, it is concluded that successful child rearing is essential for a child's overall development and realization of self-esteem. Also, women in Ikot Ekpene Senatorial District are identified with good feeding and child rearing practices and there is significant relationship between breast feeding practices and child rearing among women in Ikot Ekpene Senatorial District.

Recommendations

The following recommendations are deemed necessary:

- 1. Women should feed their children mostly with milk to be sure of hygiene.
- 2. Bottle food should strongly be discouraged unless is recommended by a medical doctor or a nutritionist.
- 3. Children of under ages should not be given solid food so as not to create negative effects on them.
- 4. Children should be given adequate food with balanced diet in order to help the children in rapid development physically, intellectually and other wise.

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