

**ROLES OF BOTTLE FOOD AND SOLID FOOD PRACTICES IN CHILD REARING  
AMONG WOMEN IN IKOT EKPENE SENATORIAL DISTRICT.**

**BY**

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***ABSTRACT***

*The study investigated bottle food and solid food practices in child rearing among women in Ikot Ekpene Senatorial District. The population of this study comprised all women in Ikot Ekpene Senatorial district of 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 “Bottle Food and Solid Food Practices in Child Rearing Questionnaire (BFSFPCR)” 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 these feeding practices (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**

The first five years of life are a period of rapid physical growth and change, and are the years when eating behaviors that can serve as a foundation for future eating patterns develop. During these early years, children learn what, when, and how much to eat based on the transmission of cultural and familial beliefs, attitudes, and practices surrounding food and eating. According to , 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

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. Food, health, and care are all necessary for healthy survival, growth and

development. According to the UNICEF conceptual framework (2011), all the three elements must be satisfactory for good nutrition. Even when poverty causes food insecurity and limited health care, enhanced care giving can optimize the use of existing resources to promote good health and nutrition in women and children. When breast milk is no longer enough to meet the nutritional needs of the infant, complementary foods should be added to the diet of the child. The transition from exclusive breastfeeding to family foods, referred to as complementary feeding or solid feeding, typically covers the period from 6 to 18-24 months of age, and is a very vulnerable period. It is the time when malnutrition starts in many infants, contributing significantly to the high prevalence of malnutrition in children under five years of age world-wide. The World Health Organization estimates that 2 out of 5 children are stunted in low-income countries. Startling transformations have occurred all over the world, particularly on the mode of caring and rearing of children. There are a number of important issues which arise as a result of these transformations. One of these issues is the concern of every well meaning individual for the future of our children on one hand and the development of the society on the other.

### **Statement of the problem**

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 is a range of behaviours and associated emotions exchange between mothers and their offspring, some of this exchange involves positive and healthy behaviours and others involve the opposite. Some of the outcomes for child development of these exchanges reflect good adjustment and individual and social success, whereas other outcomes reflect poor adjustment. Problems of development of child rearing practices have several significant impacts on the life of child, many parents today have deviated from the traditional ways of caring for their children as compared to what used to be obtained 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, traditional 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 is bottle feeding and solid food feeding practiced in child rearing among women in Ikot Ekpene Senatorial District. It is not easy to provide an answer to the above question because there is limited or absent research evidence on the situation. Therefore, the problem of this study is to examine bottle food and solid food practices in child rearing among Ikot Ekpene Senatorial District.

### **Purpose of the Study**

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

1. Examine the relationship between bottle food practices and child rearing among women in Ikot Ekpene Senatorial District.
2. Examine the relationship between solid food practices and child rearing among women in Ikot Ekpene Senatorial District.

### **Research Questions**

The following research questions will be answered:

1. What is the relationship between bottle food practices and child rearing practices among women in Ikot Ekpene Senatorial district?
2. What is the relationship between solid food practices and child rearing practices among women in Ikot Ekpene Senatorial District?

### **Hypotheses**

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

- H1: there is no significant relationship between bottle food practices and child rearing among women in Ikot Ekpene Senatorial District.
- H2: there is no significant relationship between solid food practices and child rearing among women in Ikot Ekpene Senatorial District.

### **LITERATURE REVIEW**

#### **Child rearing practices and forms of child rearing**

Child rearing is the training and bringing up of children by parents or parent-substitutes. It is also used for child rearing practices in different societies, at different ethnic groups, etc. It differs from parenting in that in child rearing, the emphasis is on the act of training or bringing up the child and the interaction between the parent and child, while parenting emphasizes the responsibility and qualities of exemplary behaviour of the parent. Child rearing is the process of supporting the physical, emotional, social and intellectual development of a child. According to Merriam Webster Learning dictionary, child rearing is defined as “The process of taking care of and raising children”.

According to Baumrind (1991), child rearing practices are meant to capture normal variations in parents’ attempt to socialize with children. It is the overall emotional climate of the parent-child relationship, an effective context of sorts that sets the tone for the parent’s interaction with the child. The term child rearing practices refers to the ways of upbringing children which are authoritarian, authoritative, permissive and neglectful parenting as suggested by Diana (1992). It can also be defined as a technique which is used and apply in child nurturance according to Grobman, (2003).

#### **Bottle Food Practices and Child Rearing**

Bottle feeding are nutritious alternatives to breast milk and nutrients that breastfed babies need to get from supplements. Manufactured under sterile conditions, bottle feeding attempts to duplicate mothers’ milk using a complex combination of proteins, sugars, fats and vitamins that are not possible to create at home. For some women, breast feeding may be too difficult or stressful. Here are other reasons for which women chose bottle feeding (Rhoda, 1999).

### **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**

Wardle (2010) assert that 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 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 and infants raised by bottle feeding tend to have more gas and firmer bowel movements than breast fed babies. Bottle feeding is a manufactured food designed and marketed for feeding to babies and infants. It is food which purports to be or is represented for special dietary use solely as food for infants by reason of its stimulation of human milk or its suitability as a complete or partial substitute for human milk.

According to Baurmring (1991), the most commonly used bottle feeding contains purified cow milk, a blend of vegetable oil, 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.

### **Solid Food Practices and Child Rearing**

According to Birch (2008), the development of the infant's intestinal micro-biome in response to dietary and other exposures may shape long-term metabolic and immune function. During the first year of life, the human infant gut in response to early environmental exposure, such as delivery type, hygiene measures and diet. Infant feeding practices particularly breast and bottle feeding have been shown to influence the structure and function of this developing micro-biome. Solid feeding is defined as the process starting when breast milk alone is no longer sufficient to meet the nutritional requirement of infants, therefore other feeding techniques are needed. The transition from exclusive breast feeding to family foods referred to as solid complimentary feeding typically covers the period from 6-24 months of age, even though breast feeding may continue up to two years of age and beyond. This is a critical period of growth during which nutrient deficiency and illness contribute globally to high rates of under nutrition among children under five years of age.

The introduction of solid food (i.e. food consumed in addition to breast milk to meet nutrient needs) is not however without risk. Recent evidence indicates that these foods may displace breast milk, thereby producing a greater likelihood of nutrient deficiency. The density and bioavailability of nutrients in the solid foods are not equal to or greater than those of breast milk. By the same token, these foods may interfere with the absorption of nutrients in breast milk. Thus, solid food increases the energy intake children need to perform certain activities. It promotes increased growth.

A growing body of evidence suggests that the food choices a mother makes during her pregnancy may set the stage for an infant's later acceptance of solid food. Amniotic fluid surrounds the fetus, maintaining fetal temperature, and is a rich source of sensory exposure for infants. Many flavors in the maternal diet appear to be present in amniotic fluid. Adult sensory panels have detected odours and compounds of garlic, cumin, and curry in the amniotic fluid of pregnant women ingesting oil of garlic capsules and spicy foods, respectively. Because taste and smell are already functional during fetal life, and because the fetus regularly swallows amniotic fluid, the first experiences with flavor occur prior to birth.

## **METHODS**

### **Research Design**

The research will adopt an Expost-Facto research design, since the research seeks to examine the interplay of variables that have already occurred.

### **Area of study**

The study was carried out in Ikot Ekpene Senatorial district of Akwa Ibom State.

### **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 "BOTTLE FOOD AND SOLID FOOD PRACTICES IN CHILD REARING QUESTIONNAIRE (BFSFPCR)" was used in this study. The instrumentation is combination of the instrument adapted from the eminent scholars in the home economy.

### **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 Economics and Educational Foundations Department of Test and Measurement".

### **Reliability of the Instrument**

The questionnaire was subjected to a test re-test method 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. The test gave 0.86 reliability coefficient which was considered substantially high enough to justify the use of the instrument.

### **Method of Data Analysis**

Data collected was analyzed with appropriate statistical techniques. For instance, each research question will be answered with descriptive statistics while the hypotheses were tested with Pearson Product Moment Correlation Analysis. The results of the statistical analysis for the hypotheses were tested for significance at 0.05 alpha level.

**Data Analyses and results**

**Research Question One**

The research question sought to find out the relationship between bottle food 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 bottle feeding practices and child rearing practices among women in Ikot Ekpene Senatorial district.**

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Bottle food practices	200	13.52	12.5	0.75*	*Strong to perfect 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 bottle food 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 mean that there is remarkable relationship between bottle food 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 solid food 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 solid food feeding practices and child rearing practices among women in Ikot Ekpene Senatorial District.**

Variable	N	Arithmetic mean	Expected mean	R	Remarks
Solid food feeding practices	200	12.61	12.5	0.80*	*Strong to perfect relationship
Child Rearing Practices among women		17.40	12.5		

**Source: Field Survey**

Table 2 presents the result of the descriptive statistics of the relationship between solid food 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 80%. The arithmetic mean for food feeding practices 12.61 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 solid food 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 bottle food 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 food 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 bottle feeding practices and child rearing among women in Ikot Ekpene Senatorial District.**

Variable	$\sum x$	$\sum x^2$	$\sum xy$	r
	$\sum y$	$\sum y^2$		
Bottle food practices (x)	2704	36976	47376	0.75*
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 (0.75). 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 food practices and child rearing among women in Ikot Ekpene Senatorial District.

**Hypothesis Two**

The null hypothesis states that there is no significant relationship between solid food 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. Solid Food 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 solid food feeding practices and child rearing among women in Ikot Ekpene Senatorial District.**

Variable	$\sum x$	$\sum x^2$	$\sum xy$	r
	$\sum y$	$\sum y^2$		
Solid Food feeding practices (x)	2521	32353	44274	0.80*
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 (0.80). 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 (0.80) was greater than the critical r –value (0.139). Hence, the result was significant. The result therefore means that there is significant relationship between solid food 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 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 food 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. 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 (0.80) 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 solid feeding practices and child rearing among women in Ikot Ekpene Senatorial District. The result therefore is in consonance with the view of Okon (2015), who stated that the transition from exclusive breast feeding to family foods referred to as solid complimentary feeding typically covers the period from 6-24 months of age, even though breast feeding may continue up to two years of age and beyond. This is a critical period of growth during which nutrient deficiencies and illness contribute globally to higher rates of under nutrition among children under five years of age. 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 was concluded that women in Ikot Ekpene Senatorial District are identified with good feeding and child rearing practices. There is significant relationship between bottle food practices and child rearing among women in Ikot Ekpene Senatorial District. There is significant relationship between solid food 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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