

## The Effect of Child Care and Feeding Practices on the Nutritional Status of Children of Market Women in Ondo State, Nigeria.

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**Abstract :** Optimal infants and young children feeding is paramount to their health and nutritional status. This study assessed the childcare and feeding practices among 200 market women in relation to their children nutritional status. Semi-structured questionnaire was used to collect information on childcare and feeding practices; anthropometric indices of 200 infants were also taken and analyzed. The result showed that 98% of the market women initiated breastfeeding immediately after delivery, 99% practiced exclusive breastfeeding and majority of the women take their children along with them to the market. The major complementary staple used by the women was sorghum (53.6%), 62% of the respondents admitted the use of soybean powder as the major protein source in the gruel. The mean age, weight, height and MUAC of the infants were respectively 20months, 10kg, 78cm, and 14cm. The study revealed that 31% of the children were moderately stunted and 39% were moderately underweight. The duration of breastfeeding and childcare practices were found to significantly affect nutritional status at  $p < 0.05$ . Therefore, mothers should be properly educated on the appropriate combination of local staples for complementary foods through food demonstration class during post natal clinic.

**Keywords -** Exclusive breastfeeding, complementary feeding, gruel, stunting, underweight.

### I. Introduction

Optimal infant and young child-feeding (IYCF) practice is crucial for nutritional status, growth, development, health and ultimately the survival of the infant and young children<sup>[1]</sup>. Worldwide, sub-optimal breastfeeding still accounts for deaths of 1- 4million children aged less than five years (under-five mortality)<sup>[1]</sup>. The poor complementary feeding practices means that many children continue to be vulnerable to irreversible outcome of stunting, poor cognitive development, and significantly increased risk of infectious diseases such as acute respiratory infection and diarrhea<sup>[2]</sup>. The inadequate nutrition education among women of child-bearing age and inadequate health services, beliefs, lack of confidence to put knowledge into practice in the face of myths and superstition challenge the survival, growth and the development of children<sup>[3]</sup>.

In a developing country like Nigeria with a high burden of diseases and low access to safe water and sanitation even in developed countries recent studies have underscored the role of IYCF practice in reducing mortality<sup>[4]</sup>. This study is a baseline study that provides data and information on childcare and infant feeding practices among the market women and the nutritional status of their children.

### II. Materials And Method

The study was a survey of market women and their children under 24 months of age in markets in Ondo State. Three major markets were randomly selected and only women who were nursing children under 24 months were selected, 200 women and 200 children were used for the study. Pretested semi-structured questionnaire was used to elicit information on demographic status, child-care, breastfeeding and complementary feeding practices. Anthropometric indices were also measured using standard procedure by Maxiya-Dixon et al, (2004)<sup>[5]</sup>. Data collected was analyzed using Epi-info nutritional anthropology software<sup>[6]</sup> to determine BMI, height for age, weight for age percentiles and Z-scores, CDC/WHO reference growth chart standards were used to determine cut-offs. SPSS version17 was used to analyze demographic and child-care practices data.

### III. Results

The study revealed that all the respondents breastfed their children, and the practice of exclusive breastfeeding (EBF) was 99%, all the mothers initiated breastfeeding in less than one hour after delivery.

Table 1 shows that the mothers introduce their infant to complementary food at six month, the food majorly used as complementary food was gruels from sorghum (53.3%) followed by cerelac (17.5%), and maize was (11%).

**Table 1 Complementary food of the respondents**

Complementary Foods	N	%
Maize gruel	22	11.3
Sorghum gruel	104	53.6
Cerelac	34	17.5
Nutriend	6	3.0
Beans (mashed)	8	4.0
Others	20	10.0

Table 2 shows the major protein source of the complementary foods given to the children, 62.8% of the mothers use soy bean power while 26.6% use groundnut and crayfish was used by 6.4% of the respondents.

**Table 2 Major protein source of the complementary foods**

Protein sources	N	%
None	6	2.1
Groundnut	50	26.6
Crayfish	12	6.4
Soybean powder	119	62.8

Table 3 shows the childcare practices of the subjects, most of the market women (90%) reported taking their children along to the market while 10% took theirs to daycare.

**Table 3 Child care center**

Child Care Center	N	%
Daycare	20	10.0
With me in the market	180	90.0

Table 4 shows anthropometry assessment of the children, the means of their ages, weight, height and mid upper arm circumference (MUAC) were respectively 20months, 10kg, 78cm and 14.68cm.

**Table 4 Means of Anthropometry Indices**

Indices	Mean
Age (month)	20±3
Height(cm)	78.2±8
Weight(kg)	10.3±3
MUAC(cm)	14.68±2

Table5 shows the height-for-age (z-score range) of the subjects, it reflected that 31% were moderately stunted while the weight for age z-score showed that 39% of the children were underweight. However, duration of breastfeeding and childcare practices were found to significantly affect nutritional status at  $p < 0.05$ .

**Table 5 Nutritional Status of the Subject**

Nutritional status	N	%
Stunting	62	31
Underweight	78	39

#### IV. Discussion

All the respondents breastfed their children, and the practice of exclusive breastfeeding was 99%, this is due to the establishment of mother and child hospitals by the Ondo State Government where anti-natal and post-natal clinics were run free of charge. This perfectly agrees with the work of Ene-Obong *et al* (2001)<sup>[7]</sup> who reported that most market women exclusively breastfed their children. Also Abidoeye (1993)<sup>[8]</sup> in his work said 72% of the market woman practice EBF.

Moreover, all the mothers initiated breastfeeding in less than one hour after delivery. This is because all of them had their babies in the hospital. This correlates with the work of Alutu and Onubu 2005<sup>[9]</sup> who have observed that 98% started breastfeeding almost immediately after delivery and fed colostrum to their babies.

Also, majority of the respondents practice exclusive breastfeeding (99%). This is an improvement from the past researches which show practice of exclusive breastfeeding to be less than 50%<sup>[10]</sup> also Aghaji (2002)<sup>[11]</sup> show that mothers knowledge of exclusive breastfeeding may improve the practice of EBF. It is a known fact that mother and child programme in the state comprehensively educate mothers on EBF.

The mothers introduce their infant to complementary food at six month, the food majorly used as complementary food was gruel from sorghum (53.3%). This agrees with Ene-Obong *et al* (2001)<sup>[7]</sup> in their study who showed that 70% of the market women used sorghum gruel as the major complementary food for their infants. The major source of protein in the gruel was soybean powder with 62.8%.

The assessment of nutritional status of the children reflected that 31% were moderately stunted. This is quite higher than Abidoye's report in 1993<sup>[8]</sup> who said that 20% of the children of the market women were moderately stunted. Moreover, 39% were moderately underweight. This is in agreement with the work of Abidoye (1993)<sup>[8]</sup> who said 39.2% of the children of the market women were underweight on the contrary, this is higher than the WHO<sup>[12]</sup> estimate in 2008 which was 26.7%. The duration of breastfeeding and childcare practice were found to significantly affect nutritional status at  $p < 0.05$ .

## V. Conclusion

It was found from the study that the prevalence of stunting and underweight was still high among the children and the adequacy of the nutrients of the complementary foods given was not ascertained. Also the foods given lack variety because mothers are not grounded on proper combination of local staples to prepare complementary foods and malnutrition still poses a great threat to health and proper development of these children.

## VI. Recommendation

Market women should be empowered by giving micro credit to them to expand their businesses and improve their socio-economic status so as to enhance good standard of living. Also, mothers should be properly educated on the appropriate combination of local staples for complementary food for children of six months and above through food demonstration classes during post-natal clinic.

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