

## **ASSESSING FACTORS AFFECTING BREAST FEEDING STATUS AMONG CHILDREN AGED BELOW FIVE YEARS IN WESTERN UGANDA.**

By

**NATAMBA Jonan, Email. jonanatamba@gmail.com**

### **ABSTRACT**

This study was carried out to assess the factors affecting breast feeding status of children aged below five years in Western Uganda.

Secondary data from UDHS (2006) was used. It was analyzed using SPSS version 16.0. The study included women aged 15-49 with children aged 0-5 years. Two levels of Analysis were performed, Univariate level, and bivariate analysis using Pearson chi square ( $\chi^2$ ) test.

Findings confirmed that mothers' age, education, income, residence status had significant effect on breastfeeding at 95% Confidence Interval. Exclusive breastfeeding for the first 6months was recommended, food containing proteins for children aged above one year.

Key words: **Malnutrition, Morbidity, Mortality, breastfeeding, UDHS.**

### **1.0 INTRODUCTION**

In Uganda, protein energy malnutrition remains a serious health and welfare problem affecting children to which it contributes significantly to mortality and morbidity levels. Over 38% of children below five years are stunted (Serunjogi, 1992).

Stunting in Uganda starts at infancy and rises steeply, peaking at about two years when about 50% of toddlers are stunted. The Northern and South Western regions are more affected than other regions.

The nutrition status among children is an outcome of many interrelated factors including environment, economics, education, and culture and food security. Among these, the ones that have immediate and direct effects on nutrition status are feeding practices and infections. This therefore implies that the nutrition of children can indicate the level of socio economic development of a community.

Given the centrality of poverty reduction as the development objective of the government, it is odd that the interrelationship between improved nutritional status and economic development is not explicit in Uganda Food and Nutrition policy. Similarly, the

conceptual frame work of determinants of nutrition status among children is not provided in the policy.

The policy targets nutrition and childhood development with the overall objective of improving health of children less than six years of age. Policies are being formulated to address nutrition priority problems with assistance from international and local agencies. The 2004/2005 policy reform has been working on policies and guidelines on anemia, breastfeeding and HIV/AIDS and a number other nutrition related disorders prevalent in the country.

Uganda government has put tremendous efforts in reducing the prevalence of both micronutrient and macronutrient deficiencies in the country, for instance through effective nutrition programs which act directly on feeding practices. However, the yield would be more significant if the government acted through factors that affect nutrition status of children. Looking into the situation of women that is by strategically targeting their economic, education, and health status in an attempt to improve nutrition at each household level since they are the principle providers and care givers of children at this level, would bring prominent results.

Barbara Natif (2000) mentioned lack of information about magnitude, nature, scope and severity of malnutrition. She also noted that poorly coordinated approaches to malnutrition problems in the relevant sectors and adequate research, sensitization and mobilization to be major causes of malnutrition threats.

The alarming high infant (76 per 1000 live births and child mortality (137 deaths per 1000 live births) in Uganda has been attributed to low levels of breast feeding. Only 6 in ten 10 children are exclusively breast fed in Uganda (UBOS and Macro International Inc, 2007). On assessing the malnutrition problem in most cases, attention is drawn to poverty stricken and low productive areas in terms of food yet many factors ought to be examined for instance some women are said to prefer career growth other than breast feeding.

Under nutrition remains a big public health problem affecting mostly children below five years of age. This accounts for the prevalent morbidity and mortality levels among children. Limited breast feeding contributes to high rates of stunting, wasting, and underweight among children. To that end therefore, there is need to assess the factors affecting breast feeding of children under five years of age.

The main objective of the study was to assess the factors affecting breast feeding status of children aged below five years in Western Uganda. On the other hand study emphasized the following specific objectives; (i) To find out how women's socio economic variables affect breastfeeding of children below five years. (ii) To ascertain the relationship between the age of the mother and the duration of breastfeeding. (ii) To establish the relationship between women's socio-economic factors and breastfeeding status of children.

The following hypotheses were used in the study.

The age of the mother does not influence the breastfeeding duration among children below 5 years.

Women's socio-economic factors like income, occupation, education residence does not influence breastfeeding among children below 5 years.

## 2.0 METHODS

This chapter addresses the procedures that were followed in the assessment of factors affecting nutritional status of children aged below five years in Western Uganda. It presents the research design, the study population, data source and data analysis.

Quantitative data was used in the study using Uganda Demographic and Health Survey of 2006.

The study populations include women aged 15-49 in Western Uganda with children aged five years and below that is 0-5 years. A sample of mothers with children in the lower age bracket (0-1) and one with mothers in the higher one (2-4) were considered for the study.

Secondary data source was used in the study using Uganda Demographic and Health Survey of 2006 dataset. 913 women respondents were selected from western region of Uganda. Children

Secondary data sources such as journals, internet, magazines, and newspapers, published and unpublished books were used to provide further information on the topic of investigation.

Statistical Package for Social Scientists (SPSS) Version 17 was used in data analysis. This version is an improved one unlike the lower versions. It is user-friendly and can accommodate a big number of variables. It can tabulate a number of variables simultaneously.

Two levels of analysis were performed. Univariate analysis was done with the help of frequency distribution tables, graphs and pie-charts to describe the background characteristics of women who were breastfeeding.

Bivariate analysis was performed with the use of cross tabulations and Pearson Chi square ( $\chi^2$ ) test was done to establish the relationship between the dependent and independent variables.

The Pearson chi Square ( $\chi^2$ ) was derived as follows.

$$\chi^2_\alpha = \sum_{i=1}^r \sum_{j=1}^k \frac{(O_{ij} - E_{ij})^2}{E_{ij}} \dots\dots\dots (i)$$

With (n-1) degrees of freedom

Where,  $O_{ij}$  is the observed frequency in row  $i$  and column  $j$

$E_{ij}$  is the expected frequency in row  $i$  and column  $j$ .

### 3.1 STUDY RESULTS

The information provided 1.0 below discusses the background characteristics of women with Children under five years of age.

**Table 1.0 Socio-demographic characteristics of women and Children under five.**

| <b>Background Characteristics</b> | <b>Frequency</b> | <b>Percentage (%)</b> |
|-----------------------------------|------------------|-----------------------|
| <b>Age of the child</b>           |                  |                       |
| 0-1                               | 446              | 69                    |
| 2-4                               | 197              | 31                    |
| <b>Age of women</b>               |                  |                       |
| 15-19                             | 218              | 23.4                  |
| 20-24                             | 187              | 20.1                  |
| 25-29                             | 153              | 16.4                  |
| 30-34                             | 122              | 13.1                  |
| 35-39                             | 105              | 11.3                  |
| 40-44                             | 76               | 8.2                   |
| 45-49                             | 70               | 7.5                   |
| <b>Marital Status</b>             |                  |                       |
| Never married                     | 216              | 23.2                  |
| Married                           | 472              | 50.7                  |
| Living together                   | 105              | 11.3                  |
| Widowed                           | 32               | 3.4                   |
| Divorced                          | 10               | 1.1                   |
| Not living together               | 96               | 10.3                  |
| <b>Place of Residence</b>         |                  |                       |
| Urban                             | 67               | 7.2                   |
| Rural                             | 864              | 92.8                  |
| <b>Level of Education</b>         |                  |                       |
| No education                      | 230              | 24.7                  |
| Primary                           | 590              | 63.4                  |

|                        |     |      |
|------------------------|-----|------|
| Secondary              | 91  | 9.8  |
| Tertiary/University    | 20  | 2.1  |
| <b>Wealth Quintile</b> |     |      |
| Lowest                 | 113 | 12.1 |
| Second                 | 188 | 20.2 |
| Middle                 | 290 | 31.1 |
| Fourth                 | 233 | 25.0 |
| Highest                | 107 | 11.5 |

**Source:** UDHS 2006

The biggest proportion of the children less than five years was between ages 0-1 years (69%) majority of which were still breast feeding in western Uganda. It should be noted that only 31% of the children fewer than five years were aged 2-4 years.

Majority of the women were aged 15-19 years (23.4%) followed by those aged 20-24 (20.1%). The least number of women were aged 45-49 (7.5%).

On the marital status, majority of the women were married (50.7%) followed by those who were never married (23.2%). Surprisingly only a small percentage of women had divorced (1.1%) perhaps because of the strong African culture against divorce as well as Christianity effects.

On the place of residence, majority of the mothers were staying in rural areas (92.8%) and only a small percentage of them stayed in urban areas (7.2%). According to UBOS and Macro International Inc (2007), the above findings are inline with even the general situation in Uganda where majority of the women stay in rural areas (83%).

On the level of education, majority of the women had completed primary education (63.4%) while a small number of them had completed tertiary or university education (2.1%). Still, relatively a big number of women had no formal education (24.7%). Education of women exposes them on the importance of breast feeding to a young child as well on the mother herself.

On the wealth quintile, majority of the women were in the middle income level (31.1%) followed by those in the fourth wealth quintile (25.0%). Women in the highest wealth quintile (11.5%) were almost the same proportion as those in the lowest wealth quintile (12.1%).

Relationship between Women’s socio-economic factors and the uptake of Breast feeding among children less than five years is presented in table 2.0 below

**Table 2.0 Influence of the age of child on breast feeding habits.**

| Age of Children  | Currently Breast feeding |                       |         |               |
|------------------|--------------------------|-----------------------|---------|---------------|
|                  | Age Group                | No (%)                | Yes (%) | Total (%)     |
| under five years | 0-1                      | 31.8                  | 68.2    | 100.0         |
|                  | 2-4                      | 99.4                  | 0.6     | 100.0         |
|                  |                          | $\chi^2$ -Value=5.126 | df=2    | P-Value=0.000 |

Source: UDHS 2006

From Table 2.0 above, it was very clear that there was a significant relationship between the age of the child and breast feeding since the p-value ( $p < 0.05$ ) was less than the critical value at 95% confidence interval.

Majority of the children currently being breastfed (68.2%) were aged 0-1 years and a small percentage (31.8 %) were not being breastfed.

The results on the influence of the age of the mother on the breast feeding of a child under five years is presented in table 3.0 below.

**Table 3.0 Influence of the age of mother on breast feeding of children.**

| Age of the mother | Currently Breast feeding |        |         |           |
|-------------------|--------------------------|--------|---------|-----------|
|                   | Age Group                | No (%) | Yes (%) | Total (%) |
|                   | 15-19                    | 85.8   | 14.2    | 100.0     |
|                   | 20-24                    | 54.0   | 46.0    | 100.0     |
|                   | 25-29                    | 49.7   | 50.3    | 100.0     |
|                   | 30-34                    | 52.5   | 47.5    | 100.0     |
|                   | 35-39                    | 59.0   | 41.0    | 100.0     |
|                   | 40-44                    | 75.0   | 25.0    | 100.0     |

|                         |      |      |               |
|-------------------------|------|------|---------------|
| <b>45-49</b>            | 94.3 | 5.7  | 100.0         |
| $\chi^2$ -Value=107.843 |      | df=6 | P-Value=0.000 |

Source: UDHS 2006

Majority of women who were currently breast feeding were in the age group of 25-29 (50.3%) followed by those in the age group of 30-34 (47.5%).

94.3% of the women aged 45-49 were not breast feeding perhaps because majority of them had little breast milk. The age group 15-19 had 85.8% of the women not breast feeding perhaps because some of them were still in schools.

The age of the woman influenced mothers in breast feeding their children since p-value was less than 0.05 at 95% level of confidence(P<0.05).

The influence residence of on breast feeding practices of women is presented on the table 4.0 below.

**Table 4.0 Influence of the type of residence on breast feeding practices.**

| Type of residence      | Currently Breast feeding |         |               |
|------------------------|--------------------------|---------|---------------|
|                        | No (%)                   | Yes (%) | Total (%)     |
| <b>Urban</b>           | 86.6                     | 13.4    | 100.0         |
| <b>Rural</b>           | 64.2                     | 35.8    | 100.0         |
| $\chi^2$ -Value=13.787 |                          | df=1    | P-Value=0.000 |

Source: UDHS 2006

From Table 4.0, it can be seen that majority of women who stayed in urban areas were not breast feeding (86.6%) and only a small proportion of them were breast feeding (13.4%).

Similarly, majority of the women in rural areas were not breast feeding (64.2%) and only 35.8% of them were breast feeding.

It was found out that the type of residence of the woman influences mothers to breast feed their children since p-value was less than 0.05 at 95% level of confidence(P<0.05).



**3.3.5. Influence of Mothers’ level of education on breast feeding of children less than five years.**

This section describes the influence of mother’s level of education on breast feeding of children less than five years.

**Table 3.5 Influence of Mothers’ level of education on breast feeding of children less than five years.**

| Level of Education  | Currently Breast feeding |         |               |
|---------------------|--------------------------|---------|---------------|
|                     | No (%)                   | Yes (%) | Total (%)     |
| No education        | 60.9                     | 39.1    | 100.0         |
| Primary             | 65.4                     | 34.6    | 100.0         |
| Secondary           | 79.1                     | 20.9    | 100.0         |
| Tertiary/University | 75.0                     | 25.0    | 100.0         |
|                     | $\chi^2$ -Value=10.455   | df=3    | P-Value=0.015 |

Source: UDHS 2006

Education status of women had influence on the breast feeding of children under five years since it was statistically significant ( $p < 0.05$ ) at 95% confidence interval as shown in Table 3.5 above.

Women with secondary education (79.1%) were not currently breast feeding since only 20.9% of them were breast feeding. Also majority of the women in tertiary and universities were not breasting feeding (75.0%) unlike only 25% of them that was breast feeding.

**3.3.6 Influence of Marital Status among women on breast feeding of children less than five years.**

This section describes the influence of marital status among women on breast feeding of children less than five years.

**Table 3.6 Influence of Marital Status among women on breast feeding of children less than five years.**

|                               |                            | Currently Breast feeding |         |               |
|-------------------------------|----------------------------|--------------------------|---------|---------------|
|                               |                            | No (%)                   | Yes (%) | Total (%)     |
| <b>Current Marital status</b> | <b>Never Married</b>       | 94.4                     | 5.6     | 100.0         |
|                               | <b>Married</b>             | 53.8                     | 46.2    | 100.0         |
|                               | <b>Living together</b>     | 56.2                     | 43.8    | 100.0         |
|                               | <b>Widowed</b>             | 90.6                     | 9.4     | 100.0         |
|                               | <b>Divorced</b>            | 40.0                     | 60.0    | 100.0         |
|                               | <b>Not Living together</b> | 65.6                     | 34.4    | 100.0         |
|                               |                            | $\chi^2$ -Value=124.997  | df=5    | P-Value=0.000 |

Source: UDHS 2006

Marital status of women influenced the capacity of women to breast feed their children aged less than 5 years since the p-value was found to be statistically significant(P<0.05).

Majority of women who had divorced (60%) were found to be currently breast feeding followed by those who were married (46.2%).

Women who had never married had the smallest proportion of those currently breast feeding (5.6%) as seen in table 4.6 above.

**3.3.7 Influence of Wealth Quintile among women on breast feeding of children less than five years.**

This section describes the influence of wealth quintile among women on breast feeding of children less than five years.

**Table 3.7 Influence of Wealth Quintile among women on breast feeding of children less than five years.**

|                        |         | Currently Breast feeding |         |               |
|------------------------|---------|--------------------------|---------|---------------|
|                        |         | No (%)                   | Yes (%) | Total (%)     |
| <b>Wealth Quintile</b> | Lowest  | 61.9                     | 38.1    | 100.0         |
|                        | Second  | 54.8                     | 45.2    | 100.0         |
|                        | Middle  | 66.9                     | 33.1    | 100.0         |
|                        | Fourth  | 68.7                     | 31.3    | 100.0         |
|                        | Highest | 80.4                     | 19.6    | 100.0         |
|                        |         | $\chi^2$ -Value=21.997   | df=4    | P-Value=0.000 |

Source: UDHS 2006

From the Table 3.7 above, a significant relationship (P<0.05) was found to exist between the wealth quintile of mothers and breast feeding of their children since p-Value was less than 0.05 at 95% confidence interval.

The biggest proportion of the women were not breast feeding for instance majority of women in the highest wealth quintile (80.4%) were not breast feeding because they could afford formula bottle milk. Among the women breast feeding, those in the second wealth quintile had the highest proportion of mothers breast feeding (45.2%) because they spent a lot of time with their children since most of them were not engaged in economic activities outside home.

#### **4.1 Introduction**

The information below summarizes findings, conclusion and recommendations in line with the objectives of the study.

#### **4.2 Summary of findings**

The biggest proportion of the children less than five years was between ages 0-1 years (69%) majority of which were still breast feeding in western Uganda. Children aged 2-4 were the least (31%).

On the marital status, majority of the women were married (50.7%) followed by those who were never married (23.2%).

On the place of residence, majority of the mothers were staying in rural areas (92.8%) and only a small percentage of them stayed in urban areas (7.2%) which is inline with even the general situation in Uganda where majority of the women stay in rural areas (83%).

On the level of education, majority of the women had completed primary education (63.4%) while a small number of them had completed tertiary or university education (2.1%).

On the wealth quintile, majority of the women were in the middle income level (31.1%) followed by those in the fourth wealth quintile (25.0%).

A significant relationship between the age of the child and breast feeding was found since the p-value ( $p < 0.05$ ) was less than the critical value at 95% confidence interval after performing a Chi-Square test. Majority of the children currently being breastfed (68.8 %) were aged 0-1 years and a small percentage (31.8 %) were not being breastfed.

Majority of women who were currently breast feeding were in the age group of 25-29 (50.3%) followed by those in the age group of 30-34 (47.5%).The age of the woman

influenced mothers in breast feeding their children since p-value was less than 0.05 at 95% level of confidence ( $P < 0.05$ ).

It was found out that majority of women who stayed in urban areas were not breast feeding (86.6%) and only a small proportion of them were breast feeding (13.4%). Consequently, it was found out that the type of residence of the woman influences mothers to breast feed their children since p-value was less than 0.05 at 95% level of confidence ( $P < 0.05$ ).

Education status of women had influence on the breast feeding of children under five years since it was statistically significant ( $p < 0.05$ ) at 95% confidence interval. Women with secondary education (79.1%) were not currently breast feeding since only 20.9% of them were breast feeding.

Marital status of women influenced the capacity of women to breast feed their children aged less than 5 years since the p-value was found to be statistically significant ( $P < 0.05$ ). Majority of women who had divorced (60%) were found to be currently breast feeding followed by those who were married (46.2%).

Further still, a significant relationship ( $P < 0.05$ ) was found to exist between the wealth quintile of mothers and breast feeding of their children since p-Value was less than 0.05 at 95% confidence interval. Among the women breast feeding, those in the second wealth quintile had the highest proportion of mothers breast feeding.

### **4.3 Conclusion**

Although the health benefits of breastfeeding are widely acknowledged, opinions and recommendations are strongly divided on the optimal duration of exclusive and long breastfeeding. From the above study, it has been found out that majority of the children being breast fed were less than two years however breast feeding is an important element that must be promoted even among children aged above years. This is a responsibility of every stakeholder to ensure that the protective effects of breast feeding are inculcated into

all women. Men too need to support their wives by ensuring good nutrition and moral support.

#### **4.4 Recommendations**

Community health workers should educate mothers and other care givers about the importance of exclusive and long breastfeeding among children aged below five years of age.

Working mothers need to seek enough time for maternity leave in order to take care of their children and hence avoid early weaning of their children. The government should ensure that maternity leave is granted to female workers including those working in the private sector.

Women education should be encouraged through Universal primary and secondary education so that they are educated on the benefits of breast feeding of children. This will also reduce on early marriage that is prone to low breast feeding.

Education packages and sensitization lessons should be designed and included in the Ante-Natal care for all pregnant women so that n women are educated on best practices in breast feeding of children below five years.

Policy statements to promote, protect, and support breastfeeding not only among individuals but also in the hospital, medical school, community, and nation should be designed since breastfeeding is associated with a reduction in the risk of acute respiratory tract infections.

## REFERENCES

Jiha (1990): Determinants of under nutrition in under fives in Uganda. An in-depth secondary analysis of UDHS 1988/89 Data, CHDC/ MOH, Kampala, Uganda.

Macro International Inc. (1993): Nutrition of Infants and young children in Uganda. Finding from UDHS 1989. Calverton, Maryland, USA.

Mudusi J and Ayiga, N (1995): Nutritional Status and Determinants of under nutrition in Hoima and Kibale districts, Child Health Development Centre, Kampala, Uganda.

Popkin, Barry M. and F.S. Solon (1975): "Income, time, the working mother, and child nutriture", Journal of Tropical Pediatrics and Environmental Child Health, pg11:156-66.

Rukundo. T (1988): PEM among the under five; a situation analysis for Jinja district, Kampala, Uganda.

Serunjogi (1992): The Prevalence of PEM in children under five years in Kiyeyi target area Tororo district, CHDC, Kampala Uganda.

UBOS and Macro International Inc. (1996): Uganda Demographic and Health Survey1995. Calverton, Maryland, USA.

UBOS and Macro International Inc. (2007): Uganda Demographic and Health Survey2006. Calverton, Maryland, USA.

Zaramba N.M (1988): Nutrition status and its determinants in children under five years in Uganda, Makerere Printery, Kampala, Uganda.