

ORIGINAL ARTICLE

# Exclusive Breast Feeding Practice in Zambia

C Tembo<sup>1</sup>, MC Ngoma<sup>1</sup>, M Maimbolwa<sup>1</sup>, A Akakandelwa<sup>2</sup>

<sup>1</sup>University of Zambia Department of Nursing Sciences

<sup>2</sup>University of Zambia Department of Veterinary Medicine

## ABSTRACT

**Background:** Exclusive Breast Feeding (EBF), the best feeding practice for infants aged from birth to six (6) months has faced challenges of adherence, exposes infants to infections such as diarrhoea, despite information on its importance being given to mothers. The main objective of this study was to establish levels of EBF practice among breast feeding mothers who had infants aged from birth to six months, factors influencing the practices and support required for mothers in Luangwa district.

**Methods:** A descriptive cross section study design was used and a total sample of 171 breast feeding mothers with infants aged from birth to six months were selected using systematic sampling method. The study was conducted in five randomly selected health facilities. The respondents were interviewed using a pretested semi-structured interview schedule and five focus group discussions each group with seven participants, were conducted using a focus group discussion guide at study sites. Quantitative data was analysed using SPSS computer software package and Fishers Exact test was used to test the association between the dependent and independent variables. Qualitative data from the focus group discussions was analysed using content analysis with the help of qualitative research computer software Nvivo.

**Results:** The prevalence of exclusive breast feeding practice was at 61%. The factors that were found to

be statistically significant to exclusive breast feeding were age of infant and support breast feeding mothers received. The others factors were found not to be statistically significant to exclusive breast feeding and these were educational level of the mother, knowledge on benefits of breast feeding and support from spouse.

The study revealed that mothers found it difficult to practice Exclusive Breast Feeding because of the amount of work at home and spouses found it difficult to help with house chores because culturally it was a woman's work.

**Conclusion:** Though exclusive breast feeding practice had improved in the district, there was still need to strengthen the practice in the district through education of spouses, family and the community on infant feeding for them to support breast feeding mothers. With the support, mothers will have time to exclusively breast feed their infants.

## INTRODUCTION

Exclusive breast feeding practice is a leading intervention in promoting Child Health Survival and a single most effective intervention that could prevent 13 – 15% of infant's deaths<sup>1,2</sup>. The practice is recommended by the World Health Organization (WHO) and United Nations Children's Funds (UNICEF)<sup>7,8</sup>. Globally, it is estimated that less than 39% of infants are exclusively breast fed for first four months of life<sup>1</sup>.

Zambia adopted exclusive breast feeding as a method of infant feeding from birth to six months and unless replacement feeding was Acceptable, Feasible, Affordable, Sustainable and Safe (AFASS), a mother would not exclusively breast

---

### Corresponding Author

C. Tembo  
Lusaka Provincial Health Office  
PO Box 50989, Lusaka  
Email: clare.tembo@yahoo.com

feed her infant<sup>3</sup>. The target of Zambia for Exclusive breast feeding for the first six months of life is 60%<sup>4</sup>. The prevalence of EBF in Zambia is 61%. However the practice dropped from 65% at 2 – 3 months to 35% at 4 – 5 months of age<sup>5</sup>.

According to the Luangwa Health Management Information System (HMIS) report<sup>6</sup>, EBF practice in Luangwa was at 31.7% at 3 – 4 months in 2008. To strengthen EBF practice Health professionals, Neighborhood Health Committee members, Community Health Workers and Mother Support groups were trained in Infant and Young Child Feeding so that they could teach women on how to feed infants.

This study was conducted to establish levels of exclusive breast feeding practice and identify factors influencing the practice in Luangwa District.

## **METHODS**

A descriptive cross section study design was used in this study. The study population was breast feeding mothers with infants aged from birth to six months. A sample of 171 breast feeding mothers with infants aged from birth to six months was selected using systematic sampling procedures. The study sites were Kasinsa, Katondwe Hospital Affiliated Clinic, Chitope, Mphuka and Luangwa Boma all in Luangwa district. Respondents were interviewed using a semi-structured interview schedule and five focus group discussions were conducted using a focus group discussion guide. Quantitative data was analysed using SPSS computer software package and the Fishers Exact test was used to test the association between the dependent and independent variables. Qualitative data from focus group discussion was analysed using content analysis with the help of qualitative research computer software Nvivo.

## **RESULTS**

This study revealed that the prevalence of EBF practice among the respondents in Luangwa district was at 61%.

## **Factors influencing exclusive breast feeding practices**

### **Age of infant**

At the age of 0 – 2 months, 54 (96%) of the infants were exclusively breast fed while at the age of 5-6 months, only 10 (16%) of the infants were exclusively breast fed. The others, 2(4%) aged 0-2 months, 11(22%) aged 3-4 months and 54(84%) aged 5-6 months) had been introduced to plain water, formula milk, cereals or porridge, vegetables and fruits.

### **Education levels of mothers**

The level of education was low among the majority of the respondents as most of them 103 (60%) had only attained primary school education. Only 3 (2%) respondents had attained college education while 21(12%) had never been in school.

### **Knowledge on benefits of breast feeding**

Majority 107 (62.5%) of the respondents were aware that breast milk had all the nutrients that an infant required in the first six months of its life. However knowledge on other benefits of breast feeding was less than 50 percent.

### **Source of support for breast feeding mothers**

Majority 148 (86.5%) of the respondents stated that they had received support from health professionals in the form of education on how to feed an infant. In addition to support from Health Professionals other people, for example spouses, grandmothers, mothers too gave support to mothers during breast feeding. Support received was in the form of assistance in house chores to give the mother time to breast feed and encouragement to exclusively breast feed the infant.

### **Social cultural practice**

Fifty four (31.6%) of respondents had knowledge on some traditional practices on breast feeding and these included breast feeding in public causing diarrhoea and vomiting 23(13.5%), breast feeding in the house for the first two months 13(8%), using herbs for lactation 2(1%).

During the focus group discussion, many men reported that they feared to be labeled as “being controlled by their wives” if they helped with house chores. However, a few men said that they were willing to help their wives. They also indicated that they required knowledge on exclusive breast feeding for them to be able to support their wives. On the other hand quantitative data showed that majority 78 (45.6%) of the respondents reported receiving support from spouses. However, out of this number, 12 (7%) respondents gave their infants other food.

### **Type of support required by breast feeding mothers**

The respondents were requested to suggest the type of support they required in order for them to successfully exclusively breastfeed their babies. The respondents indicated that the family and the community should be educated on importance of exclusive breast feeding for them to support breast feeding mothers effectively.

## **DISCUSSION**

Infants are expected to be exclusively breast fed from birth to six months because breast milk is a natural food that supplies all the vital nutrients an infant requires during this period<sup>7, 8</sup>. The study revealed that the prevalence of Exclusive breast feeding practice was at 61%, a finding slightly above the national target of 60%<sup>4</sup>. The results of Luangwa were slightly lower than the findings in Mazabuka where 68.8% of infants were exclusively breast fed but higher than those of Kafue where 53% of infants were exclusively breast fed<sup>9</sup>. The variations could have been due to the different social context of the three districts. Other fluids and foods were given to some infants and reasons given for the practice were insufficient breast milk 71(41.5%).

### **Factors influencing exclusive breast feeding**

#### **Age of the infant**

It was observed that as the infant grew, mothers introduced other foods before reaching the age of six

months. At the age of 5-6 months, only 10 (16%) of infants were exclusively breast fed. The findings showed some significant relationship between Exclusive breast feeding and age of an infant ( $p=0.000$ ).

These results were lower than the findings in Mazabuka and Kafue which had 31.1% and 29.9% respectively of infants who were exclusively breast fed at the same age<sup>9</sup>.

### **Educational Level of the mother**

Education is important because it helps a person to understand and analyze issues in order to make informed decisions. The findings revealed that education levels were low among respondents as most of them 103 (60%) had only attained primary school education. Low education levels may have contributed to the early introduction of other foods to an infant despite mothers receiving information on exclusive breast feeding. The study showed no association between exclusive breast feeding practice and educational level of the mother ( $p=0.065$ ). However it was observed that the three mothers who had attained college education exclusively breast fed their infants and that may point to an influence of education on feeding practice. This finding is in agreement with other studies in Spain, Ghana and other countries which revealed that maternal level of education was not associated with breast feeding though higher education levels were related to positive trends of feeding<sup>10,13</sup>.

### **Knowledge on benefits of breast feeding**

Information on the importance of exclusive breast feeding and benefits of breast feeding is given to mothers during antenatal, postnatal and children's clinic. The study found that most 107 (62.6%) of the respondents knew that breast milk provides all the nutrients an infant requires in the first six months of life. Out of the 107 (62.6%) respondents who knew that breast milk contained all the nutrients the infant needed, 43 (25%) introduced other foods to the infant before the age of six months. Knowledge on other benefits of breast feeding was generally less

than 50%. Introduction of other foods before six months was brought out during focus group discussions where participants revealed that giving an infant porridge from two months was a common practice because infants cried a lot. The findings revealed no association between exclusive breast feeding practice and knowledge on benefits of breast feeding ( $p=0.484$ ). This is in accordant with findings in South Africa, Ghana which revealed that despite efforts of increasing awareness on the many benefits of breast feeding, many mothers do not maintain exclusive breast feeding practice for the first six months of the infant's life<sup>11,13</sup>.

### **Social Cultural Practices**

The findings revealed that male participants found it difficult to help with house chores because neighbors would think that they were being controlled by their wives. The culture of men not assisting in house chores because it is a responsibility of a woman could have contributed to early introduction of fluids and food to infants before the age of six months. Breast feeding requires time for the mother to properly feed the infant. Time was not enough for mothers to exclusively breastfeed and carry out households' chores at the same time.

### **Source of Support for mothers**

Most 141 (82.5%) of the respondents in this study reported that they received support from Health professionals which was in a form of education on infant feeding. Despite education being given, 67(39%) of respondents practiced mixed feeding and by the age of 5-6 months, only 10(16%) of infants were exclusively breast fed which is low. Furthermore, some mothers reported receiving support from other people for example spouse, grandmothers and mothers. It was interesting to note that the ten (10) mothers who received support from their grandmothers, were able to exclusively breast feed their infants. The findings revealed a significant relationship between exclusive breast feeding and support given to mothers ( $p=0.000$ ).

Results of this study on support from health professionals were different from the findings of Barclay<sup>14</sup> in Singapore where less than 5 percent of infants at six months of age were exclusively breast fed and reasons given were lack of support from health care professionals.

Though men had difficulties in assisting mothers, 31(39.7%) of the respondents received help in form of house chores from their spouses. However there was no relationship between exclusive breast feeding and support received from a spouse ( $p=0.838$ ).

### **Support required by breast feeding mothers**

Exclusive breast feeding requires time and concentration for it to be successful. Mothers in this study stated that they needed support with house chores from their spouses, family and community in order for them to have time to exclusively breast feed their babies. The spouse, family and the community can give effective support if they have the knowledge on importance of exclusive breast feeding practice. The study findings are similar to the results of other studies that revealed that exclusive breast feeding was poorly understood by families and the community as a best way to feed an infant in the first six months of life, but if family members were educated on exclusive breast feeding, they would fully support the mother<sup>12</sup>.

### **CONCLUSION**

The purpose of the study was to establish levels of exclusive breast feeding and factors influencing the practice in Luangwa District. The prevalence of exclusive breast feeding was at 61% just above the National target of 60%. There was still need to strengthen the practice because mixed feeding was still being practiced in infants below six months of age. The factors that were significant to exclusive breast feeding were age of infant and support. Mothers received support from health professionals but probably they were not able to comprehend information due to low levels of education. Support received from spouse, mothers, grandmothers may

have had gaps due to insufficient knowledge on exclusive breast feeding among them. Focus group discussions revealed that mixed feeding was a common practice by mothers in the community which probably meant that there was influence from the community. The other factors were educational level of the mother, knowledge on benefits of breast feeding and support from spouse which were found not to be statistically significant to exclusive breast feeding.

### RECOMMENDATIONS

1. The family and community must be educated on the importance of exclusive breast feeding for them to effectively support breast feeding mothers.
2. Information on breast feeding should be given at all times during Antenatal, post natal and Children clinic so that mothers are reminded on the importance of exclusive breast feeding.
3. Spouses who escort their wives for Antenatal care and have shown support for their wives need to be encouraged and if possible be used as peers for other men.
4. There is need to identify factors contributing to spouse minimal support to breast feeding mothers.

### ACKNOWLEDGEMENTS

I would like to thank; the Ministry of Health for sponsoring this study, my research Supervisors for their valuable advice and support, the management and Staff of Luangwa District Health Office and Members of staff at study sites, all the Respondents for participating in this study, research Assistants for collecting data and all those who supported me in any way during the course of my study.

**Funding:** The research was supported by the Ministry of Health who contributed Two Thousand Kwacha Rebased (KR 2 000) while the rest of the funds were raised by the researcher.

### REFERENCES

1. Bandari, N., Kabir, A. K. M. & Salam, M. A. (2008). Mainstreaming nutrition into Maternal and Child Health Programmes: Scaling up of Exclusive Breast Feeding. *Maternal and Child Nutrition*. 4 (51), 5–23.
2. Gupta, A. (2003). *Why ensure exclusive breast feeding for all babies*. Report.
3. Ministry of Health. (2010). *Integrated Prevention of Mother-to-Child Transmission of HIV 2010 National Protocol Guidelines*. Lusaka, MOH.
4. National Food and Nutrition Commission. (2006). *Annual Report on the Food and Nutrition situation in Zambia*, 1<sup>st</sup> Edition. Lusaka, NFNC.
5. Central Statistical Office (Zambia), Ministry of Health (MOH), Tropical Disease Research Centre (TDRC), University of Zambia and Macro International inc.(2009). *Zambia Demographic and Health Survey 2007*. Calverton, Maryland, USA: CSO and Macro International inc.
6. Luangwa District Health Management Information System (HMIS), 2008 report.
7. Fraser, D.M., Cooper, M.A. & Nolte, A.G.W. (2006). *Myles Textbook For Midwives*, African Edition, Churchill, Elsevier.
8. Sagoe, M. C. & Ketsela, T. (2005). "Follow up of Health workers Trained in Breast feeding counselling and HIV and Infant feeding counselling in Ghana, Nigeria, Zambia and Zimbabwe", 3(1).
9. Bwalya K. M. (2008). *Feeding Practices and Nutritional status of Infants and Young Children in Mazabuka and Kafue districts of Zambia*. Lusaka.
10. Ordenana. J., Colodro. L., & Tornero, (2011). Relationship between level of education and breastfeeding duration depends on social context. *Journal of Human Lactation*, 27(3), 272-278.
11. Coovadia, H.M., Rollins, N.C. & Bland, R. M. (2007). Mother to child Transmission of HIV

- Infection during EBF in the first six months of life: an intervention Cohort study. *Lancet*, 369: 1107-1116 (Kwa Zulu Natal).
12. Almroth, S., Arts, M., Quang N.D et al (2008). Exclusive breast feeding in Vietnam: an attainable goal *Acta Paediatrica*, 1651-2227.
13. Singh, B. (2010). Knowledge, Attitude and Practice of Breast Feeding – A case study. *European Journal of Scientific research*, 40(3), 404-422.
14. Barclay, L. (2007). Simple Antenatal preparation improves breast feeding practice. *Obstetric Gynaecology*, 109, 73-80.