

Assessment of Hindrances to Exclusive Breastfeeding Among Mothers in Vungu

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Abstract

Incidence of exclusive breastfeeding is declining in almost all parts of the world despite all its benefits. The World Health Organisation recommends exclusive breastfeeding for the first six months of life and this reduces child mortality rate by 13% which rose from 8.2% in 2009 to 8.6% currently in Zimbabwe. In Gweru rural district none of the mothers exclusively breastfed at six months in year 2010. These rates threaten the efforts to reduce child mortality. Hence the purpose of this study is to find the reasons why mothers are not exclusively breastfeeding. The results of this study are intended to assist Zimbabwe's Ministry of Health and Child Welfare in mapping up appropriate intervention strategies, to boost mothers' conformance to exclusive breastfeeding which will enhance the achievement of the Millennium Development Goal (MDG) number 4 that aims to reduce infant mortality by 2/3 by 2015. This study present finding in which 100 mothers from ten clinics were selected using convenient proportional stratified sampling technique, structured questionnaires were used. Alpha coefficient of 0.872 showed that the instrument was fit. Traditional beliefs, cultural expectations, patriarch, working conditions, ignorance, religious beliefs, maternal negative attitude, maternal negative feelings, personal beliefs and mother in laws were found to be the hindrances to exclusive breastfeeding. However, mothers sometimes exclusively breastfeed and have never practised exclusive replacement feeding. Complementary and mixed feeding was rare. Eighty eight percent of mothers exclusively breastfeed at one month, twenty seven percent were still exclusively breastfeeding at 6 months. This implies that generally, there is a trend that exclusive breastfeeding rates declines as the age of the child increases. Basing on these results the recommendations made were that mothers should be educated on the benefits of exclusive breastfeeding both to the mother and the child. The myth that infants are not satisfied with the mother's milk until 6 months of age should be demystified and the Ministry of health and child welfare should come up with programmes that will encourage mothers who are exclusively breastfeeding so that they continue. Mothers should be enlightened on why they are encouraged to exclusively breastfeed if they are found to be HIV positive and the male counterparts should also be educated on the benefits of Exclusive breastfeeding. However, limitations of the study were that Social and cultural beliefs have an influence on an individual's perception hence some mothers had challenges of opening up.

Keywords: exclusive- breastfeeding, infant, caregiver, mother.

INTRODUCTION

Together with adolescence, infancy is one of the periods of rapid human development (Murdock, 2002). Periods of rapid development in any organism often demand the support of good nutrition (Bronner, 2006). Unlike adolescence however, infancy is the most vulnerable period in childhood because the infant is fully dependent on the mother's milk for its nutrition (Barasi, 2003). Breast milk contains just the right balance of nutrients that provide the infant with antibodies to fight some common childhood illnesses, and it is unique in that it decreases the risk of food allergies (Murdock, 2002).

Breastfeeding is the feeding of an infant or young child with breast milk directly from the breast rather than from a feeding bottle or other container (Payne & Dale, 2009). Breast milk is rich in protein enzymes, hormones, growth factors, minerals,

electrolytes, vitamins and water (Riordin & Aurbach, 1999). It also contains long chain polyunsaturated fatty acids that are essential for brain development and offers protection against a host of environmental insults to which the infant had not been previously exposed, hence allowing the immune system to develop naturally without undue premature stress (Ogundele & Coulter, 2003). These components again protect infants against malnutrition, which is rampant in Southern Africa (Palne, 2001). These benefits, however, are associated with exclusive breastfeeding, a process whereby an infant receives no other foods or drinks except drops of vitamins, mineral supplements or medicine prescribed by a physician (WHO, 2003).

In the event that the mother cannot or chooses not to breastfeed, formula milk can be perceived as an alternative infant feeding method only when it is

AFASS, that is, affordable, feasible, acceptable, sustainable and safe (Zimbabwe National Nutrition Survey 2010). However, in most parts of Africa formula-feeding is associated with increased risk of morbidity and mortality due to incorrect dilutions and unhygienic practices (Ndauti, John, & Richardson, 1995). To minimise such consequences, WHO, UNAIDS and UNICEF (2000) passed a global public health recommendation that infants should be exclusively breastfed for the first six months of life and thereafter breastfeeding should continue up to 24 months alongside complementary foods to achieve optimal growth and development.

Considering the prevalence of high rates of HIV infections in Africa, the global programme on Acquired Immune Deficiency Syndrome (AIDS) recommended that, where malnutrition and infectious diseases are prevalent, women should exclusively breastfeed despite their HIV status. The risks of HIV infection through breastfeeding are considered lower than the risk of deaths from other causes resulting from failure to breastfeed (Ogundele & Courlter, 2003). In addition, exclusive breastfeeding (EBF) for the first three months of life is associated with a 50% reduction in postnatal maternal-to-child transmission (PMTCT) and it reduces the infant mortality rate by 13%. This will assist in the achievement of the Millennium Development Goal (MDG) number 4, which aims to reduce infant mortality by 2/3 by 2015 (American Paediatrics Group, 1997). EBF also provides significant social and economic benefits to the nation by reducing healthcare costs and employee absenteeism.

In Zimbabwe, despite efforts at various levels to emphasize the importance of correct feeding practice, a wide gap still exists on what mothers are practising and what is expected. About 98% of women initiate and practice breastfeeding and only 5.6% exclusively breastfeed up to six months of the baby's life (Kaissier, Maunder, & Senekal, 2003). This exposes the infants to a high risk of morbidity and mortality. The Zimbabwe National Nutrition Survey (2010) revealed that in Gweru District, 96% of the mothers exclusively breastfed up to one month; about 50% practised EBF up to three months; and none of the mothers had exclusively breastfed their infants up to six months. This is despite all the efforts at various levels to emphasise the importance of correct feeding practice. This work is thus dedicated to highlight the factors that hinder mothers from exclusively breastfeeding for the first six months of a baby's life. The paper is constituted as follows:

1. Introduction
2. Data
3. Methods used
4. Analysis and results
5. Conclusions

DATA

This was a descriptive survey conducted in Vungu constituency, Midlands province Zimbabwe involving 498 mothers with 0-12 month infants attending health clinics between 1 may-1 august 2012. The sampling method used was convenient proportional stratified sampling technique. All eligible mothers who attended the clinics during the study period were included in the study. Data collection was carried out according to a schedule that was prepared. Data were collected from all the ten clinics at alternate weeks with designated days for each clinic. The specific days selected for data collection for each clinic coincided with the scheduled days for immunization for the infants.

After signing the consent letters, eligible mothers were given semi structured questionnaires by the researcher in the clinics at respective days during the study period. The questionnaire was pre-tested among 30 mothers from another health clinic in the same district; Alpha coefficient of 0.872 was obtained. The questionnaire had 5 sections. Section A solicited information on maternal socio-demographic variables (age, marital status level of education, source of income and religion), Section B hindrances to exclusive breastfeeding, Section C infant feeding methods used, Section D the extent to which they fed their infants with other foods and Section E the extent to which they exclusively breastfeed. All data in the questionnaire were coded and entered into Statistical Package for the Social Sciences (SPSS) version 11.0. The dependent variable was exclusive breastfeeding.

METHODS USED

The data were analysed using the Statistical Packages for Social Sciences (SPSS). Descriptive statistics and factor analysis were employed for the analyses of data. The descriptive statistics was used for questions 1, 3, 4, and 5 while factor analysis was used for research question 2.

Reliability means dependability or consistency. It suggests that the same thing is repeated or recurs under the identical or very similar conditions (Neumann, 2006). A pilot study was done at Birch enough district hospital in Gweru to determine the reliability of the questions that were going to be used for the study. Convenience sampling was used to sample the 30 mothers to whom the questionnaires were administered. Reliability of the instrument was determined using the Alpha reliability method. An Alpha coefficient of .872 was obtained for the instrument.

Factor analysis is a statistical method used to describe the variability among observed correlated variables in terms of a potentially lower number of unobserved variables called factors. In other words, it is possible, for example, variations in 3 or 4 observed variables

mainly reflect the variations in fewer unobserved variables. Factor analysis searches for such joint variations in response to unobserved latent variables. The observed variables are modelled as linear combinations of the potential factors, plus 'error' terms. The information gained about the interdependencies between observed variables can be used later to reduce the set of variables in a dataset. Computationally this technique is equivalent to low rank approximation of the matrix of observed variables.

RESULTS

Among 498 eligible mothers during the study period 100 respondents were included in the study giving a response rate of 100 %. The ages range between 16 and 40 years and the majority of the respondents are in the age group ranging from 16-30 years. This indicates that the majority of the respondents are of the middle age and only 7% were between 36 and 40 years. From the hundred mothers who took part in the research 82% were married, 10% were divorced, 5% separated and only 3% were widows. This suggests that the majority of women used for the study were married and still with their husbands. The findings showed that 65% of the mothers reached secondary level while 20% completed primary level and 14% had reached tertiary level. Only 1% never went to school. This indicates that majority of the mothers had secondary education and almost everyone attended school at some point in their lives. The information provided shows that 57% of the mothers were unemployed, 30% were self employed and only 13% were formally employed. This is because many of the mothers only completed secondary education and could not proceed to tertiary level so it is difficult to secure jobs hence some resort to self employment.

Hindrances to Exclusive Breastfeeding

Table 1: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of sampling adequacy	Approx.CH-Square
Bartlett's Test of Sphericity	1367.272
Dif	.465
Sig	.000

Table 1 above shows the Kaiser-Meyer-Olkin (KMO) measure of sampling adequate and Bartlett's Test of sphericity. The KOM value given is 0.465 indicating that the sample used for the study was adequate while the Bartlett's Test of sphericity was found to be significant at 0.000 which is an indication that there was a correlation between variables hence the need to proceed with the factor analysis to detect the factors that hinder mothers from exclusive breastfeeding.

Factor analysis showed that ten factors accounting for 69.809% were hindrances to exclusive breastfeeding

Table 2: Factor 1: Traditional beliefs

Item	Factor load	mean	Std Dev
Colostrum is dirty so it cannot be given to the baby	0.779	3.0100	1.7261
Use traditional medicine for sunken fontanel	0.749	3.4200	1.77058
Water is prescribed as medication by my church	0.649	2.6300	1.74457
The first expression of milk is not good for the child	0.647	3.5400	1.8427
Women in my community exclusively breastfeed	0.641	2.700	1.29099
My siblings were breastfeed	0.576	4.0900	1.17288
I stopped EBF because my leave was over	0.451	2.3800	1.75107
Variance accounted for=15.627%			

The information given on Table 2 above shows that traditional belief accounted for 15.627% of variance of the hindrances to exclusive breastfeeding. Implying that a traditional belief is a hindrance. This finding is in agreement with Davis, Darko and Mukuna (2003) who found out that traditional belief discourage mothers from breastfeeding exclusively.

Table 3: Factor 2: Cultural expectations

Item	Factor load	mean	Std Dev
Exclusive breastfeeding not acceptable in my culture	0.825	3.4500	1.79997
No breastfeeding after sexual intercourse	0.788	2.9200	1.79043
EBF does not reduce the chances of infection	0.679	3.7900	1.37286
Breast milk alone does not satisfy the baby	0.631	3.2000	1.76383
I am not confident with my ability to breastfeed	0.512	3.7400	1.45380
Variance accounted for =14.4557%			

From the results given in table 3 above, cultural expectations of mothers accounted for 14.4557% of variance on the decision to exclusively breastfeed. The factor loading of the 5 items ranges from between 0.512 and 0.826 and shows a high correlation between items and that cultural factors hinder mothers from exclusive breastfeeding.

Table 4: Factor 3: Patriarchy

Item	Factor load	mean	Std Dev
My husband does not help with household chores	0.820	3.2200	1.52143
I always feed my baby the way my husband tells me	0.749	2.5800	5.12541
My husband does not enjoy my company when breastfeeding	0.707	3.3500	1.48647
In my family a woman cannot decide on the infant feeding method	0.638	2.8100	1.70380
Variance accounted for = 8.096 %			

Table 4 above shows that patriarchy accounted for 8.096% of variance of the decision to exclusively breastfeed. The factor loading of the four items ranged between 0.638 and 0.820 showing a high correlation under the theme. This was an indication that patriarchy can hinder mothers from exclusively breastfeeding. This concurs with the results for the study carried out in Kenya which showed that husbands are an obstacle to exclusive breastfeeding (Spisak,S & Gross,S 1991).

Table 5: Factor 4: Working conditions

Item	Factor load	mean	Std Dev
Time is not given to EBF	.758	43300	130310
There is no facility for privacy when breastfeeding	.755	41800	140259
At my work place EBF is not encouraged	.685	4550	105768
EBF is time consuming	.683	18300	117254
Variance accounted for =6.484			

Table 5 shows that working conditions accounted for 6.484 of variance of the hindrances to exclusive breastfeeding. The factor loading of the four items ranged between 0.685 and 0.758 showing that there is a high correlation. It means working conditions of the mother can hinder her from breastfeeding exclusively. This finding is in agreement with (UNICEF/WHO 2010) which says a woman should not have taken maternity leave for more than twice before with the same employer for her to get paid maternity leave.Ninty days of paid martenit leave will be granted (45 days before and 45 days after confinement).Such conditions can make mothers give priority to their jobs at the expense of the child.

Table 6: Factor 5: Ignorance

Item	Factor load	mean	Std Dev
Sensitisation on the importance of EBF	0.789	4.2300	1.21319
Knowledge about EBF	0.788	3.7500	1.57233
Soon after birth porridge is given	0.518	1.25025	1.25025
Variance accounted for =5.499 %			

Table 6 shows that ignorance accounted for 5.499 % of the variance on hindrances to exclusive

breastfeeding. The factor loading of the 3 items ranges between 0.518 and 0.789 an indication of correlation and that mother’s ignorance can hinder her from breastfeeding exclusively. Contrary to that the results of the study done in Ethiopia showed that higher maternal education level was associated with lower rate of breastfeeding (Sellen,W,D 2002). According to their explanation when a women is better educated,the opportunities for employment are eminent and thus the opportunity to stay home and practice exclusive breastfeeding is compromised. However according to this study if the mother ie knowledgable the chances are high that she exclusively breastfeed. This is exactly how it is to the western countries e.g. US where higher maternal education is related to higher rates of exclusive breastfeeding (Naresk, K. M 2012).

Table 7: Factor 6: Religious beliefs

Item	Factor load	mean	Std Dev
Religion forbid EBF	0.764	4.0900	1.40773
I was breastfed when I was a baby	0.553	4.5500	1.10440
Variance accounted for =4.819%			

Table 7 above shows that religious beliefs accounted for 4.819% of variance on hindrances to exclusive breastfeeding. The result shows that religious beliefs hinder mothers from breastfeeding exclusively. The factor loading of the two items ranges between 0.553 and 0.769 indicating a high correlation and those religious beliefs are a hindrance.

Table 8: Factor 7: Maternal attitude

Item	Factor load	mean	Std Dev
I hate breastfeeding	0.821	4.2000	1.01504
It is forbidden to breastfeed when menstruating	0.435	4.4500	.92524
Variance accounted for =4.2069%			

However table 8 above shows that maternal negative attitude accounted for 4.2069% on the hindrances to exclusive breast feeding. The factor loading to the two items ranges between 0.435 and 0.821 indicating a high correlation and that the negative attitude of the mother towards EBF is a hindrance to EBF. The results for a study carried out in Barbados also showed that maternal negative attitude is associated with the infant feeding method a mother chooses. The more the negative attitude towards EBF the less she is likely to practise exclusive breastfeeding (Gloria,E, Ottoo, A &Rafael, P. 2009)

Table 9: Factor 8: Maternal feelings

Item	Factor load	Mean	Std Dev
EBF makes me look clumsy	0.699	38200	
EBF affect my sexual life negatively	0.420	139537	
Variance accounted for= 3.996%			

Table 9 above shows that mothers' negative feelings accounted for 3.996% of variance on hindrances to exclusive breastfeeding. The factor loading for the two items ranges between 0.420 and 0.699 indicating a high correlation and that the mother's negative feelings hinder her from breastfeeding exclusively.

Table 10: Factor 9: Personal beliefs

Item	Factor load	mean	Std Dev
Water is given to quench thirst after birth	0.842	1.6400	1.18509
Variance accounted for = 3.353 %			

Table 10 above shows that personal beliefs accounted for 3.353% variance on the hindrances to exclusive breastfeeding. The factor loading is 0.842 indicating a correlation and that mothers personal beliefs hinder her from breast feeding exclusively.

Table 11: Factor 10: Mother in laws

Item	Factor load	mean	Std Dev
My mother in law introduced the foods to the child without my consent	-0.040	16500	177058
Variance accounted for =3.105%			

Table 11 above shows that mothers in law are accounted for 3.105% of variance on hindrances to exclusive breast feeding. The factor loading of the one item is -0.040 indicating a correlation and that mother in laws can hinder mothers from breast feeding exclusively.

Table 12: Distribution of respondents by infant feeding method

Feeding Method	N	Mean	Std Deviation
Exclusive Breastfeeding	100	3.1500	1.79997
Mixed Feeding	100	2.4600	1.87714
Exclusive Replacement Feeding	100	1.3300	1.01559
Complimentary Feeding	100	1.8100	1.51554

In table 12 above, the extent to which mothers use the various feeding methods is shown. The standard deviation is high because they are heterogeneous in their responses. The mean of 3.1500 indicates that mothers sometimes exclusively breastfeed and they rarely do mixed feeding and complementary feeding however they never practise exclusive replacement feeding. According to the National Food and Nutrition Bulletin (2008) exclusive breastfeeding is the best infant feeding method particularly in poor environments where early introduction of other foods are a concern because of the risk of pathogen contamination.

Table 13: Distribution of respondents according to infant feeding with foods

Item	N	Mean	Std Deviation
Plain water	100	2.3500	1.71961
Drops of cooking oil	100	1.9600	1.23844
Sugar and salt solution	100	1.8000	1.32574
Sour porridge	100	2.5200	1.81731
Sadza and sauce	100	2.2600	1.77300

From the information given in table 13 above sour porridge is the food which is sometimes given to infants before they reach 6 months of age. Just like in Ghana infants are given KOKO that is sour porridge as early as 1 month of life (Moussa Abba, 2010). Plain water, drops of cooking oil, sugar and salt solution and sadza are rarely given.

Table 14: Distribution of respondents according to how they EBF

Item	Frequency	Percent
1 Month	88	88.0
2 Months	68	68.0
3 Months	53	53.0
4 Months	37	37.0
5 Months	31	31.0
6 Months	27	27.0

Table 14 above shows the frequency distribution of mothers according to how they exclusively breastfed their infants from 1 month up to 6 months. From the information given 88% of the mothers exclusively breastfeed at one month and the rates dropped as the age of the child increases. At 6 months only 27% exclusively breastfed. This is supported by the results of the survey by (Zimbabwe National Nutrition Survey, 2010) which revealed that in Gweru District, there had been 96% exclusive breastfeeding at one month which dropped to about 50% by 3 months and further dropped to 0% by 6 months. However, in Vungu 27% exclusively breastfeed up to 6 months. This generally indicates that mothers are not exclusively breastfeeding up to 6 months of age which is recommended by WHO.

CONCLUSION

From the findings of this study; it was concluded that mothers in Vungu are not exclusively breastfeeding up to the age of six months as per WHO recommendations. The prevalence rate of EBF was 88% at one month and went down to 27% at the age of six months. This was attributed to ten (10) socio-cultural and maternal factors that led mothers into practising mixed and complementary feeding. These factors were traditional beliefs, cultural expectations, patriarch, working conditions, ignorance, religious beliefs, maternal negative attitude, maternal negative feelings, personal beliefs and mother in laws. The study also revealed that mothers in Vungu sometimes feed their infants with sour porridge more than any other foods however, in general, the extent to which mothers exclusively breastfeed has improved compared to the results for the Zimbabwe National

Nutrition Survey (2010) which indicated that none of the mothers in Gweru rural District exclusively breastfed at 6 months.

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