

Factors affecting the HIVpositive mothers for practicing exclusive breast feeding

Hardas K. Chavda^{1*}, Vijay B. Garchar²

¹Assistant Professor, ²Intern, Dept. of Paediatrics, Gujarat Adani Institute of Medical Science, Bhuj, Gujarat

***Corresponding Author:**

Email: htsh_chvd@yahoo.co.uk

Abstracts

Introduction: Exclusive Breast Feeding is one of the approaches suggested for developing countries in the Prevention of Mother to Child Transmission (PMTCT) of HIV post-natally. EBF for up to six months is connected with a 3-4 fold reduced risk of HIV transmissions in compare to mixed feeding.

Materials & Methods: The study was conducted as per provisional reports of Census India, population in 2011 is **143,286**. The study was conducted at Gujarat Adani Institute of Medical Science Bhuj. The study population comprised of HIV positive mothers who were 18 years or older with infants aged 6–12 months at the time of the study. HIV positive mothers with very ill children and unwell HIV positive mothers who carry their children at the Hospital where disqualified from the study.

Results: The results showed that mothers who had choice on infant feeding practices were 3 times further likely to do elite breastfeeding than the referent group while mothers who were prejudiced by health worker on breastfeeding practice were 5.2 times more likely to practice elite breastfeeding than those who were not prejudiced by health workers. However, mothers who had breast problems were 2.8 times not as much of likely to practice exclusive breastfeeding. Mothers who practice exclusive breastfeeding, particularly those with HIV/AIDS come across a variety of barriers.

Discussion & Conclusions: The study participants may have answered questions easily and precisely because they established infant feeding therapy.

Keywords: Exclusive Breast Feeding, Hiv Positive Mother, Children, Factors.

Introduction

Breastfeeding Theater a chief role in nutrition, health and development for both HIV infected and non HIV infected infants. When the infants are exclusively breastfed for the first six months of life, their immune system is stimulated and this goes hand in hand with protecting them from diseases like diarrhoea and acute respiratory infections, which are considered to be two of the major causes of infant mortality in the developing world.⁽¹⁾

UNICEF (2011) and WHO (2010a,) currently advocate that children be exclusively breastfed during the first 6 months of life. Exclusive Breast Feeding (EBF) is suggested because breast milk is pure and contains all the nutrients essential for children in the first few months of life.⁽²⁾

Exclusive Breast Feeding (EBF) which is defined as providing the infant no other food or drink, not even water, apart from breast milk (including expressed breast milk), with exemption of drops or syrups containing of vitamins, mineral supplements or prescribed medicine; when it is adept for the first six months of an infant's life, is a valuable involvement in saving children's lives.^(3,4)

With the a variety of options of infant feeding in the context of HIV/AIDS, the safest option is exclusive replacement feeding (ERF); ERF positions out since when it is practiced, the infant will not be bare to the virus present in the breast milk hence no HIV infection.⁽⁵⁾

Many scholars and researchers have revealed that breast feeding by HIV positive mothers prompts the infant to HIV infection. Though breastfeeding is necessary for child health and growth in low-resource

settings, it carries a major risk of transmission of HIV-1, especially in late stages of maternal disease. The risk of HIV communicational the way through breastfeeding is maximum in early on infancy (before six months of age) and persists as long as breastfeeding continues.⁽⁶⁾

Transmission of HIV from mother to child is superior amongst the mixed fed infants than exclusively breast fed infants. It is predictable that, with Exclusive Breastfeeding (EBF), 13% to 15% deaths of children below 5 years could be turn away in low and middle income countries. WHO Globally it is expected that prevalence of exclusive breastfeeding is 35%. Studies found that a larger period of breastfeeding is connected with enlarged risk of Mother to Child Transmission (MTCT) of HIV.⁽⁷⁾

There are numeral things that have been reported to delay EBF, these comprise sociocultural and norms, family and social forces to mixed feed, mores that necessitate giving water to new born since every outsider in going the house is to be given water, the faith that fatigue and dehydration that the infant gets after birth require giving it water and giving infants concoctions just after delivery for defense. Hence current study was done with an aim to establish factors that control exclusive breastfeeding practices among HIV positive mothers of infants aged 6-12 months old.

Materials & Methods

A Cross-sectional study was conducted as per provisional reports of Census India, population in 2011 is **143,286**. The study was conducted in Department of Pediatrics, Gujarat Adani Institute of Medical Science

Bhuj, Kutch, Gujarat. The study population comprised of HIV positive mothers who were 18 years or older with infants aged 6–12 months at the time of the study. HIV positive mothers with very sick children and Sick HIV positive mothers who brought their children at the clinic where excluded from the study.

Questionnaires with closed and open ended questions were utilized by investigator and research assistants to interview mothers. Mothers were approach by hospital staffs that were nurses, conversant of the study and requests to contribute willingly before commencing the interview. Upon agreeing to be interviewed the mothers were interviewed until the necessary amount of study respondents was achieved. A total number of 200 mothers which was the necessity were interviewed.

Information from respondents was gain utilizing the questionnaire. Mothers were first inquired for their approval to contribute in the study. Upon in accord to contribute in the study, a research assistant and principal investigator manages a questionnaire on present and earlier (recalled) infant feeding practices and answers were recorded. A total of 200 women were interviewed; where each interview took about 10 to 15 minutes rely upon mother' space of replying and serenity of the infant. For qualitative data collection the principle investigator interviewed 5 contributors, tape-recorded and also answers were note down in book.

The data was coded and entered into Microsoft Excel spreadsheet. Analysis was done using SPSS (Statistical package for social science) version 15 (SPSS Inc. Chicago, IL, USA) Windows software program. The variables were assessed for normality using the Kolmogorov-Smirnov test. Descriptive statistics were calculated. Univariate and bivariate analysis were done to conclude various proportions Variables which showed significant association ($p < 0.05$) to the dependent variable (EBF) were additional analyzed in logistic regression model to recognize features that were true connected with exclusive breastfeeding.

Results

A total of 210 HIV positive mothers with infants aged 6 – 12 months coming in the hospital were interviewed. Their ages varies between 18 to 30 years, with a mean age being 25. Infants were of 6-8 months; their mean infant age on the occasion of interview was 7.0 months (SD =3.2). Out of these 115 were boys and 95 were girls.

Infant feeding practices were reviewed; these included exclusive breastfeeding, mixed feeding, substitution feeding and prelacteal feeding. Data shows that mothers opted for one or the other practice for different reason. In present study, data demonstrates that majority of infants (94%) were breastfed while few 6% were not at all breastfed. Results on various infant feeding practices are given as follow.

Mothers were classifies in two groups: first, as involved exclusive breastfeeding if the infant was fed on breast milk merely for the first six months of life, and second not committed exclusive breastfeeding if the mother provide infant breast milk and further foods/liquids, or did not breastfeed exclusively for the primary six months of life. Results demonstrates that elite breastfeeding (EBF) was practiced by 96 of the mothers; then during mothers 114 did not breastfeed exclusively. Majority of infants (94%) were exclusively breastfed during first month, though; these rates started to turn down as the age of infant enlarges.

Assorted factors were established to pressure exclusive breastfeeding as will be accessible. The socio-demographic data were investigated, where result demonstrate that exclusive breastfeeding was practiced more by mothers who were at age group of 26-30 by 38.7%, as contrasts to additional age groups. The experiential difference was not statistically significant ($p = 0.48$). Other parameters of socio-demographic feature: education level and Occupation illustrates no statistical significance to exclusive breastfeeding as shown in (Table 1).

Table 1: Rate of exclusive breast feeding & non-exclusive breast feeding practice (n=210)

Variables	Response	Yes (EBF)	No (EBF)	X ²	P-value
Age of mothers	18 – 25 years	54	60	2.64	0.35
	26 – 30 years	42	54		
Education	No education	9	6	4.03	0.03
	Primary edu.	34	79		
	Secondary edu.	53	29		
Occupation	Employed	9	32	5.01	0.003
	Farmer	6	24		
	Business	15	16		
	House wife	66	42		

In view to mothers who practiced breastfeeding, exclusive breastfeeding showed significant associations with: mother considered that breast milk is sufficient for infant for the first six months of life ($p < 0.001$). Even though ANC turnout exposed mother to breastfeeding education, findings demonstrate that it had significant relationship with working exclusive breastfeeding ($p = 0.003$). Husbands influence on Infant feeding had no significant association with EBF ($p = 0.08$) as Described in table 2.

Table 2: Time of Exclusive Breastfeeding Status (EBFS) practice by a few variable in the sample characteristics (n=192)

Variable	Response	Yes (EBFS)	No (EBFS)	X ²	P-Value
ANC attendance	Yes	138	45	5.01	0.003
	No	5	4		

BM adequate for months	Yes	110	40	15.91	<0.001
	No	33	9		
EBF Knowledge	Yes	115	42	14.05	0.002
	No	28	7		
Disclosure to Husband	Yes	124	42	5.83	0.003
	No	19	7		

Table 3 recapitulates additional various factors which are linked with exclusive breastfeeding. Although disclosure of HIV status to husband/spouse, health workers influence on breastfeeding, mother being shown addition, and mother having her possess choice on how to feed her infant were connected with exclusive breastfeeding in bivariate analysis, only health workers sway and mother having result on infant feeding holds significant association in multivariate logistic regression analysis. The results showed that mothers who had decision on infant feeding practices were 3 times more likely to practice exclusive breastfeeding than the referent group while mothers who were influenced by health worker on breastfeeding practice were 5.2 times more likely to practice exclusive breastfeeding than those who were not influenced by health workers. However, mothers who had breast problems were 2.8 times less likely to practice exclusive breastfeeding.

Table 3: Logistics Regression on demonstrating on factors connected with exclusive breastfeeding

Variable	Response	Crude		Adjusted	
		OR	P-value	OR	P-value
Revelation to husband/spouse	No	1	0.01	1	0.45
	Yes	0.50		1.50	
Husband/spouse influence on EBF	No	1	-0.20	1	0.57
	Yes	2.08		0.18	
Revealed addition	No	1	0.02	1	0.06
	Yes	0.40		1.46	
Knowledge on benefits of BF	No	1	0.24	1	0.30
	Yes	1.60		0.40	

Among 194 participants who reported to have breastfed their infants (72%) reported beginning breastfeeding within an hour after delivery. Forty (21%) accounts delay for more than one hour while little (7%) delayed for additional day. Early beginning; that is inside one hour was done frequently by those who had vaginal delivery by 69%, while for all who postponed (more than one hour and more than a day) 43% had caesarean section.

Mothers who practice exclusive breastfeeding, especially those with HIV/AIDS encounter various barriers. The reported obstructions by mothers include:, fright of infecting the baby, be short of revelation of mother's HIV status, health workers communicates to

look upon exclusive breastfeeding, breast problem, poor information on significance of breastfeeding and exclusive breastfeeding. These were found to encumber the practice even in situation where the mother opts to practice exclusive breastfeeding. The conclusion from quantitative and qualitative are obtainable to show the resemblance and disagreement of data obtained from the two data collection method.

Concerning adequacy of breast milk, results show that 61.7% of the respondents said that breast milk is adequate for the baby for the primary six months while others (37.8%) tales that it is not enough. On the other hand, when asked to describe exclusive breastfeeding, most of the respondents (79%) distinct exclusive breastfeeding properly that is, giving infant breast milk only for the first six months of life, while (11.5%) distinct exclusive breastfeeding as giving infant breast milk merely for three or four months and the residual (9.5%) did not know what exclusive breastfeeding is therefore botched to define it. The amount of times for feeding infants per day was accounts to be on demand by 78%, while others supposed the infant should be breastfed 3-6 times (15.9%) with few (6.1%) mentioned fewer than three times.

Termination of breastfeeding was done premature by a few respondents, at the age of one month's time, 9 mothers had closed breastfeeding their infants. Leading accomplishment at the age of 5 months, semi (50.5%) of the mothers had clogged breast feeding. A variety of reasons for premature termination of breastfeeding by the age of six months were: panic of infecting the child with virus (67%), mothers considers that their breast milk was not enough (9%), work absent from home (4.3%), breast problem (2.1%) and includes good quality HIV test results (DNA-PCR negative) meaning that the infant is not HIV positive (8.5%).

Discussion

The results of current study tinted the proportion of EBF amid HIV-positive mothers, recognized factors that are connected with EBF and discover fences to EBF concurrently. The results recommend require of extra support and reinforces therapy for mothers to be able to breastfeed exclusively for the suggested 6 months. It has been revealed that EBF is more prejudiced by health workers, mother's own choice to practice EBF, revelation to spouse and proper information about EBF than well-versed option of personality mothers.^(8,9)

In present study it was establish that the majority mothers (94%) breastfed their babies, the results which is reliable with that of study by de Paoli et al and the demographic health survey where it was renowned that, approximately all (98%) babies in Tanzania are breastfed for some era of time in spite of mothers' HIV status. It was establish in this study that the majority mothers (71%) begins breastfeeding inside one hour after birth, which is the suggested time. The same outcome has been accounted by further studies where it is affirmed that,

majority of mothers begin breast feeding at birth and from time to time contained by the first day with a reported longer period of breastfeeding of up to 24 months.

In the present study, the time of exclusive breastfeeding amongst HIV positive mothers in Ilala Municipal was originate to be 46% which is comparatively superior in contrast to those reported in other studies 13.3%, 16%, 30.6% and 40% in Tanzania, Kenya, Ethiopia and Uganda correspondingly. This experiential dissimilarity may be owing to the strengthened PMTCT services. On the other hand, the period of exclusive breastfeeding reduced as the age of the infant increase, being superior in the first months of life and departing down as the child raise, the similar has been reported in other studies. This could be a result of mothers being hesitant whether their breast milk is enough to meet infant's body necessity for the first six months as well as dread of infecting the child. In the present study health workers were establish to participate twin roles, first they were reported to have huge control on infant feeding choices by 58.5%,⁽¹⁰⁾ leading in facilitating obedience to exclusive breastfeeding all the way through education given to all pregnant women and further purposely HIV positive mothers, secondly, the messages that were given by health workers were putting mothers in quandary and lead mothers to make a decision against EBF practice.⁽¹¹⁾

Throughout in- depth interview, mothers accounted having predicament to each breastfeed exclusively or else since health workers telling them of the hazard of breast milk that it has virus thus prolonged feeding baby on it might contaminate the baby. This represents the health workers as fence to exclusive breastfeeding by not promoting it through their contradicting messages and also by not considering in reimbursement that go with exclusive breastfeeding. Additionally, the present study discovered that mothers were given options by health workers to also exclusive breastfeed for 3 or 6 months. This is differing to the present WHO guideline which counsel exclusive breastfeeding to carry on up to first six months of infant's life. These answer are constant with result of study in Niger where health workers were originate to be misinformed about the practice as well as be deficient in believing in it.⁽¹²⁾ This could be owing to lack of rationalized knowledge of health workers in view to current suggested infant feeding practice. It further entail that, health workers are not yet pertaining the new WHO and PMTCT guideline which counsel exclusive breastfeeding or substitute feeding for HIV infected mothers.

Conclusions

The study findings have limitation that they cannot be generalized due to the small sample size and also due to the fact that it was health facility based. The study participants may have answered questions easily and accurately because they received infant feeding counseling. This unfairness may have overvalued the duty of exclusive breastfeeding practices while at the same time miscalculate the rates of mixed and prelacteal feeding. Despite of these limitations, study findings off every important contribution on infant feeding decisions.

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