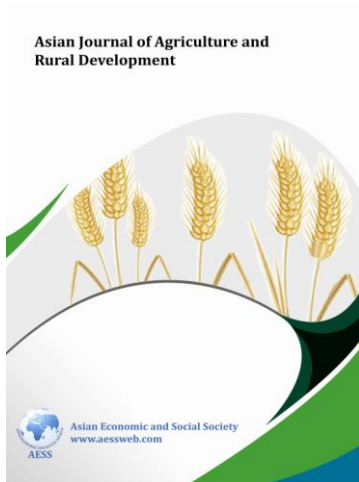


Publisher: Asian Economic and Social Society
ISSN (P): 2304-1455, ISSN (E): 2224-4433
Volume 3 No. 4 April 2013.



Farming Mothers' Perceptions on Exclusive Breastfeeding in Ori-Ade Area, Osun State

Ashimolowo Olubunmi R., Aromolaran Adetayo K. † and Akinmoyede, Omolola G. (Department of Agricultural Extension and Rural Development Federal University of Agriculture, Abeokuta, Ogun state, Nigeria)

Citation: Ashimolowo Olubunmi R., Aromolaran Adetayo K. and Akinmoyede, Omolola G. (2013) "Farming Mothers' Perceptions on Exclusive Breastfeeding in Ori-Ade Area, Osun State", Asian Journal of Agriculture and Rural Development, Vol. 3, No. 4, pp. 176-185.



Author(s)

**Ashimolowo Olubunmi R.,
Aromolaran Adetayo K.
and Akinmoyede, Omolola
G.**

Department of Agricultural
Extension and Rural Development
Federal University of Agriculture,
Abeokuta, Ogun state, Nigeria

Farming Mothers' Perceptions on Exclusive Breastfeeding in Ori-Ade Area, Osun State

Abstract

The study focused on the perception of rural farming mothers on exclusive breastfeeding in Ori-Ade local government area of Osun state. A purposive sampling technique was used to select 120 rural farming mothers. Data was collected through the use of interview guide. Data was analyzed using both descriptive statistical tools (frequency distribution and percentage) and inferential statistical tools (Chi-square and Pearson product moment correlation). The study revealed that most (77.5%) of the respondents were married, average household size was 8 persons and (45.0%) had secondary education. All (100 percent) of the respondents were aware that babies should be breastfed exclusively for at least six months while 61.70 percent practised the method. Most (90%) of the respondents indicated that sensitization could be used to encourage farming mothers to adopt exclusive breastfeeding method and 86.70% sourced their information on exclusive breastfeeding from the hospital. The chi-square result shows that there was significant relationship between farming mothers' marital status, education and their perception of exclusive breastfeeding practises ($\chi^2 = 0.038, 0.039$ at $p < 0.05$). Conclusively, farming mothers in the study were aware of exclusive breastfeeding but were not totally practising it. Most of them were not well informed about exclusive breastfeeding. It is therefore recommended that rural farming mothers should be enlighten to enrich their knowledge of exclusive breast feeding.

Keywords: Exclusive Breastfeeding, Farming mothers, Methods of Breast feeding, Perception

Introduction

Breastfeeding is the feeding of an infant or young child (baby) with breast milk directly from female human breast (i.e. through lactation) rather than from a feeding bottle or other container. Babies have a sucking reflex that enables them to suck and swallow milk. Most mothers can breast feed for six months or more without the addition of infant formula or solid food. Guidelines for infant feeding recommend exclusive breastfeeding until 4 to 6 months of age, and continuing breastfeeding throughout the period of complementary feeding (WHO 2001, Kramer and Kakuma 2002). The human breast milk is the healthiest form of milk for human babies (Picciano, 2001) as it contains just the right amount of fat, sugar, water and protein, and other nutrients that are needed for a baby's growth and development.

The American Academy of Pediatrics (AAP) recommends exclusive breastfeeding for the first six months of life (Gartner *et al.*, 2005). Furthermore, breastfeeding should be continued for at least the first year of life and beyond for as long as mutually desired by mother and child (Gartner *et al.*, 2005). Exclusive breastfeeding involves the practice of feeding newly born infants for the first six months of life on breast milk only, without any other type of food (not even water).

Gartner *et al.* (2005) defines exclusive breastfeeding as an infant's consumption of human milk with no supplementation of any type (no water, juice, non-human milk, and foods) except for vitamins, minerals, and medications. National and international guidelines recommend that all infants be breastfed exclusively for the first six months of

life. The World Health Organization (WHO) recommends exclusive breastfeeding (EBF) for the first six months of life, after which, infants should receive nutritionally adequate and safe complementary foods while breastfeeding continues for up to two years of age or beyond (WHO, 2003).

Exclusive breastfeeding has dramatically reduced infants death in developing and under-developed countries by reducing diarrhoea and infectious diseases, HIV transmission from mother to child compared to mixed feeding, reduces gastro-intestinal infection, does not impair growth, helps mother lose weight, and delays return of menstrual periods (Kramer and Kakuma, 2002). The decreasing numbers of breastfeeding women are attributed to many factors, such as insufficient knowledge about the beneficial effects of breast milk, widespread campaigns of formula milks and early return to work. In the first half hour after birth, the baby's suckling reflex is strongest, and the baby is more alert, so it is the ideal time to start breastfeeding (Widstrom *et al.*, 1990). Farming mothers' perception on exclusive breastfeeding should also be evaluated to determine how to properly advise them because anything that affect their infants will also affect their farming activities, this can directly or indirectly affect their agricultural productivity. In this view, the study was guided by the following research specific objective:

1. describe the socio-economics characteristics of the respondents.
2. verify the awareness of the respondents towards breastfeeding and its various types.
3. identify the source of information on breastfeeding practiced in the study area
4. evaluate farming mother's perception towards exclusive breastfeeding.
5. identify the benefits of exclusive breastfeeding and how it can be further encouraged among the respondents.

Study Hypotheses

H₀₁: There is no significant relationship between the socio-economic characteristics of the rural farming mothers and their perception towards exclusive breastfeeding.

H₀₂: There is no significant relationship between the benefits of exclusive breastfeeding to mother/child and their perception towards exclusive breastfeeding.

Materials and Methods

The study was conducted in Ori-Ade local Government area in the Northern parts of Osun state. Two agricultural zones namely Ipetu-Ijesha and Ijebu-Ijesha were randomly selected. Six villages were selected from each zone making twelve villages. From each of the twelve villages selected, ten rural farming mothers were purposively selected. The selection was based on nursing and post nursing farming mothers only. The total sample size for the purpose of this research was 120 rural farming mothers. Data collected from well structured interview guide was analysed using both descriptive and inferential statistics. Percentage, mean, frequencies, were used to summarise and organise data while Chi-square and simple correlation were used to test the hypotheses.

Results and Discussion

Personal Characteristics of Respondents

Table 1 showed that 77.5% of the respondents were married with age range of 26 - 33 years. This implies that there were a higher proportion of married, middle-aged young women who were nursing or post nursing farming mothers in the study area than respondents that were of different marital status. Also 45.0% of the respondents had secondary education while 20 percent had primary education.

This implies that the respondents' education could have contributed to their perception of exclusive breast feeding practises. Most (66.7%) of the respondents were Christians while 31.7% were Muslims. The study further revealed that the farming mothers have spent an average of 8 years in farming with an average of 6 persons in their household. These findings are similar to Agesa (2001) findings on the socio-economic and demographic characteristics (Marital status, age, gender and educational status) of the rural migrants' household.

Table 1: Selected Socio-Economic Characteristics of Respondents

Variables	Mean	Mode
Age (in years)	30 years	42.4% 26-33 years
Sex	100% female	
Education Status	27.5%	secondary education
Religion	66.7%	Christianity
Farming experience	8 years	83.4% 1-10 years
Marital Status	77.5%	Married
Household size	6 person	5-8 person

Source: Field survey, 2011

Farming Mothers’ Awareness of Various Breastfeeding Practises

Table 2a showed that 87.5% of the respondents were aware of modern breastfeeding practices, 98.3% of the respondents were familiar with Exclusive breastfeeding practices (Practice of feeding newly born infant for the first six months of life on breast milk only, without any other type of food, not even water). All (100% of) the respondents were aware that it is good for nursing mothers to breastfeed babies for at least the first six months of life as recommended by the ministry of health (WHO, 2001).

Also, 99.2% of the respondents were aware that attendance of ante-natal session is compulsory at modern hospital. Nurses recounted how they had encouraged close associates and mothers who visit the Health Centre to practice

exclusive breastfeeding. The nurses also confirmed that at the health facility, mothers are often educated on the need to see breastfeeding as an investment that would yield bountiful dividends. Even though this is the usual practice at the health facility, all the nurses expressed dissatisfaction with the rate of exclusive breastfeeding among mothers in the locality. As an approach, a number of the nurses expressed the need for effective interventions at the hospital that could prompt breastfeeding beyond mere early initiation to sustainable exclusive breastfeeding (Agunbiade and Ogunleye, 2012). This is an indication that there is an increase in level of awareness which may be due to an increased attendance of ante-natal session in hospitals, sensitization on baby friendly programme or adoption of baby friendly facility.

Table 2a: Awareness on Exclusive Breastfeeding (N=120)

Statement of Awareness on Exclusive Breastfeeding	Aware		Not Aware	
	Frequency	percentage	Frequency	Percentage
Awareness on modern breastfeeding practices	105	87.5	15	12.5
Familiar with Expressed Breastfeeding	80	66.7	40	33.3
Familiar with Pre-dominant/mixed feeding	116	96.7	4	3.3
Familiar with Tandem breastfeeding	71	59.2	49	40.8
Familiar with extended/shared breastfeeding	64	53.3	56	46.7
Familiar with exclusive breastfeeding	118	98.3	2	1.7
Cleaning of tips of breast before feeding	106	88.3	14	11.7

It is good for mothers to start breastfeeding baby on first day of delivery	104	86.7	16	13.3
It is good for nursing mothers to breastfeed babies exclusively for at least six months, as recommended by the Ministry of health	120	100	0.00	0.00
Attendance of ante-natal session is compulsory at modern hospital	119	99.2	1	0.8

Source: Field survey, 2011

Table 2b showed that 61.70 percent of the rural farming mothers practiced exclusive breastfeeding. This could be an indication that majority of the respondents were informed about the practice of exclusive breastfeeding, while 25.00 percent of them practiced Pre-dominant/mixed feeding. This could be linked to antenatal training and information on

exclusive breastfeeding which the rural farming mothers received during their antenatal sessions in the health centers. This negates Davies-Adetugbo (1997) who opines that most of the rural farming mothers practiced mixed feeding than exclusive breastfeeding as it was believed by the respondents to provide higher level of nutritional needs to the infants.

Table 2b: Breastfeeding Method Practiced by the Respondents (n=120)

Breastfeeding Method Practiced	Frequency	Percent
Expressed breast milk	5	4.20
Pre-dominant/mixed feeding	30	25.00
Tandem breastfeeding	7	5.80
Extended/Shared breastfeeding	4	3.30
Exclusive breastfeeding	74	61.70

Source: Field survey, 2011

Farming Mothers' Sources of Information on Breast Feeding Method Practised

Table 3 revealed that majority (86.7%) of the respondents were informed about their adopted breastfeeding practices in the hospital, probably through attendance of ante-natal sessions while the rest of the respondents (13.3%) were informed either through friends, mother or relations. This is line with Shirima *et al.* (2001) who established in a similar study that health personnel (doctor/nurse) and the maternal mother were the main sources of the mothers' information on infant feeding in both rural and urban areas. Although majority of the respondents got their information from hospital possibly for clarity and medical effect of the breastfeeding practises on their health so as not to affect their performance in their main occupation which is farming, some of the respondents still sourced information from their

friends, relations especially their mother for explanation based on their past experiences on any of the breast feeding methods.

Furthermore, since the respondents sought most their information from the hospital, any information pertaining to this issue is best disseminate either through the hospital or rural health talk and campaign on the issue to the rural mothers. This is best done by rural health workers or extension agents who have information on rural farming mothers' occupation while giving them information on their occupation they could teach them some health tip on exclusive breast feeding practises. Antenatal classes are the best starting point for birth preparation of pregnant women, where they are offered advice and tips to help and support them every step of the way and to prepare for life with a newborn baby.

Table 3: Sources of Information on Breast Feeding Method Practiced

Sources of information	Frequency	Percentage
Friends	2	1.7
Mother	5	4.2
Relations	9	7.5
Hospital	104	86.7
Total	120	100.0

Source: Field survey, 2011

Perception towards Exclusive Breastfeeding among Farming Mothers

Table 4 revealed that 95% of the respondents strongly disagreed with the perceptual statement that people that breastfeed their babies are exclusively poor while only 0.8% strongly agreed with the statement. This shows that the respondents were of the opinion that breast feeding their babies does not signify poverty and that the state of either being rich or poor should not affect breast feeding of infants because these babies require breast milk for proper nurturing and growth.

Also, 62.8% of the respondents strongly disagreed with the perception statement that feeding with pap exclusively makes baby very strong rather than the use of breast milk while 16.7% agreed with this statement (pap is a locally made custard from maize which is commonly called “ogi” in Southwest Nigeria.) Normal physical development in infancy requires a nutritional and adequate diet among other things (Thompson, 2009). Most (87.5%) of the respondents strongly agreed with the perception statement that health conditions such

HIV, AIDS, breast cancer can disrupt breastfeeding. This opinion of farming mothers could also help them to be watchful of their health state for the sake of their infants so as not to unknowingly infect them with their own diseases that could be transferred through breastfeeding.

A larger percentage (80.0%) of the respondents also strongly disagreed with the assumption that most people do not breastfeed so as to avoid breast sagging. The sagging of breast could be due to different causes rather than exclusive breastfeeding practice. The mean of perception was 14.83 and standard deviation was 3.17. Majority (66.9%) had positive perception while 33.1 percent had negative perception. Respondents that scored above the mean score had a positive perception while those that scored below the mean score had a negative perception. The perception of rural farming mothers has influence on their decision and reaction to the issue of breast feeding as it could affect their health, babies, as well as their farming activities.

Table 4: Perception of Rural farming Mothers towards Exclusive Breast Feeding

Perception towards Exclusive breastfeeding	SA	A	UD	D	SD
People that breastfeed their babies are exclusively poor	1(0.8)	2(1.7)	2(1.7)	1(0.8)	114(95)
Most people do not breastfeed their babies due to lack of time/commitment to work	5(4.2)	24(20.0)	0(0.0)	5(4.2)	86(71.7)
Most people do not breastfeed to prevent breast from sagging	2(1.7)	9(7.5)	1(0.8)	11(9.2)	97(80.8)
Giving out pap exclusively makes baby very strong rather than the use of breast milk	11(9.2)	20(16.7)	3(2.5)	11(9.2)	75(62.5)
Health reasons (HIV, AIDS, Cancer, etc) can disrupt breastfeeding	105(87.5)	8(6.7)	3(2.5)	2(1.7)	2(1.7)

Note: Strongly Agree= (SA), Agree= (A), Undecided= (UD), Disagree= (D), Strongly Agree (SD). Figure in parenthesis are percentages. Source: Field survey, 2011

Benefits of Exclusive Breastfeeding to Mother/Children

Table 5 revealed that 92.5% of the respondents strongly agreed that exclusive breastfeeding paves way for greater immune health of child while 1.7% disagreed. More so, 86.7% strongly agreed that exclusive breastfeeding reduces symptoms of upper respiratory tract infection while 2.5% disagreed with this statement. This is in line with the findings of Blair *et al.* (1999) which reported that breast milk contains valuable antibodies from the mother that may help the baby resist infections.

Furthermore, 83.3% strongly agreed that Exclusive breastfeeding protects infants from sudden infant death syndrome (SIDS) while 1.7% disagreed with the statement. Most (96.7%) of the respondents strongly agreed that Exclusive Breastfeeding fosters bonding between a mother and her child; this agrees with Feldman (2000) who opines that maternal bond between a mother and her child (infant) can be strengthened through exclusive breastfeeding.

Also, 84.2% of the respondents strongly agreed that Exclusive breastfeeding reduces the risk of breast, ovarian and endometrial cancer as well as sudden infant death while only 0.8% of the

respondents strongly disagreed with the statement. This agrees with Krama and Kakuma (2002) who opined that exclusive breastfeeding has dramatically reduced infants death in developing and under-developing countries by reducing diarrhoea and infective diseases, HIV transmission to child compared to mixed feeding, reduces gastro-intestinal infection, does not impair growth, helps mother lose weight and delays return of menstrual periods. This also agrees with the study of Kunz *et al.* (1999), Blaymore *et al.* (2002), Horne *et al.* (2004), World Health Organization (2003), Armstrong and Reilly (2002) as well as Piscane *et al.* (2005). Exclusive breastfeeding has dramatically reduced infant deaths in developing countries by reducing diarrhoea and infectious diseases (Iwinski, 2006). It has also been shown to reduce HIV transmission from mother to child, compared to mixed feeding (Coutsoudis *et al.*, 1999; Coutsooudis *et al.*, 2001; Iliff *et al.*, 2005; Coovadia *et al.*, 2007). The results reported earlier in study showed that majority of the respondents were well informed about the benefits of Exclusive breastfeeding which could have affected their perception positively, and make them possible benefactors of these benefits.

Table 5: Benefits of Exclusive Breastfeeding (N=120)

Benefits of Exclusive Breastfeeding	SA	A	UD	D	SD
Exclusive breastfeeding paves way for greater immune health of child	111(92.5)	2(1.7)	2(1.7)	2(1.7)	1(0.8)
Reduces symptoms of upper respiratory trait infection and collection of injection	104(86.7)	12(10.0)	1(0.8)	2(1.7)	1(0.8)
Protects infants from sudden infant death syndrome (SIDS)	100(83.3)	4(3.3)	4(3.3)	2(1.7)	10(8.3)
Increases cognitive development in childhood (High intelligence)	113(94.2)	4(3.3)	1(0.8)	2(1.7)	0(0.00)
Fosters bonding between a mother and her child	98(81.7)	5(4.1)	7(5.8)	4(3.3)	6(5.0)
Fosters hormonal release oxytocine and prolactine hormone that relax the mother and make her feel more nurturing towards her baby	101(84.2)	9(7.5)	4(3.3)	5(4.1)	1(0.8)
Reduces the risk of breast, ovarian and endometrial cancer	101(84.2)	10(8.3)	8(6.7)	8(6.7)	1(0.8)

Source: Field survey, 2011

Encouraging Farming mothers on Exclusive Breastfeeding

Table 6 revealed that majority (90%) of the respondents agreed that exclusive breastfeeding

practice can be further encouraged among fellow respondents through sensitization (by organizing Extension and Rural Health Development programmes), while 55.8% of

them agreed with Monitoring (by intensive follow-up) and 15.0% with acculturation (introduction of exclusive breastfeeding as a new cultural trait within the community).

Table 6: Encouragement of Exclusive Breastfeeding among Farming Mothers (N=120)

Ways of encouraging Exclusive breastfeeding	Frequency	Percentage
Sensitization	108	90.0
Monitoring	67	55.8
Acculturation	18	15.0

Source: Field survey, 2011

The entries in table 6 showed that besides from sensitization, monitoring programme such as follow-up visit could be carried out by health workers so as to ensure that rural mothers were practising exclusive breast feeding and they could be further encouraged to adopt exclusive breastfeeding practises. Adequate information facilitates the achievement of most other developmental goals and increases the probability that progress will be sustained as regards the continuous practice of exclusive breastfeeding

Hypotheses Testing

Ho₁: There is no significant relationship between the socio-economic characteristics of the rural farming mothers and their perception towards exclusive breastfeeding.

Chi-square analysis result on table 7 showed that there is a significant relationship between the marital status of the respondents and their perception towards breast feeding ($\chi^2 = 48.783$, $p < 0.05$). This indicates that the marital status

of the respondents could affect their perception toward exclusive breast feeding which implies that married farming mother could have positive perception towards exclusive breast feeding. The association between the educational level of the respondents and their perception towards exclusive breast feeding was significant ($\chi^2 = 51.036$, $p < 0.05$) which indicates that as the rural farming mother advances in education, they are likely to acquire more knowledge on the issue of exclusive breast feeding, indicating that the level of a person’s education has impact on their perception towards breast feeding. The religion of the rural farming mothers was not significantly related to their perception towards exclusive breast feeding. This could probably be because the religion belief of the respondents did not discourage exclusive breast feeding and regardless of religion they practice, breast feeding is perceived more a natural than religious issue.

Table 7: Result of Chi-square

Variables	Chi-Square	Degree of freedom	Asymptotic Significance	Decision
Marital status	48.783	33	0.038	S
Educational level	51.036	35	0.039	S
Agricultural Occupation	65.111	44	0.021	S
Non-Agricultural occupation	92.646	99	0.661	NS
Religion	13.037	22	0.932	NS

P < 0.05, (2-sided) NS= Not Significant, S = Significant.

Source: Field survey, 2011

Table 8: Result of Correlation

Variables	Pearson value (r)	P(significant level)	Decision
Age	0.247	0.007	S
Farming experience	0.204	0.026	S
Household size	-0.028	0.759	NS

Source: Field survey, 2011

Entries in Table 8 showed that there was significant relationship between the age of the respondents and the perception of exclusive breast feeding. This indicates that the older farming mothers could have positive perception of exclusive breast feeding; this could be drawn from the experience of the older farming mothers on child bearing and raising them.

Likewise the relationship between the farming experience of the rural farming mother and perception towards exclusive breast feeding was significant in that the rural farming mothers that had more experiences in farming activities which are their major occupation could have derived a means of accommodating exclusive breast feeding of their infant. The experience these rural farming mothers have in farming has an effect on their perception of exclusive breast

feeding. The household size, be it small or large, is not significantly related to the perception of the rural farming mothers towards exclusive breastfeeding.

Ho₂: There is no significant relationship between the benefits of exclusive breastfeeding to mother/child and their perception towards exclusive breastfeeding.

The correlation analysis result as presented in Table 9 showed that there was no significant relationship between total benefits derived by mother/child and the mothers' perception towards exclusive breastfeeding. Correlation between total perception and benefit indicated a weak negative correlation $r = -0.115$ and the significant level was $p < 0.05$.

Table 9: Results of Correlation Analysis

Variables	Pearson Value(r)	P (significant level)	Decision
Total perception and benefit	- 0.115	0.213	NS

Source: Field survey, 2011

The result of this test reveals that the perception of the rural farming mother did not affect the benefit they perceived would be derived from the practice of exclusive breastfeeding. They know the benefits of exclusive breastfeeding even though they have negative or positive perception of exclusive breastfeeding it would not affect the derived benefits the accrued to exclusive breastfeeding by the rural farming mothers.

Conclusion and Recommendations

The study established that the major and non-agricultural occupations among farming mothers were farming and knitting respectively in the study area. It was found that many of the rural farming mothers practiced exclusive breastfeeding compared to other breastfeeding

methods and that exclusive breastfeeding is the cheapest source of food, naturally and readily available for infants' direct consumption. The study also revealed that rural farming mothers agreed that exclusive breast feeding has benefit on the growth, health and wellbeing of their infants but only a few of them believed that that is one of the reasons for the good health of their babies. Religion of the farming mothers was also found not to influence their perception of exclusive breast feeding while their age, marital status and education had influence on their perception of exclusive breastfeeding practice. It is therefore recommended that rural farming mothers should be educated on the benefits of exclusive breastfeeding by both government and non-governmental organization and also encourage them on how they can carry out exclusive breastfeeding without affecting their

occupation and wellbeing. Since majority of the rural farming mother in the study area get their information about exclusive breast feeding from hospitals, then the health workers could use the avenue to reach the mothers for enlightenment and sensitization.

References

- Agesa, R. U. (2001).** Migration and the Urban to Rural earnings Difference: A sample selection Approach. *Journal of Economic Development and Cultural Change*, 49, 847-865.
- Agunbiade O. M. & Ogunleye O. V. (2012).** Constraints to exclusive breastfeeding practice among breastfeeding mothers in Southwest Nigeria: implications for scaling up. *International Breastfeed Journal*, 7, 5.
- Armstrong, J. & Reilly, J. J. (2002).** Breastfeeding and lowering the risk of childhood obesity. *Lancet*, 359(9322), 2003–2004.
- Blair, P. S., Fleming, P. J. & Smith, I. J. (1999).** Babies sleeping with parents: case-control study of factors influencing the risk of the sudden infant death syndrome. *BMJ*, 319, 1457-1462.
- Blaymore Bier, J. A., Oliver, T., Ferguson, A. & Vohr, B. R. (2002).** Human milk reduces outpatient upper respiratory symptoms in premature infants during their first year of life. *J Perinatol*, 22(5), 354–359.
- Coovadia, H. M., Rollins, N. C., Bland, R. M., Little, K., Coutsooudis, A., Bennish, M. L. & Newell, M. L. (2007).** Mother-to-child transmission of HIV-1 infection during exclusive breastfeeding in the first 6 months of life: an intervention cohort study. *Lancet*, 369(9567), 1107-1116.
- Coutsooudis, A., Pillay, K., Kuhn, L., Spooner, E., Tsai, W. Y. & Coovadia, H. M. (2001).** Method of feeding and transmission of HIV-1 from mothers to children by 15 months of age: prospective cohort study from Durban, South Africa. *AIDS*, 15(3), 379-387.
- Coutsooudis, A., Pillay, K., Spooner, E., Kuhn, L. & Coovadia, H. M. (1999).** Influence of infant-feeding patterns on early mother-to-child transmission of HIV-1 in Durban, South Africa: a prospective cohort study. *South African Vitamin A Study Group*, 354(9177), 471-476.
- Davies-Adetugbo A. A. (1997).** Socio cultural factors and promotion of exclusive breastfeeding in rural Yoruba Communities of Osun state. *Nigeria Journal of social sciences Medicine*, 45, 113-125.
- Feldman, S. (2000).** Nursing Through Pregnancy. New Beginnings (La Leche League International) 17(4), 116–118.
- Horne, R. S., Parslow, P. M., Ferens, D., Watts, A. M. & Adamson, T. M. (2004).** Comparison of evoked arousability in breast and formula fed infants. *Arch. Dis. Child*, 89 (1), 22-25.
- Iloff, P. J., Piwozm E, G., Tavengwam N, V., Zunguza, C. D., Marinda, E. T., Nathoo, K. J., Moulton, L. H., Ward, B. J. & Humphrey, J. H. (2005).** Early exclusive breastfeeding reduces the risk of postnatal HIV-1 transmission and increases HIV-free survival. *AIDS*, 19(7), 699-708.
- Iwinski, S. (2006).** Is Weighing Baby to Measure Milk Intake a Good Idea?. *LEAVEN* 42(3), 51–53.
- Kramer, M. & Kakuma, R. (2002).** Optimal duration of exclusive breastfeeding. *Cochrane Database Syst Rev*: CD003517.
- Kunz, C., Rodriguez-Palmero, M., Koletzko, B. & Jensen, R. (1999).** Nutritional and biochemical properties of human milk, Part I: General aspects, proteins, and carbohydrates. *Clin Perinatol*, 26(2), 307–333.
- Picciano, M. (2001).** Nutrient composition of human milk. *Pediatr Clin North Am*, 48(1), 53–67.
- Pisacane, A., Continisio, G. I., Aldinucci, M., D'Amora, S. & Continisio, P. (2005).** A controlled trial of the father's role in breastfeeding promotion. *Pediatrics*, 116(4), 494–498.
- Shirima R, Greiner T, Kylberg E. & Gebre-Medhin M. (2001).** Exclusive breast-feeding is rarely practised in rural and urban Morogoro, Tanzania. *Public Health Nutr*, 4, 147-154.
- Thompson, Ross A. (2009).** Child Development. *Microsoft Encarta* [DVD]. Redmond, WA: Microsoft Corporation.
- Widstrom, A. M., Wahlberg, V., Matthiesen, A. S., Eneroth, P., Uvnas-Moberg, K. & Werner, S. (1990).** Short-term effects of early suckling and touch of the nipple on maternal behavior. *Early Hum Dev*. 21, 153-163
- World Health Organization (2001)** The Optimal Duration of Exclusive breastfeeding. Report of an Expert Consultation. Geneva, Switzerland: World Health Organization, 2001.

World Health Organization (2003). Global strategy for infant and young child feeding.

Geneva, Switzerland: World Health Organization and UNICEF.