



**PSYCHOSOCIAL FACTORS INFLUENCING BREASTFEEDING
BEHAVIOR OF MOTHERS ATTENDING HOME-BASED
CLINICS IN THE WESTERN KENYA**

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Introduction

Optimal breastfeeding is a crucial decision with lifelong health implications for both the infant and mother (Gross, 2008). The practice of this behaviour provides numerous benefits over other methods of infant feeding (Arifeen et al., 2001 & Black et al., 2008). This practical evidence has led to the recommendation of breastfeeding as a cost effective strategy for improving infant survival and reducing the burden of childhood diseases, particularly in developing countries (Lakati, Binnis & Stevenson 2001; Sikorski et al., 2001; Jones et al., 2003 & WHO, 2007). In Kenya, despite the numerous health benefits of optimal breastfeeding, of all the mothers approximately 52 percent initiate breastfeeding within the first hour of birth, 3 percent exclusively breastfeed for 6 months and 57 percent continue breastfeeding through the first year (Kenya Demographic Health Survey, 2008-09). While optimal breastfeeding is a key strategy in tackling the fundamental policy goal of addressing health issues of infants and children this practise is far from reach (GOK/WHO, 2004). In Kenya sub-optimal breastfeeding is widespread, perhaps due to the weak implementation and poor monitoring of Infant Young Child Feeding Programmes in the country (WHO, 2006). Presently, the Baby Friendly Hospital Initiative, Comprehensive Policy guidelines on Infant Young Child Feeding and ten steps to successful breastfeeding are among ongoing policy efforts being utilized to promote optimal breastfeeding in Kenya (MoH, 2007 & MoH, 2008).

The absolute implementation, reviewing and updating of the policy may hasten achieving the goals of Child Survival and Development Strategy (CSDS), Millennium Development Goals-4&6 (MDGs) and the Vision 2030 (Kramer & Kakuma, 2004). Although the nutritional and immunological benefits of breastfeeding and policy efforts are well documented, consistent study results concerning the factors are more elusive (Marquis, 2005). The pathways by which, psychosocial factors such as a mother's feelings, societal norms, and mother's confidence to over breastfeeding inhibitors affects optimal breastfeeding is difficult to disentangle (Callen & Pinelli, 2004). Although research has demonstrated the influence of socio-demographic factors on breastfeeding, these factors are not easily modified and therefore offer little opportunity to effectively promote optimal breastfeeding (O'Brien, Buikstra & Hegney, 2008; Blyth



et al., 2004). This has led to the need for breastfeeding researchers to focus on identifying factors which may be open to modification (Bai et al., 2009). Factors such as socio-demographic are closely associated with the practice of breastfeeding, yet psychosocial factors are crucial for mother's decision-making to optimally breastfeed (Meedya, Fahy, & Kable, 2010). This decision-making process is determined by the strength of the mother's intention to optimally breastfeed, the level of her breastfeeding self-efficacy and the level of support from society which is all amenable to being strengthened by research (Bai et al., 2010). Breastfeeding research conducted to date has demonstrated the effect of many factors associated with the human mind and its functions, including the woman's plans regarding breastfeeding (Forster, McLachlan, & Lumley, 2006; Gijbbers et al., 2007). However, to date little research has been performed to explore in details the opinion and perceptions of lactating mothers attending home-based clinics which are managed by traditional birth attendants (Blyth, 2004).

Given that breastfeeding is a choice, not a behaviour that is randomly assigned to mothers, experiential aspects need to be well comprehended and articulated for successful promotion of optimal breastfeeding which is not a panacea, but the literature would suggest that infants and their mothers acquire health benefits when optimal breastfeeding is practised (Callen & Pinelli, 2004). Traditional birth attendants utilize routine instruction based approaches in home-based clinics to support rates of initiation, exclusivity and continuation which have yielded unsatisfactory results since they lack the theoretical basis to understand mother's intention to optimal breastfeeding (Scott et al., 2001 & Elliott et al., 2004).

The Theory of Planned Behavior (TPB) formed the theoretical framework of this study which offered a clearly defined structure that allowed the exploration of psychosocial factors that manipulate optimal breastfeeding. The TPB model by Ajzen (figure 1) illustrates determinants of breastfeeding intention as maternal attitude, subjective norm and perceived behavioral control towards the behaviour which in turn is revealed by underlying belief structures (Ajzen, 1991). Attitude towards behaviour is conceptualised as the general evaluation, either positive or negative, of performing optimal breastfeeding. Subjective norm reflects normative beliefs of significant social referents (i.e. whether one should or should not perform optimal breastfeeding). Perceived behavioural control is the extent to which optimal breastfeeding is under volitional control (Francis et al., 2004). In addition to these direct determinants of intention, the TPB identifies the behavioural, normative and control beliefs as supporting the constructs of attitude, subjective norm and perceived behavioural control. By employing this framework of the TPB, we examined and comprehended mothers' breastfeeding behavior by retrogressively finding its determinants back to the underlying beliefs.



Methods

Study Area, Design and Population

Kakamega Central district situated in Western Kenya formed the study area principally because breastfeeding behavior was sub-optimal amongst lactating mothers attending home-based clinics which are managed by traditional birth attendants but not trained health professionals. This cross-sectional study was conducted between April and May, 2010 at Eshisiru and Makaburini home-based clinics. Sample criteria included breastfeeding mothers of 18-40 years with an infant up-to 1yr old. This breastfeeding mother should have given birth by the help of a traditional birth attendant and in the home-based clinic, have been attending scheduled postnatal services at the home-based clinic for the last four weeks from the commencement of the data collection. Non breastfeeding mothers, breastfeeding mothers attending postnatal clinics in formal health centres, and breastfeeding mothers below 18 years and above 40 years were excluded from the study. A purposive sampling technique was used to select 20 out of 50 participants based on the inclusion criteria for this study, recommendations on qualitative research and utility of the TPB, and limitation of resources. The participants were elucidated for the purpose of the study before their participation in the in-depth interviews.

Study Instrument

An in-depth interview was conducted using a question guide developed based on Ajzen's theoretical framework. The main theme explored during the in-depth interview was psychosocial factors affecting optimal breastfeeding. A total of 8 health workers who promoted breastfeeding behavior in postnatal clinics of formal health centres were purposively selected and interviewed, the findings of these interviews were used to construct a question guide for the study. Two nutrition experts and two researchers then critically examined, discussed and provided inputs into the content of the question guide; they also assisted in refining it. The question guide was then pretested on a sample of 10 breastfeeding mothers attending postnatal clinics at Provincial General Hospital who were randomly selected. The question guide was utilized to solicit information through in-depth interviews in groups consisting 3 breastfeeding mothers until saturation point, meaning that we held 6 interviews on the three breastfeeding behavior and we had a traditional birth attendant totalling to a sample of 20 (see in table 1, 2, 3). Verbatim transcripts were prepared regarding feelings, circumstances and social pressures that these breastfeeding mothers encountered during their practise of breastfeeding behavior. The procedure of preparing verbatim transcripts was essential to determine the salient consequences, referents and circumstances that form the belief structure underlying the intention to practise optimal breastfeeding. Direct contact with the target population through the procedure of in-depth interviews enhanced the list of verbatim transcripts developed (Creswell, 2008). The question guide used in this study elicited verbatim transcripts on behavioural, normative and control beliefs (table 1). The term 'optimal breastfeeding' was used to



describe initiation of breastfeeding within the 1st hour of birth, exclusive breastfeeding for six months and continued breastfeeding through the 1st year of birth. Perceived outcomes of behavioural beliefs were elicited by enquiring the advantages and disadvantages of optimal breastfeeding. The significant referents manifesting normative beliefs were obtained by asking participants who would approve and disapprove of their optimal breastfeeding. The facilitators and barriers signifying control beliefs were brought forth by asking participants about circumstances that made breastfeeding behavior easy or challenging.

Data Analysis

Constant comparative approach grounded in the Theory Planned Behaviour was used to analyse verbatim transcripts obtained from in-depth interviews. This analysis entailed three stages including open, axial and selective coding (Arora, 2000). In the open coding phase, verbatim transcripts generated during the in-depth interviews were examined and updated by listening to tapes to identify outstanding categories of information. In axial phase, the inductive coding categories were saturated and a set of categories developed where we identified several categories from the open coding list that were compared across to explore themes. The central phenomenon of interest was positioned at the centre of the theory and linked with other categories. In the selective phase, the inductive coding obtained was then organized into a coding paradigm that presents a theoretical model of the process under investigation.

Results

The interview responses supplied a detailed source of information about behavioral beliefs, normative beliefs and control beliefs. Constant comparative approach analysis identified familiar verbatim transcripts on salient consequences (advantages/disadvantages), social referents (approval/disapproval) and circumstances (facilitator/barrier).

Behavioral Beliefs

Prevalent salient consequences (advantages/disadvantages) of breastfeeding behavior are presented in Table 1. Participants were aware of some of the benefits of initiating breastfeeding within the first hour of birth. For example, 13(65 percent) reported that 'early breastfeeding stimulates milk production for the baby and quickens regaining of pre-pregnancy shape'. There were also other perceived benefits such as 'boosting baby's immunity' reported by 14(70 percent). With respect to disadvantages, 'embarrassment/low self-efficacy' emerged as a key issue reported by 16(80 percent) of the participants. 'Painful nipples' was also an issue reported by 16(80 percent) of the participants. Exclusive breastfeeding was defined as feeding the baby restrictively on breastfeed milk with no fluids and water except medicine. Basically, 12(61 percent) reported that exclusive breastfeeding, 'helps to prevent various childhood illnesses', 'strengthen a baby's immune system'. There were also recognized benefits for the mother, such as 'regaining one's pre-pregnancy shape more quickly' reported by 13(65



percent) of the participants. With regard to disadvantages, 'embarrassment/low self efficacy' emerged as key issue reported by 16(80 percent) of participants who also felt uncomfortable breastfeeding in public places. Out of the participants 8(40 percent) reported continued breastfeeding through the first year to 'postpone return of fertility in mothers' and 'enhance neurodevelopment in infants'. Of the participants 14(71 percent) remarked that continued breastfeeding was 'time-consuming' and would 'limit their social activities'.

Normative Beliefs

The social expectations of important people in a breastfeeding mother's life regarding the performance of breastfeeding behavior were displayed in table, 2. Practically 16(82 percent) of the participants reported 'traditional birth attendant' as people whose opinion was influential on mother's decision to initiate breastfeeding within the first hour. Traditional birth attendant would be influential, although participants were almost anonymous in their belief that the final decision would be with the mother. The decision to exclusively breastfeed for six months was influenced by 'traditional birth attendant' reported by 8(42 percent). Family members were reported to be disapproving group 16(80 percent). Participants principally described 'traditional birth attendant' as important people who encouraged the practise of exclusive breastfeeding for six months. However it was argued that breastfeeding mothers were subjected to the pressures of feeding the infants other foods such as tea, porridge, soups and water. These pressures were exerted from their partner and family members who perceived breast milk alone as insufficient for the infant's growth and development. Continued breastfeeding through the first year was influenced by 'traditional birth attendant' reported by 8(42 percent) and 'family members' reported by 4(19 percent) of the participants. However about 2(12 percent) of the participant reported 'mother's partner to be unsupportive' towards continued breastfeeding through the first year.

Control Beliefs

Control factors incorporated items that may encourage/discourage breastfeeding behavior (table 3). For initiation of breastfeeding within the first hour of birth, 'mother's health after child birth' reported by 12(59 percent) and 'mother's knowledge on breastfeeding' reported by 8(40 percent) of participants were considered as facilitator of breastfeeding initiation. Social factors such as 'delivery room procedures' reported by 13(63 percent) also enhanced initiation of breastfeeding. Factors reported to facilitate exclusive breastfeeding for six months of life included 'mother's and infant's health' reported by 8(42 percent) of the participants. Social barrier mentioned included 'having to be away from the baby for long hours' reported by 12(62 percent) of the participants since these mothers also have to return to work for economic survival. Approximately 8(38 percent) reported negative reactions such as 'embarrassed/low self efficacy', 'not being allowed to breastfeed in a public place'. Factor mentioned to facilitate continued breastfeeding through the first year included 'mother's health'



reported by 7(35 percent) of the participants, however 'resuming busy schedules of domestic duties' reported by 14(72 percent) were barriers ascertained. The information obtained from this coding phases in tables 1, 2, 3 were then organized into a coding paradigm that presents a theoretical model (Figure 2) of the process under investigation. In this way an attempt was made to build up a theory.

Discussion

Mothers place a very high value on the emotional and health benefits of breastfeeding behavior. 'Enhancing bondage between the baby and mother' and 'boosting immunity' were the most reported advantages of breastfeeding. Similar findings have been reported in past studies examining reasons associated with breastfeeding (Cernadas et al., 2003 & Dettwyler, 2001). Embarrassment/low self efficacy of breastfeeding is multifaceted, relating to the need to protect one's modesty and avoid the act of being seen to behave indecently by the public. This complex issue with respect to 'embarrassment/low self efficacy of breastfeeding' is also consistent with other studies including the moral requirement that breastfeeding should be conducted with discretion or without exposure of the breast (Sheeshka et al., 2001; Shepherd, Power, & Carter, 2000). The importance of this finding in the context of this study methodology was its identification as the most important of the attitudinal factors inhibiting mothers' intention of initiation, exclusivity and continuation of breastfeeding. This presents a need for these attitudinal factors to be addressed by breastfeeding educators and promoters.

Normative influences emerged from mother's partner, family members, traditional birth attendants, society and environment. The influences from these significant referents did show to affect the mother's decision on initiation, exclusivity and continuation of breastfeeding. This qualitative analysis interpreted traditional birth attendants as being the major source of support regarding mother's breastfeeding intention. This finding is consistent with other studies that described nurses to be significant social referents approving breastfeeding (Tarkka, Paunonen & Laippala 1998; Naanyu, 2008) This has crucial implications for remedial practice of traditional birth attendants, to encourage mothers to initiate breastfeeding within 1st hour of birth, maintain exclusive breastfeeding for 4-6 months and to offer continued support for those who wish to continue breastfeeding. Mother's partner, family members and society were the disapproving social referents towards optimal breastfeeding. Thus, breastfeeding instructive approaches should therefore be designed to emphasize importance of optimal breastfeeding to enlighten this disapproving group of social referents. Possibly the assorted information on breastfeeding leaves this disapproving group of social referents with mixed perceptions on both sub optimal and optimal breastfeeding (Baggot, 2008). Fostering strong combined relationships amongst mother's partner, family members, traditional birth attendants, society and environment is fundamental to support a breastfeeding mother.



Creating a supportive environment in society was an important aspect of optimal breastfeeding because a mother's perception of the disapproval of people in society may serve as a hindering circumstance to the practice of optimal breastfeeding behavior. For instance a promotion in New York was successful in improving community's awareness of breastfeeding in public places (Downs & Hausenblas, 2005). After 3 months of displaying the billboard that read 'babies are born to be breastfed', the proportion of mothers with positive attitudes towards breastfeeding in public increased significantly. Promotion as such may be needed to foster optimal breastfeeding as a cultural norm in society. The qualitative analysis reflects that self confidence was a barrier to initiation of breastfeeding within the first hour of birth. This may reveal that a mother of low self esteem does not consider her self-confidence to achieve her intention to initiate breastfeeding as being important. The mother's return to work was a significant issue influencing exclusive breastfeeding for six months and continued breastfeeding through the 1st year of birth. Therefore, it is important to support working mothers' by instituting friendly breastfeeding environment. Generally creation of a supportive environment and boosting a breastfeeding mother's confidence is a key for supporting her to overcome breastfeeding behavior barriers. Furthermore to encourage mothers on exclusivity of breastfeeding after returning to work, postnatal services at home-based clinics should incorporate trainings on how to store, prepare and feed expressed breast milk to educate breastfeeding mothers.

Exploration of salient beliefs among the breastfeeding mothers is an important strength of this study and is essential for gaining comprehension of breastfeeding behaviour, which enables breastfeeding promoters (traditional birth attendants) to have an intellectual capacity of a number of underlying beliefs to efficiently influence optimal breastfeeding amongst breastfeeding mothers. Although the TPB has been supported by various fields, one potential concern with the application of the theory is the limited use in qualitative studies. The study has some limitations. The sample consists of basically breastfeeding mothers from two home-based clinics which are exclusively managed by traditional birth attendants in Kakamega Central district, Kenya. Therefore, the results obtained in this study are more indicative than confirmatory. Evidently, further determining research is needed employing populations from a wider range of ethnic, cultural and socioeconomic settings to provide information applicable to the broad range of population. Advancing this study, we suggest that the results obtained can be employed to develop and validate an instrument used to examine theoretical constructs of the TPB to understand breastfeeding mothers' decision-making processes on optimal breastfeeding.

In summary, this qualitative study revealed the belief structures of breastfeeding behaviour amongst breastfeeding mothers who receive breastfeeding information and support from traditional birth attendants rather than health professionals. The understanding of these significant beliefs provides a base for quantitative research on optimal breastfeeding to confirm these belief structures.



Conclusions

The awareness of these salient beliefs influencing breastfeeding behavior provides a basis for the effective promotion of optimal breastfeeding behavior in home-based clinics. As the theory implies, traditional birth attendants can guide mothers to optimally breastfeed by determining a number of beliefs identified from this study. Additionally, a measurement instrument derived from this study can serve as a foundation for quantitative research on optimal breastfeeding behavior.

Ethical Consideration

Ethical approval was given by National Council for Science and Technology. Research authorization was granted by the Ministry of Public Health and Sanitation. We sought informed consent from the respondents who were informed on the research procedures, details and assured of confidentiality.

References

- Ajzen, I. (1991). *The Theory of Planned Behaviour. Organizational Behavior and Human Decision Processes*. 1991; 50:179–211.
- Arifeen, S. Black, R.E. Antelman, G. Baqui, A. Caulfield, L. & Becker, S. (2001). Exclusive Breastfeeding reduces acute Respiratory Infection and Diarrhoea Deaths among Infants in Dhaka slums. *Paediatrics*, 2001; 108, e67.
- Arora, S. McJunkin, C. Wehrer, J. & Kuhn, P. (2000). *Major Factors Influencing Breastfeeding Rates: Mother's Perception of Father's Attitude and Milk Supply*. *Paediatrics*; 2000: 106, e67.
- Baggot, K. (2008). *Catchy Slogan Converts Attitude toward Breastfeeding*. 2008. Available at <http://www.babylune.com/catchyslogan-converts-attitudes-toward-breastfeeding/> (accessed on 24 February 2008).
- Bai, Y. Middlestadt, S.E. Peng, C.Y.J. & Fly, A.D. (2009). Psychosocial factors underlying the mother's decision to continue exclusive breastfeeding for 6 months: an elicitation study. *Journal of Human Nutrition and Dietetics*. 2009; 22: 134–140
- Bai, Y. Middlestadt, S.E. Peng, J. & Fly, A.D. (2010). Predictors of Continuation of Exclusive Breastfeeding for the First Six Months of Life. *Journal of Human Lactation*. 2010; 26: 26
- Black, R. Allen, L. Bhutta, Z. Caulfield, L. de Onis, M. Ezzati, M. Mathers, C. & Rivera, J. (2008). Maternal and Child Under-nutrition: Global and Regional Exposures and Health Consequences. *Lancet*, 2008; 371: 243-260.
- Blyth, R. Creedy, D. Moyle, W. Pratt, J. De Vries, S. & Healy, G. (2004). Breastfeeding duration in an Australian population: the influence of modifiable antenatal factors. *Journal of Human Lactation*. 2004; 20(1):30–38
- Callen, J. & Pinelli, J. (2004). Incidence and duration of breastfeeding for term infants in Canada, United States, Europe, and Australia: a literature review. *Birth*. 2004; 31(4):285–292.
- Cernadas, J.M. Noceda, G. Barrera, L. Martinez, A.M. & Garsd, A. (2003).



- Maternal and Prenatal Factors Influencing the Duration of Exclusive Breastfeeding during the First 6 Months of life. *Journal of Human Lactation*. 2003; 19:136-144
- Creswell, J.W. (2008). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Approaches to Research*. 2008. Upper Saddle River, NJ: Merrill/Pearson Education
 - Dettwyler, K. (2001). *Believing in Breastfeeding*. MIDIRS Midwifery Dig. 2001; 11(3): 385–387
 - Elliott, T.C. Agunda, K.O. Kigundu, J.G. Kinoti, S.N. & Latham, M.C. (2002). *Breastfeeding versus Infant Formula: The Kenyan Case*. Food Policy, 2002; 1:10 pp 7-10.
 - Forster, D. McLachlan, H. & Lumley, J. (2006). Factors associated with breastfeeding at six months postpartum in a group of Australian women. *International Breastfeeding Journal*. 2006; 1(18):1–18
 - Francis, J.J. Eccles, M.P. Johnston, M. Walker, A. Grimshaw, J. Foy, R. Kaner, E. S. Smith, L. & Bonetti, D. (2004). *The Theory of Planned Behaviour Questionnaires: Manual for Researchers*. 2004. Newcastle upon Tyne, UK: Published for ReBEQI project (Research-Based Education and Quality Improvement) by the Centre for Health Services Research.
 - Gijsbers, B. Mesters, I. André Knottnerus, J. Constant, P. & Schayck, V. (2007). Factors Associated with the Initiation of Breastfeeding in Asthmatic Families: The Attitude Social Influence–Self-Efficacy Model. *Journal of Breastfeeding Medicine*. 2007; 1(4):219-234.
 - GOK/WHO, (2004). Report on Assessment of IYCF Policies, Programmes and Practices in Kenya.
 - Gross, J. (2008). The Perceived Behavioral Control of Breastfeeding among Pregnant adolescents and its' Relation to Postpartum Breastfeeding Difficulties. *Journal of Paediatric Nursing*, 1: 101- 150.
 - Jones, G. Steketee, R.W. Black, R.E. Bhutta, A.Z. & Morris, S.S. (2003). The Belgio Child Survival Study Group. How many child deaths can we prevent this year? *Lancet*, 2003; 362, 65–71.
 - Kenya Demographic Health Survey (2008-09). Preliminary Report. Kenya National Bureau of Statistic. Nairobi, Kenya. National Coordination Agency for Population and Development. Nairobi, Kenya. ICF Macro Calverton, Maryland, U.S.A.
 - Kramer, M.S. & Kakuma, R. (2004). The optimal duration of exclusive breastfeeding: A systematic review. *Advances in Experimental Medicine and Biology* 2004; 554: 63- 77.
 - Lakati A, Binnis C, & Stevenson M. (2002). The Effects of Work Status on Exclusive Breastfeeding in Nairobi. *Asia Pacific Journal of Public Health*, 2002; 14(2): 285- 290.
 - Marquis, G.S. (2005). Breastfeeding and its impact on child psychosocial and



- emotional development: Comments on Woodward and Liberty, Greiner, Pérez-Escamilla, and Lawrence. In: Tremblay RE, Barr RG, Peters RDeV, eds. *Encyclopaedia on Early Childhood Development* [online]. Montreal, Quebec: Centre of Excellence for Early Childhood Development; 2005:1-5. Available at: <http://www.child-encyclopedia.com/documents/MarquisANGxp.pdf>.
- Meedy, S. Fahy, K, & Kable, A. (2010). Factors that positively influence breastfeeding duration to 6 months: A literature review. *Women and Birth*. 2010; 23(4): 135-145
 - Ministry of Health (2007). National Strategy on Infant and Young Child Nutrition. Final Draft 2007.
 - Naanyu, V. (2008). Young Mothers, First Time Parenthood and Exclusive Breastfeeding in Kenya. *African Journal of Reproductive Health*. 2008; 12(3):125-138
 - O'Brien, M. Buikstra, E. & Hegney, D. (2008). The influence of psychological factors on breastfeeding duration. *Journal of Advanced Nursing*, 2008; 63(4): 397-408
 - Republic of Kenya, Ministry of Health (2008). Kenya National Strategies and Guidelines.
 - Scott, J.A. Landers, M.G. Hughes, R.M. & Binns, C.W. (2001). Factors Associated with Breastfeeding at Discharge and Duration of Breastfeeding. *Journal of Paediatric Child Health*. 2001; 37:254-261.
 - Sheeshka, J. Potter, B. Norrie, E. Valaitis, R. Adams, G. & Kuczynski, L. (2001). Women's Experiences Breastfeeding in public places. *Journal of Human Lactation*. 2001; 17(1):31-38.
 - Shepherd, C.K. Power, K.G. & Carter, H. (2000). Examining the Correspondence of Breast-feeding Couples' Infant Feeding Attitudes. *Journal of Advanced Nursing*. 2000; 31: 651-660.
 - Sikorski, J. Boyd, F. Dezateux, C. Wade, A. & Rowe, J. (2001). Prevalence of Breastfeeding at Four Months in General Practices in South London. *British Journal of General Practice*, 2001; 51: 445- 450.
 - Tarkka, M.T. Paunonen, M. & Laippala, P. (1998). What Contributes to Breastfeeding Success after Childbirth in a Maternity ward in Finland? *Birth*. 1998; 25(3):34-40.
 - World Health Organization (2006). World Health Organization Fifty-Ninth World Health Assembly A59/13. Provisional Agenda Item 11.8 4 May 2006.
 - World Health Report (2007). WHO Collaborative Study Team on the Role of Breastfeeding on the Prevention of Infant mortality. Effect of Breast-Feeding on Infant and Child Mortality due to Infectious Disease in Less Developed Countries: a pooled analysis. *Lancet*, 2007; 355: 451-465.
 - Downs, S.D. & Hausenblas, H.A. (2005). Elicitation studies and the Theory of Planned Behavior: A Systematic Review of Exercise Beliefs. *Psychological Sport Exercise*; 6, 1-31.