RISK FACTORS FOR EARLY WEANING AMONG BABIES FOLLOWED-UP IN A BABY-FRIENDLY PRIMARY CARE UNIT IN İSTANBUL

Serap Yıldırım Çifçili Assist. Prof. MD,[1] Tülay Yılmaz Akgün MD,[2] Mehmet Akman MD,[1] Pemra Cobek Ünalan Assist. Prof. MD,[1] Arzu Uzuner Assoc. Prof. MD,[1] Sibel Kalaca Assoc. Prof. MD[3]

[1] Marmara University Medical School, Family Medicine Department, İstanbul, Turkey
[2] Maslak Acibadem Hospital, Emergency Department, İstanbul, Turkey
[3] Marmara University Medical School, Department of Public Health, İstanbul, Turkey

ABSTRACT

Objective: *This study aims to explore the breast-feeding profiles and the factors that affect breast-feeding and weaning attitudes among mothers of 0-12 month old babies in a baby-friendly primary care unit.*

Material and Method: *The study was conducted in a Mother and Child Health Centre in İstanbul in May-October 2006. All 364 mothers who were registered in the health centre were enrolled. A total of 358 mothers were included in the study.*

Results: *The frequencies of breastfeeding initiation and of breastfeeding within the first hour were 98.9 %and 62.3 %respectively. Among the babies older than 6 months (n=200), 52.5 %were weaned before 6 months. Pacifier use (OR: 3.01, 95 %CI: 1.35-6.69), being preterm (OR: 3.36, 95 %CI: 1.04-10.79), having a job (OR: 2.83, 95%CI: 1.14-7.04) or smoking (OR: 2.27, 95 %CI: 1.01-5.14) were found to be risk factors for early weaning.*

Conclusion: *Although the frequency of initiating breast-feeding is very high, the continuation duration is below the World Health Organization (WHO)'s recommendations. Physicians and other health workers should strongly recommend against smoking during prenatal and postnatal visits. Physicians should not support pacifiers, until we have sufficient data to support its benefits. In order to increase the duration of breast feeding, health professionals should focus on preterm babies, smoking or working mothers.*

Key Words: *Breast-feeding, weaning, bottle-feeding, primary health care, infant, post-natal care, prenatal care.* ***Nobel Med 2011; 7(3): 66-71***

İSTANBUL'DA BEBEK DOSTU BİR BİRİNCİ BASAMAK MERKEZİNDE TAKİP EDİLEN BEBEKLERİN ERKEN SÜTTEN KESİLME İLE İLİŞKİLİ RİSK FAKTÖRLERİ

ÖZET

Amaç: Bu çalışmada bebek dostu bir birinci basamak sağlık merkezinde takip edilen 0-12 ay arası bebeklerin beslenme biçimleri ve anne sütünden kesilmelerini etkileyen faktörler incelenmiştir.

Materyal ve Metod: Çalışma bir Ana Çocuk Sağlığı Aile Planlama Merkezinde, Mayıs-Ekim 2006'da gerçekleştirilmiştir. Merkezde takip edilen tüm anneler (364) çalışmaya davet edilmiş, 358 anne çalışmaya dâhil edilmiştir.

Bulgular: Emzirmeye başlama ve ilk saatte emzirme sıklıkları sırasıyla %98,9 ve %62,3'tü. Altı aydan büyük bebeklerin (n=200) %52,5'i 6 aydan önce anne sütünden kesilmişti. Emzik kullanımı (OR: 3,01, %95 Güven Aralığı (GA): 1,35-6,69), prematürite (OR: 3,36, %95 GA: 1,04-10,79), annenin çalışıyor olması (OR: 2,83, %95 GA: 1,14-7,04) ve annenin sigara içmesi (OR: 2,27, %95 GA: 1,01-5,14) anne sütünden erken (<6 ay) kesilmenin risk faktörleri olarak saptandı.

Sonuç: Emzirmeye başlama sıklığı yüksek olmakla birlikte, sürdürülme sıklığı Dünya Sağlık Örgütünün (DSÖ) önerdiği sürenin altındadır. Hekimler ve diğer sağlık çalışanları gerek doğum öncesi, gerek doğum sonrası görüşmelerde sigara içmeme konusunu önemle vurgulamalıdır, Emzik kullanımı, yararı hakkında yeterli kanıt olmadığı müddetçe desteklenmemelidir. Anne sütü ile beslenme süresini uzatabilmek için sağlık çalışanları prematüre bebekler, çalışan ve sigara içen annelerin bebekleri üzerinde odaklanmalıdır.

Anahtar Kelimeler: Anne sütü, sütten kesilme, biberon, birinci basamak, süt çocuğu **Nobel Med 2011; 7(3): 66-71**

INTRODUCTION

Since 1991, The Turkish Ministry of Health has implemented the "Incentive of Breast Milk and Baby-Friendly Hospitals Program" recommended by the United Nations Children's Fund (UNICEF) and World Health Organization (WHO), "Ten steps to successful breastfeeding" strategies, as the basis of all the actions.[1] According to the Turkish Demographic and Health Survey (TDHS) in 1998, the frequency of exclusive breastfeeding in the first two months was 14 %whereas this rate was 44% in 2003.[2] Yet, frequency of exclusive breastfeeding was low, 23% of the babies were being given other food during the first two months of life (2003) such as plain water, water-based liquids or fruit juice and 18% of children younger than 6 months were fed with formula.[2] Amongst infants aged six months or younger in the developing world, the prevalence of exclusive breastfeeding is 39 %and the prevalence of no breastfeeding is 5.6%.[3]

Several maternal factors were found to be associated with early weaning in different studies like desire to breastfeed, mother's age, smoking behavior, employment status, self-reported depressive mood, the educational level, race, income level, primiparity, support from husband and family after birth.[4-7] Higher levels of knowledge on breastfeeding was related to longer duration of breastfeeding for primiparous mothers.[8] The factors related to babies for weaning were gender, birth weight and the use of a feeding bottle or pacifier.[9,10] Although breastfeeding is very common in Turkey and frequency of exclusive breastfeeding has increased after the implementation of "Incentive of Breast Milk and Baby-Friendly Hospitals Program" the frequency of exclusive breastfeeding during the first six months is not sufficient.[2]

In this study, we aimed to explore factors that relate to early weaning (before 6 months of age) in mothers who have adequate and continuous access to a "baby-friendly" primary health care in order to find out the reasons of discontinuing breastfeeding in this particular group of mothers.

MATERIAL and METHOD

This cross-sectional study was conducted in a Mother and Child Health Care Centre (MCHCC) in a socio-economically homogenous district of Istanbul. MCHCC's are specialized primary care units, which are responsible for reproductive/sexual health, prenatal care, genetic counseling and childcare from infancy to adolescence. However, delivery of the babies does not take place in these units. These centres were certified as "baby-friendly" by the Ministry of Health, which means the mothers are educated, supported, empowered and encouraged for breastfeeding at every visit both during pregnancy and well child visits.

We enrolled 364 mothers who had a 0-12 month old baby in the May-October 2006 period. Six mothers declined to participate. In total, 358 mothers gave →

Table 1: The distribution of feeding type and median weaning month according to the age of the baby

Current age of baby	Exclusively breastfed n (%)	Partially breast fed n (%)	Formula and/or complementary feeding only n (%)	Median weaning month (minimum-maximum)
0-2 months n=56	37 (66.1)	16 (28.5)	3 (5.4)	1 (0-2)
3-4 months n=64	30 (46.9)	28 (43.8)	6 (%9.4)	2 (0-4)
5-6 months n=38	11 (28.9)	24 (63.2)	3 (7.9)	2 (1-5)
7-8 months n=25	2 (8.0)	18 (72.0)	5 (20.0)	3 (1-8)
9-10 months n=41	0 (0.0)	30 (73.2)	11 (26.8)	6 (3-10)
11-12 months n=134	0 (0.0)	78 (58.2)	56 (41.8)	7 (0-12)

* with complementary formula/water/fruit juices

Table 2: The factors associated with early weaning, univariate analysis (only babies older than 6 month were included, n=200)

		Weaned before 6 months n=38 n (%)	Weaned after 6 months n=162 n (%)	
Work status of the mother	Currently working	12 (32.4)	25 (67.6)	X^2=5.322, p=0.021
	Not working currently	26 (16.0)	137 (84.0)	
Presence of paid worker to help the mother	Yes	22 (34.4)	42 (65.6)	X^2=14.456, p<0.001
	No	16 (11.8)	120 (82.2)	
Mother's smoking behavior	Current smoker	18 (29.5)	43 (70.5)	X^2=6.297, p=0.012
	Never smoked or quit during pregnancy	20 (14.4)	119 (85.6)	
Delivery type	C-section	27 (25.5)	79 (74.5)	X^2=6.138, p=0.013
	Vaginal	11 (11.7)	83 (88.3)	
Babies' gestational age	Term (<37 weeks)	30 (16.4)	153 (83.6)	X^2=9.504, p=0.002
	Preterm (<37 weeks)	9 (52.9)	8 (47.1)	
Pacifier use (before 6 months)	Yes	24 (30.8)	54 (69.2)	X^2=11.509, p=0.001
	No	14 (11.5)	108 (88.5)	
Receiving formula after delivery at the hospital	Yes	17 (12.8)	116 (87.2)	X^2=9.974, p=0.002
	No	21 (31.3)	46 (68.7)	
Bottle-fed (before 6 months)	Yes	35 (29.2)	85 (70.8)	X^2=20.148, p<0.001
	No	3 (3.8)	77 (96.2)	

written informed consent. Participants responded to a structured, face-to-face questionnaire, consisting of 16 open-ended and 32 close-ended questions on demographic and obstetric characteristics of the mothers, their knowledge of breastfeeding, reasons for weaning, level of support from family and depressive symptoms. The beneficial effects of breastfeeding for mother and infant were explored by two open-ended questions. Knowledge level was classified as insufficient (no correct answer), intermediate (one or two correct answers) and sufficient (more than two correct answers). A two-question test was used for screening depressive symptoms.[11]

The Ethical Committee of Marmara Medical School approved the study.

Data were installed and analyzed using a SPSS 13.0 software program. The Chi-square test, Fischer's exact test, Student's t test, Mann-Whitney-U tests and binary-logistic regression (backward-stepwise) were used. The level of significance was set as a p value ≤0.05.

RESULTS

Demographic Details

The mothers' mean age was 28.4±5.2 years and their infants' median age was 8 months (range=0-12 months). The mean infant age was 7.5±4.1 months. 39.1% of the mothers had lower than 5 years of schooling, 18.4% of the mothers had more than 8 years of schooling, 41.3% of the mothers were employed before delivery, 29.7% of the mothers were currently working and 24.0% of the mothers were smokers. According to the mothers' self-report, the percentage of caesarean section was 54.7% for the last birth. Fifty percent of the infants were female. Most of the infants (91.6%) were term. There was no infant below the third percentile, 23% were at the 50th percentile, 24% at the75th percentile. Of the babies 44.7% used pacifier and 52.5% used feeding bottles before 6 month of age and 33.8% were given formula at the hospital after birth.

56.7% of the mothers declared that health professionals gave information about breastfeeding during their last pregnancy and 77.7% declared that they had been taught about an appropriate breastfeeding technique. In terms of knowledge about breastfeeding 21.8 %of the mothers had no knowledge at all about the benefits of breastfeeding for the infant, while 8.1 %had sufficient knowledge about the benefits for the mother and 20.7% about the benefits for the infant.
The distribution of feeding type and median weaning month according to the age of the baby are listed in Table 1. The average time for initiating breastfeeding was 5.87±1.00 hours (range=0-360 hours; median: 1.0 hour) after birth. The number of mothers who declared that they could not ever breastfeed their babies was 3 (0.8%); all of these mothers were working and highly educated (11-15 years of schooling) and they all stated that their babies did not want to suck. None of these babies was premature and one of them was delivered by caesarean section. The percentage of the mothers who initiated breastfeeding within the first hour was 62.3%. Initiation of breastfeeding within the first hour was more frequent among the multiparous mothers (p=0.004) and the mothers who had a vaginal delivery (p<0.001).

The most frequent reasons for weaning among the whole population (0-12 months) were "baby did not want to suck", "my milk was not sufficient" and "I had to return to work" (44%, 19%, and 10%, respectively). In all age groups most frequent weaning reason was "baby did not want to suck", except 9-10 month old group in which the same reason was "end of maternity leave". Of the infants, 62.3% were breast-fed within 0-60 minutes and 6.6% were not breastfed during the first→

day of life. Among the babies aged 0-6 months, 43.0 %were being partially breastfed, 7.6% were being fed only with formula or juices, and 49.4% were being exclusively breast-fed. Among the babies older than 6 months, 62.0% were being partially breastfed and 36.0% were being fed only with formula and/or complementary food. Data about the reasons for early initiation of supplemental feeding according to the mothers were published elsewhere.[12]

The percentage of mothers who reported depressive symptoms was 45.3%. Among the mothers who initiated breastfeeding (n=355, 99.2%), 91.5 %mentioned social support (from spouse or family) during the breastfeeding period; mostly this was help with the housework (67.4%). The frequency of social support decreased minimally as the child grew older.
Factors associated with early weaning (before 6 months of age)

Babies older than 6 months (n=200) were included in the analysis. According to the univariate analysis the following were related factors for early weaning ($p<0.05$ for all factors, Table 2): currently working and smoking mother, presence of a paid worker to help the mother, caesarean section delivery, being a preterm baby, using pacifier and bottle before 6 months, receiving formula after the delivery at the hospital. Factors that were not associated with early weaning were: sex, birth or current weight of the baby, breastfeeding initiation time, age of the mother, number of birth, educational level of the mother, knowledge level of the mother about breastfeeding, monthly income of the family, husband/father's employment status or mother's depressive symptoms. A binary logistic regression (LR) analyses was performed to analyze the risk factors for early weaning. Babies older than 6 months of age (n=200) were included. All factors that were significantly associated with early weaning in the univariate analysis were included in the logistic regression analysis. For the factors that were statistically correlated with each other, only one was included in the regression model. The backward LR method was used for the regression analysis. Using a pacifier (OR: 3.01, 95% CI: 1.35-6.69), being preterm (OR: 3.36, 95% CI: 1.04-10.79), having a currently working (OR: 2.83, 95% CI: 1.14-7.04) or a smoker mother (OR: 2.27, 95% CI: 1.01-5.14) were risk factors for early weaning (Table 3).

Table 3: Risk factors of early weaning among babies older than 6 months of age (n=200) (Logistic regression analysis)

Risk factors associated with early weaning* (Step 2)	B	p	OR (95 %Confidence Interval)
Mother's work status (baseline never worked or on maternity leave) Working mother	1.136	0.025	2.83 (1.14-7.04)
Mother's smoking behavior (baseline not smoking) Smoker mother	0.821	0.049	2.27 (1.01-5.14)
Pacifier use (baseline non-user) User	1.101	0.007	3.01 (1.35-6.69)
Babies' gestational age (baseline term) Term babies	1.210	0.042	3.36 (1.04-10.79)

*Variables included in the model: mother's current occupational status, smoking behavior, delivery type, babies' gestational age, pacifier use, receiving formula at the hospital after birth.

DISCUSSION

The frequency of breastfeeding initiation in our study was slightly higher than the results of the Turkey Demographic and Health Survey 2003 (TDHS) (98.9% vs. 97% respectively).[2] The frequency of exclusive breastfeeding among the babies of 0-2 months of age was also higher than the TDHS-2003 results (66.1% vs. 43.5% respectively). Frequency and duration of exclusive breastfeeding varies in different studies from different regions of Turkey.[2,13-15] The higher frequency in our study may be due to the baby friendly procedures in the health centre.

Due to the cross sectional nature of this study; the relationships between possible risk factors and early weaning should be carefully evaluated. Another point is that participants of the study were a certain group of mothers who were enlisted to a "baby-friendly" primary care unit, so that the results can only be generalized to this group of mothers. In addition, we do not know the further feeding practices for the small babies. To overcome this limitation, we did not include the babies of 0-6 months in the analysis. The results of this study however, can be a source of information about the breastfeeding practices of the women whose babies are being followed by baby friendly primary care centers.

Some studies have claimed that pacifier use causes early weaning.[10,16,17] However, a randomized, controlled trial found that pacifier use was more a marker of breastfeeding difficulties or decreased breastfeeding motivation than a cause of early weaning itself.[18] It has also been suggested that the use of pacifiers in the first week of life is likely to interfere with the infant learning to suck effectively, and should be discouraged.[19] On the other hand, there are certain documented benefits of pacifier use including the lower rate of Sudden Infant Death Syndrome.[20] However, any benefits of pacifier use should be carefully evaluated. Because it may cause loss of a self-directed ability to maintain state during the night and may also shorten breastfeeding duration.[21]

Researchers have elucidated many other factors, which might affect weaning. One of them is the type of →

the delivery. In our study, approximately half of the mothers had a cesarean section delivery. Tuncel et al.[14] reported that babies after a vaginal delivery were more frequently breast-fed in the first hour than the ones after a caesarean section delivery. Similarly, we found that the mothers who had a vaginal delivery initiated breastfeeding in the first hour more frequently. The mean initiation time of breastfeeding for the mothers who had a caesarean section delivery was longer. However, the logistic regression analysis showed no effect of the delivery type on early weaning.

We found, as have earlier studies,[22-24] that mothers who smoked were less frequently breastfeeding and more likely to wean early.

Giugliani et al.[25] found that having a professional or family member caregiver and end of maternity leave were significantly related to early weaning. In a study in California, end of maternity leave and the presence of a paid worker or a supporting family member were strongly related to early weaning.[26]

Our results were concordant with these earlier results. Kronborg[8] reported that the total breastfeeding period was related to the mother's educational level. However, in a study in Turkey, the mother's age, education and employment status, and traditions were not found to affect complementary food initiation time.[27] In our study, the mothers' education level was not related to frequency of early weaning. According to the TDHS 2003 results, initiation of breastfeeding in the first hour after delivery was positively related to the educational level of the mother, however, in our study, this was not the case. The difference may be due to the higher educational level of mothers in our study than in the general Turkish population.[28] There was no relationship between the levels of knowledge on the benefits of breastfeeding and early weaning.

In our study, all babies were delivered at hospitals and all mothers met with health workers at least once before delivery. In a cohort study of 1163 women, among various other factors, receiving formula was related to weaning between 2-12 weeks.[25] In our study, babies who received formula at the hospital after birth were weaning more frequently; however, the logistic regression analysis did not show any effect on early weaning.

Researchers from different countries have mentioned similar factors as reasons for weaning. The most common reasons for leaving breastfeeding in the first week were inadequacy of the breast-milk, the hunger of the baby, problems with the breastfeeding procedure, and in the third month, it was end of the maternity leave.[15, 16, 26] The most frequent reasons that the mothers mentioned for early weaning in our study were, "baby did not want" and "end of maternity leave". Besides, the mothers who returned to work were less frequently breastfeeding. This was also documented by other studies in Turkey.[29] The legal duration of maternity leave is only 8 weeks totally for pre and post delivery in Turkey and it may be a threat to the continuation of breastfeeding. Extending this period may support breastfeeding.

In a study in Croatia[30], the baby's gender and APGAR score and the type of delivery were found to be related to breastfeeding frequency and duration. In this study, low birth-weight babies were less frequently breast-fed than normal or overweight ones. In our study however, there was no relationship between the baby's birth weight and breastfeeding initiation or early weaning. However, unlike an Australian study[4], babies whose gestational age was less than 37 weeks were more frequently weaned before 6 months.

In conclusion, "baby friendly" MCHCCs action is effective in introducing breastfeeding as a national health policy. However, there are still problems such as early weaning and the introduction of complementary foods earlier. Learning the determinants of weaning may help health professionals to improve appropriate strategies. Post-natal follow-ups are opportunities to remind mothers that permanent and exclusive breastfeeding is beneficial. Health professionals should be encouraged to insist on breastfeeding just after the delivery, to recommend smoking cessation before, during and after pregnancy, to avoid pacifiers and feeding bottles. Elective caesarean section deliveries should be avoided. Health professionals should emphasize the appropriate working hours and social support for working and breastfeeding mothers.

CORRESPONDING AUTHOR: Serap Yıldırım Çifçili Assist. Prof. MD. Bestekar Sadettin Kaynak sok. No: 7/8 Altunizade 34662 Üsküdar, İstanbul serapcifcili@gmail.com

DELIVERING DATE: 15 / 09 / 2009 • **ACCEPTED DATE:** 09 / 02 / 2010

REFERENCES

1. Evet deyin, Şubat 2002: Anne sütü. UNICEF Türkiye web sitesi http://www.unicef.org/turkey/sy1/_mc1.html.
2. Yigit EK, Tezcan S. Bebeklerin beslenme alışkanlıkları, çocukların ve annelerin beslenme durumu. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Türkiye Nüfus ve Sağlık Araştırması, 2003. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Sağlık Bakanlığı Ana Çocuk

Sağlığı ve Aile Planlaması Genel Müdürlüğü, Devlet Planlama Teşkilatı ve Avrupa Birliği, Ankara, Türkiye. s.141-155. http://www.hips.hacettepe.edu.tr/tnsa2003/data/turkce/bolum12.pdf
3. Lauer JA, Bertan AP, Victora CG, de Onis M, Barros AJD. Breastfeeding patterns and exposure to suboptimal breastfeeding among children in developing countries: review and analysis of nationally representative surveys. BMC Medicine 2004; 2: 26 http://www.biomedcentral.com/1741-7015/2/26.
4. Foster DA, McLachlan HL, Lumley J. Factors associated with breastfeeding at six months postpartum in a group of Australian women International Breastfeeding Journal 2006; 1:18. http://www.internationalbreastfeedingjournal.com/content/1/1/18.
5. Baker M, Milligan K. Maternal employment, breastfeeding, and health: Evidence from maternity leave mandates. Journal of Health Economics 2008; 27: 871–887.
6. Pincombe JBA, Baghurst P, Antoniou G, et al. Baby Friendly Hospital Initiative practices and breastfeeding duration in a cohort of first-time mothers in Adelaide, Australia. Midwifery 2008; 24: 55-61.
7. Cwikel J. Why do women stop breastfeeding? A closer look at "not enough milk" among Israeli women in the Negev Region. Breastfeeding Review 2005; 13: 7-13.
8. Kronborg H, Vaeth M. The influence of psychosocial factors on the duration of breastfeeding. Scand J Public Health 2004; 32: 210-216.
9. Forster DA, McLachlan HL, Lumley J. Breastfeeding patterns and exposure to suboptimal breastfeeding among children in developing countries: review and analysis of nationally representative surveys. Int Breastfeed J 2006; 1: 18. http://www.internationalbreastfeedingjournal.com/content/1/1/18.
10. Cunha AJ, Leite AM, Machado MM, Breastfeeding and pacifier use in Brazil. Indian J Pediatr 2005; 72: 209-212.
11. Arrol B, Khin N, Ngaire K. Screening for depression in primary care with two verbally asked questions: cross sectional study. BMJ 2003; 327: 1144-1146.
12. Ünalan PC, Akgün T, Çifçili S, Boler İ, Akman M. Bebek dostu bir ana çocuk sağlığı merkezinden hizmet alan anneler neden bebeklerine erken ek gıda vermeye başlıyor? Türk Pediatri Arşivi 2008; 43: 59-64.
13. Karatoprak N, Yazar S, Önal Sönmez E, et al. Anne sütü ile beslenmeye etki eden faktörlerin değerlendirilmesi. Çocuk Dergisi 2003; 3: 44-48.
14. Tunçel EK, Dündar C, Canbaz S, Pekşen Y. Bir üniversite hastanesine başvuran 0-24 aylık çocukların anne sütü ile beslenme durumlarının saptanması. C.Ü. Hemşirelik Yüksekokulu Dergisi 2006; 10: 1-6.
15. Yesildal N, Aytar G, Kocabay K, et al. Breastfeeding practices in Duzce, Turkey. J Hum Lact 2008; 24: 393-400.
16. Victora CG, Behague DP, Barros FC, Olinto MT, Weiderpass E. Pacifier use and short breastfeeding duration: cause, consequence, or coincidence? Pediatrics 1997; 99: 445-453.
17. Howard CR, Howard FM, Lanphear B, et al. The effects of early pacifier use on breastfeeding duration. Pediatrics 1999; 103: E33.
18. Kramer MS, Barr RG, Dagenais S, et al. Pacifier use, early weaning, and cry/fuss behaviour: a randomized controlled trial. JAMA 2001; 286: 322-326.
19. Collins C, Ryan P, Crowther C, et al. Effect of bottles, cups, and dummies on breastfeeding in preterm infants: a randomized controlled trial. BMJ 2004; 329: 193.
20. Forster DA, McLachlan HL. Breastfeeding initiation and birth setting practices: a review of the literature. J Midwifery Women's Health 2007; 52: 274-280.
21. Pollard K, Fleming P, Young J, Sawczenko A, Blair P. Night-time non-nutritive sucking in infants aged one to five months: relationship with infant state, breastfeeding, and bed-sharing versus room-sharing. Early Hum Dev 1999; 56: 185-204.
22. Haug K, Irgens L, Baste V, et al. Secular trends in breastfeeding and parental smoking. Acta Paediatr 1998; 87: 1023-1027.
23. Giglia RC, Binns CW, Alfonso HS. Which women stop smoking during pregnancy and the effect on breastfeeding duration. BMC Public Health 2006; 6: 195 http://www.biomedcentral.com/1471-2458/6/195.
24. Horta BL, Kramer MS, Platt RW. Maternal smoking and the risk of early weaning: a meta-analysis. Am J Public Health 2001; 91: 304-307.
25. Giugliani ER, Issler RM, Justo EB, et al. Risk factors for early termination of breastfeeding in Brazil. Acta Paediatr 1992; 81: 484-487.
26. Taveras EM, Capra AM, Braveman PA, et al. Clinician support and psychosocial risk factors associated with breastfeeding discontinuation. Pediatrics 2003; 112: 108-115.
27. Hizel S, Ceyhun G, Tanzer F, Sanli C. Traditional beliefs as forgotten influencing factors on breastfeeding performance in Turkey. Saudi Med J 2006; 27: 511-518.
28. Hancioglu A, Ergocmen BA. Kadınların temel özellikleri ve statüleri Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Türkiye Nüfus ve Sağlık Araştırması, 2003. Hacettepe Üniversitesi Nüfus Etütleri Enstitüsü, Sağlık Bakanlığı Ana Çocuk Sağlığı ve Aile Planlaması Genel Müdürlüğü, Devlet Planlama Teşkilatı ve Avrupa Birliği,Ankara, Türkiye. s.33-43. http://www.hips.hacettepe.edu.tr/tnsa2003/data/turkce/bolum3.pdf.
29. Ertem IO, Akinci Z, Ulukol B, Başkan-Gülnar S. Socioeconomically advantaged infants attending a university well-child clinic in Ankara: are they breastfeeding optimally? Turk J Pediatr 2001; 43: 223-230.
30. Berovic N. Impact of sociodemographic features of mothers on breastfeeding in Croatia: questionnaire study. Croat Med J 2003; 44: 596-600.