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Breast-Feeding Behaviours of the Mothers

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Abstract: Breast-feeding is the most useful nutrient due to the facts that its contents change according to the requirements of the newly-born, it protects them against the infections and it meets all the physiological and psychological needs of the baby in the fist six months and it is economical. In the following months, the infants getting breastmilk could be supported by additional nutrients so that they can make a healthy start in life being far away from the malnutrition and infection risks. This study was conducted at the local hospitals of Aksehir, Konya, with an aim to determine the breast-feeding behaviors of the volunteered 345 mothers who had 0-24-month-old babies. The ratio of the mothers who had breastfed their babies in wake of the birth was found to be 50.1%, while the ratio of the ones who did that in the first two hours was 35.9%. It was also found that 14.0% of the mothers hadn't breastfed their babies in the first three or more hours. Another finding in the study was that 89.0% of the mothers had given colostrums, while 7.2% of them hadn't. The other 3.8% said that they didn't remember if they had done that or not. The relationship between giving colostrums and the education level was found to be significant (p<0.05). It was also found that 79.7% of the mothers had chosen breast-feeding as the first nutrient to their babies in wake of the birth. The frequency of breast-feeding was found to vary as follows: 45.8 % of the mothers breastfed when their babies needed, 40.3% of them did that when their babies cried and the other 13.0% did breast-feeding according to a scheduled timetable. The ratio of the mothers who did not breast-feeding was 0.9%. The relationship between that frequency and mother education level was found to be significant statistically (p<0.05), but the relationship between breast-feeding frequency and other variables such as mother age, the order of the child in family and the number of children was found to be insignificant (p>0.05). The period in which the babies were fed by only breast milk without any additional nutrient was found to vary as follows: 69.1% of the babies were breastfed during 4-6 months, 27.0% were breastfed less than 4 months, 4.1% of them 7-12 months. The average breast-feeding period without any additional nutrient intake was found to be 4.5±0.8 months. 73.6% of the mothers who started giving the additional nutrient did that in the 4-6 months after the birth, while 17.2% of them did that before the fourth month and the other 9.2% of them did that after the sixth month following the birth.

Key words: Breast milk, breast-feeding, colostrums, infant

INTRODUCTION

Mankind is assumed to have been living on Earth for two million years and to have led a hunter-gatherer lifestyle until the last five thousand years, most probably feeding their babies with breast milk during that time. Breastfeeding fell into disrepute as a result of the misleading messages given by some feminist activities following the World War I and women participation in working life after the industrial revolution. Although breast-feeding became to regain importance in the 18th century, the developments in the baby food industry led to the increasing interest in their superiority and thus causing some researchers to conduct studies on it. The interest was such that baby food industry and even its management gained impressive power and made breast-feeding insignificant again. As a consequence the era of baby bottle began and it became a symbol of modern mothering, which has caused a decline in the ratio of breast-feeding, a commonly used way to feed an infant. Today, it is known that more than a million infant

per year die as they are not fed by breast milk and many more get ill due to the same reason. Recent research has shown that no artificial baby food can replace breast-feeding no matter how sophisticated technology is used in its preparation (Ozatay, 1994).

Breast-feeding is the most useful nutrient due to the facts that its contents change according to the requirements of the newly-born, it protects them against the infections and it meets all the physiological and psychological needs of the baby in the fist six months and it is economical (Tuncel *et al.*, 2006). Recent studies have shown that breast-feeding on its own in the first six months after birth is much more useful than previously thought. The nutritional value and the anti-infective peculiarity of breast-feeding along with its effect on delaying pregnancy not only increase the survival chance of the infants but also protects mothers from breast and uterus cancer types, providing contraception (Baumslag, 1991). It was proved that the infants who had breast-feeding in the first 6 months were likely to

Table 1: Ten steps to successful breast-feeding (WHO, 1989)

- Every facility providing maternity services and care for newborn infants should:
- 1. Have a written breast-feeding policy that is routinely communicated to all health care staff.
- 2. Train all health care staff in skills necessary to implement this policy.
- 3. Inform all pregnant women about the benefits and management of breast-feeding.
- 4. Help mothers initiate breast-feeding within half an hour of birth.
- 5. Show mothers how to breastfeed and how to maintain lactation even if they should be separated from their infants.
- 6. Give newborn infants no food or drink other than breast milk, unless medically indicated.
- 7. Practise rooming-in that is, allow mothers and infants to remain together 24 h a day.
- 8. Encourage breast-feeding on demand.
- 9. Give no artificial teats or pacifiers (also called dummies or soothers) to breast-feeding infants.
- 10. Foster the establishment of breast-feeding support groups and refer mothers to them on discharge from the hospital or clinic.

have 10-15 times more chances of survival than the ones who didn't. Depending on this fact, some international agencies have taken a number of decisions to encourage breast-feeding since 1980s (Ozatay, 1994). WHO and UNICEF issued a report including "Ten Steps to Successful Breast-feeding" with an aim to create "Baby Friendly Hospitals" which put these recommendations into practice (Table 1) (WHO, 1989). This initiative which started in Ankara in 1991 encompassed 12 contries namely Bolivia, Brazil, Ivory Coast, Philippines, Gabon, Kenya, Egypt, Mexico, Nigeria, Pakistan, Thailand and Turkey. A year after the issue of this report, another one "Innocenti Report" was launched in Florence. In this report, it is recommended that a suitable environment be established for mothers to breastfeed in the first six months and the additional food be given after six months besides breast-feeding (Ozatay, 1994).

Breast-feeding, which is physiologically and economically useful for both the mother and the infant, is recommended as a sole way of feeding during the first six months after the birth without intervals. Following this period, additional nutrients along with breast milk will help the infant to make a healthy start far away from the risk of malnutrition and infection (Coskun, 2003).

This study was conducted in the local hospitals of Aksehir, Konya, with an aim to determine the breast-feeding behaviors of 345 mothers who had 0-24-month-old babies.

MATERIALS AND METHODS

The participants of the study are 345 breast-feeding mothers registered in 11 local hospitals in Aksehir, Konya, a province in Turkey. The authorities were given explanations about the aim and the details of the study and their permission and assistance were asked to conduct the research and gather the data. The randomly chosen 345 volunteered mother participated in the research and the survey forms prepared from different sources were used as an instrument in the study.

Statistical Package for Social Sciences (SPSS) version 10.0 was used in the evaluation of the data and the average, standard deviation $(\overline{X} \pm S_{\overline{X}})$ absolute values and percentages (%) were shown in the tables. Chi-square significance test was also used when needed.

RESULTS AND DISCUSSION

157 (45.5%) of 345 infants who participated in the study are girls and the 138 (54.5%) were boys. The ages of the mothers vary from 18-45 and their average is 26.63 ± 0.29 years pld. Nearly half (49.3%) of the mothers are graduated from primary school and almost all of them (96.8%) are housewives.

The average family number is 2.68±0.06, varying from 2 -4 and 58.3% of the families are nucleus families comprised of father, mother and child.

The latest child of 42.3% of the mothers are also their first child. The ratio of the mothers who have 2 or moreyear intervals of between their two pregnancy periods is 41.7% while the ratio of the others having less than a 2 year-interval is 15.9%. The average of interval time is 52.8 ± 2.4 months.

While the mothers were supposed to breastfeed their babies as soon as they gave birth, the ratio of the mothers who did that was found to be 50.1%. The ratio of the mothers who breastfed in the first 1 or 2 h was 35.9% while the ratio of the mothers who did that later than 2 h was 14.0%. In a similar study carried out by Yucecan et al. (1992), it was found that the ratio of the mothers who breastfed just after the birth was 52.8% while that ratio was 24.0% among the mothers who breastfed 2 or 6 h later than the firth. In that study it was also found that some mothers (10.5 %) waited for three praying-call time to pass as a result of a superstitious religious belief. In our study the mothers didn't follow that superstitious belief and 86.0% of them breastfeed their babies in the first two hours. In another study, Ozturk et al. (1997) found that 131 babies (74.5%) were breastfed in the first hour following the birth. In some other studies, Cetinkaya et al. (1999) that ratio as 59.0 % and Onay (2005) found that 68.11% of the participants breastfed their babies just after the birth. In our study, the ratio of the mothers who breastfed their babies just after the birth (50.1%) is lower than the ratios in the other studies.

Another finding in the study was that 89.0% of the mothers had given colostrums, while 7.2% of them hadn't. The other 3.8% said that they didn't remember if they had done that or not. The relationship between giving colostrums and the education level was found to

be significant (p<0.05). It was also found that 79.7% of the mothers had chosen breast-feeding as the first nutrient to their babies in the wake of the birth. The relationship between giving colostrums and mother education level was found to be significant statistically (p<0.05) : 97.5% of the mothers who were graduated from high school or university were found to give colostrums while 79.7% of the mothers who were literate or illiterate were found to do that. The relationship between giving colostrums and other variables such as mother age, the order of the child in family and the number of children was found to be insignificant (p>0.05). In some similar studies, the ratio of the mothers' giving colostrums was as follows: 93.3% (Cetinkaya *et al.*, 1999) and 93.1% (Onay, 2005).

The breakdown of the first food given by mothers to the babies is given in Table 2.

Table 2: The breakdown of the first food given by mothers to the babies

The first food	f	%
Breastmilk	275	79.7
Water with sugar	28	8.1
Baby food	23	6.7
Water	15	4.3
Others (cows' milk, date, etc.)	4	1.2
Total	345	100.0

As is seen from the table, 79.7% of the mothers breastfed their babies, while 8.1% of them gave water with sugar, 6.7% gave baby food, 4.3% gave water and the other 1.2% fave cow milk as the first food (Table 2). In a similar study conducted on 580 mothers, Toksoz et al. (1991) found 43.9% gave breastmilk, 36.5% gave water with sugar, 8.1% gave water and 11.3% gave animal milk or baby food as the first food. In our study, the ratio of breast-feeding is higher (79.7%), while the others were lower: water with sugar is 8.1%, water is %4.3 and animal milk is %1.2. In another study conducted by Ok and Genc (1992), 51.2% of the mothers said that they had given their babies breastmilk as the first food, while 15.9% said they gave water, 5.7% said they gave water with sugar and 26.8% said other things (e.g. I don't know; baby food, etc.). Ozturk et al. (1997), also found that 71.4% of the mothers had given breastmilk as the first food while 22.3% had given water with sugar and the other 2.9% had given baby food. In another study conducted by Dalgic et al. (1998), it was found that 90.2% mothers had breastfed their babies, 4.6% had given water with sugar and 3.4% had given water and the other 1.7% had given baby food to their babies as the first food. This finding is higher than the one in ours (79.7%). Similarly, in a study done in Kemalpasa, Izmir, Gunay et al. (2003) found that 81.6% of the participants with 6-12 month-old babies had firstly breastfed their babies and Onay (2005) also pointed out that 94.1% of the participants had given their babies breastmilk as the first food.

The relationship between the mothers' giving their babies breastmilk or other nutrients (water with sugar, water, baby food and cow milk) as the first food and some other variables such as mother age, the order of the breastfed child in family and the number of children was found to be insignificant (p>0.05).

As a result of the study, it was also found that the frequency of breast-feeding was found to vary as follows: 45.8% of the mothers breastfed when their babies needed, 40.3% of them did that when their babies cried and the other 13.0% did breast-feeding according to a scheduled timetable. The ratio of the mothers who did not breast-feeding was 0.9%. The relationship between breast-feeding frequency and other variables such as mother age, the order of the child in family and the number of children was found to be insignificant (p>0.05) but frequency and mother education level was found to be significant statistically (p<0.05) in that 16.3% of the mothers graduated from elementary school breastfed their baby in accordance with a schedule whereas this ratio was much lower among the mothers who had little or no school education and the ones graduated from high school or other higher schools (respectively 3.4% and 7.5%).

The findings related with whether the mothers are still breast-feeding and how longer they will go on breast-feeding are in the Table 3.

As is seen from the Table 3, 79.1% of the mothers said "Yes" and the rest (20.9%) said "No" to the question "Are you still breast-feeding?. Another finding is that more than a half of the mothers (58.6%) said that they would continue breast-feeding for nearly 19-24 months. In a study conducted by Toksoz *et al.* (1991), the relationship between the education level of the mothers and the envisaged breast-feeding period was found to be significant (p<0.001), in that 27.2% of the mothers graduated from secondary and higher schools stated that they wanted to breastfeed their babies for 4-6 months. Onay (2005), however, found that there was a statistically insignificant relationship between some variables and their envisaged breast-feeding time (p>0.05).

As regards the mothers' reasons for not breast-feeding, 47.2% of the mothers cited delactation as the reason while 31.9% of them said the breast-feeding time was enough according to them. In a study conducted on the breast-feeding habits of nurses, Bagci and Egemen (1991) found that 93.0% of the participants had breastfed their babies and that 3.0% of the ones who had not breastfed their babies said that it was because of their health problems while 4.0% said their job obligations were the reason for their not breast-feeding. In our study, the ratio of the mothers who had not breastfed because of their health problems was found to be 5.6%, while there was no mother who had not breastfed because of their job obligations. In a similar study, Genc *et al.* (1998) found that the mothers gave

Table 3:	The breakdown of the findings i	related	with whether the
	mothers are still breast-feeding	and I	how longer they
	will go on breast-feeding		
The State	e of Breast-feeding	f	%

The State of Breast-feeding	t	%
Still breast-feeding	273	79.1
Not breast-feeding	72	20.9
Total	345	100.0
How long they will keep breast-feeding		
<u><</u> 6 months	6	2.2
7-12 months	30	11.0
13-18 months	39	14.3
19-24 months	160	58.6
24 months <	2	0.7
As long as babies need it	36	19.2
Total	273	100.0

Tabe 4: The breakdown of the durations in which the infants were given only breastmilk

were given only breastnink				
Only breastmilk	f	%		
Less than 4 months	93	27.0		
4-6 months	238	69.1		
7-12 months	14	4.1		
Total	345	100.0		

Average $(\overline{X} \pm S_{\overline{x}}) = 4.5 \pm 0.8$

different reasons for not breast-feeding: 47.2% said the child gave it up, 23.0% said the amount of breastmilk was insufficient, 5.7% said they became pregnant, another 5.7% said they had some health problems, 4.6% said it was time to give it up, 1.2% said they had some teat problems and another 1.2% said they were using contraceptive methods but 8.0% gave no reasons for stopping breast-feeding. Onay (2005), also found, in a study carried out in Konya province, that 53.6% of the mothers cited delactation as the reason for stopping breast-feeding, 14.2% said the child did not want it, 10.7% said it was time to stop it and another 10.7% said they became pregnant. In this study, the ratios are respectively as follows: 47.2%, 6.9%, 31.9% and 5.6%.

The breakdown of the durations in which the infants were given only breastmilk is given in Table 4.

In the analyses of the table, we see that more than a half of the participants (69.1%) had breastfed their infants between 4-6 months, 27.0% of them did that less than 4 months and 4.1% of them for 7-12 months. The average of breast-feeding time without any additional food was found to be 4.5±0.8 months (Table 4). Michaelsen et al. (1994) found that 60.0% of the babies had only been breastfed in the first 3 months while 10.0% of them did that until the first five months. In another study by Kahraman et al. (1994) found that at the end of the first month, the third and the sixth months following the birth, the ratios of the babies breastfed without any additional food were respectively as follows: 77.9%, 56.2% and 11.9%. Luleci et al. (1997) found that the average of the babies breastfed without any additional food was 3.3±1.8 months. In a similar study, Onay (2005) found that the majority of the participants (60.1%) had breastfed their babies without any

additional in the first 4 months. The second group preceding them was the mothers (34.6%) who did that between 4-6 months. In our study the mothers who had breastfed their babies in the first 4-6 months made up the majority of the participants (69.1%).

The statistical analyses of the relationship between the mothers' giving only breastmilk to their babies and such variables as mother age, education level, the numbers of children and the order of the breastfed baby among the siblings, it was found that there was an insignificant relationship between them (p>0.05).

The breakdown showing the data about the times whether the babies started to get additional food or, if not, when they would start that is given in the following Table 5.

As is seen from the Table 5, majority of the mothers (69.3%) said that they had started to use the additional food while the rest (30.7%) said they hadn't. In the same table, it was clear that 73.6% of 239 mothers who were using the additional food stated to do that in the first 4-6 months, 17.2% did that before the fourth month and 9.2% did that after the sixth month. The average time of the mothers for beginning to support their babies with additional food was found to be 5.1±0.1 month. As for the mothers who hadn't started to give additional food yet, the findings were as follows: 93.4% of 106 mothers in this group said that they were planning to start giving additional in the fourth or sixth months, while 3.8% of them said they would do that before the fourth month and 2.8% said they would do that after the sixth month. The results of the study by Ok and Genc (1992) revealed that the ratio of the babies in and below the fourth month who had started to take additional food was 40.5% and that of those who started to take it between the 4th and 6th months was 26.3% and the ratio of the babies who started to take additional food after 7th and 9th months was 2.4%. As is seen from the figures, the ratio of the babies who started to take additional food before they get six month old was 66.8% and this finding is rather lower than the ratio of the same classified group in our study, which we found as 90.8%. In another study by Onay (2005), a finding related with the babies who started to get additional food at the end of the sixth month was 95.4%, which was similar to ours.

In this study, nearly half of the mothers (53.6%) were found to give the additional food to their babies with a spoon, 10.1% of them with a baby-bottle and 5.3% of them using the both.

The findings related with the times whether the mothers started to give their babies home-made food or, if not, when they would start that is given in Table 6.

As a result of the analyses of the data in Table 6, it is seen that more than a half of the participants (57.7%) said "No" to the question "Has your baby started to get the food you prepare for yourself yet?", while the rest (42.3%) said "Yes". 69.2% of 146 mothers who said

not, when they we	buid start that	
Did they start to get		
additional food?	f	%
Yes	239	69.3
No	106	30.7
Total	345	100.0
If yes, when?		
Before 4 months	41	17.2
4 6. months	176	73.6
After 6 months	22	9.2
Total	239	100.0
Average (X	\pm S $_{\overline{x}}$) = 5.1 \pm 0.1 ay	
If no, when will they start ?	,	
Before 4 months	4	3.8
4 6. months	99	93.4
After 6. months	3	2.8
Total	106	100.0

Table 5:	The	breakdow	n s	showing	the	data	about	the	time	es
	whet	her the ba	abie	s started	to	get ad	ditional	food	or,	if
	not, \	when they [,]	wou	ld start th	nat					

Table 6:	The breakdown of the findings related with the times
	whether the mothers started to give their babies home-
	made food or, if not, when they would start that

Did they start to get		
home-made food?	f	%
Yes	146	42.3
No	199	57.7
Total	345	100.0
lf yes, when		
Before the 4. month	-	-
Between the 4 6. months	101	69.2
After the 6. month	45	30.8
Total	146	100.0
Average ($\overline{\mathbf{X}} \pm \mathbf{S}_{\overline{\mathbf{X}}}$) = 5.4±0.20	
If no, when will they start to get it	?	
Before the 4. month	11	5.5
4 6. months	109	54.8
After 6. month	79	39.7
Total	199	100.0

"Yes" to that question mentioned the fourth and sixth months as the times their babies had begun to take home-made food and 30.8% of them said they had begun giving it after the first sixth month. The average time for the babies' starting to get homemade food was found to be 5.4 ± 0.20 . More than a half of the other 199 mothers (54.8%) who said their babies hadn't started to take home-made food yet said that they would do that in the 4th or the 6th month.

Conclusion and recommendations: This study was conducted at the local hospitals of Aksehir, Konya, with an aim to determine the breast-feeding behaviors of the volunteered 345 mothers who had 0-24-month-old babies.

According to the findings of the study, 157 (45.5%) of the babies are girls and 138 (54.5%) of them are boys. The ages of the mothers range from 18-45 and their age medium is 26.63 ± 0.29 . Nearly half of the participants

(49.3%) are graduated from primary school and almost all of them (96.8%) are housewives. The average of family members is 2.68 ± 0.06 and it varies from 2-4. The ratio of the mothers who breastfed their babies just after the birth is 50.1% and it was also found that 89.0% of the mothers had given colostrums to their babies. Another finding of the study is that 79.7% of the mothers had given to their children breastmilk, 8.1% gave water with sugar, 6.7% gave baby food, 4.3% gave only water and 1.2% gave cows' milk as the first food. The average of breast-feeding without any additional food is 4.5 ± 0.8 month. 69.3% of the mothers said that they had started to give additional food while 30.7% of them said they hadn't.

In order for the newly-born babies to survive in the new surrounding they were born into, they must be fed with sufficient amounts of nutrients both in quality and quantity. The ideal food for them is undoubtedly the breastmilk with its unique properties provided by nature. The prospective mothers are recommended to be educated on the benefits of breast-feeding during their pregnancy period through the help of the medical staff, particularly the nurses and the midwives. The mothers should also be given some further education before and after bearing a baby. Moreover, the written and visual media should also contribute to the awareness of "breast-feeding for a long time" by covering a sufficient deal of space in their means.

REFERENCES

- Bagcı, T. and A. Egemen, 1991. Hemsirelerin Kendi Bebeklerini Anne Sutu ile Besleme Durumları. Beslenme ve Diyet Dergisi. J. Nutr. and Diet., 20: 181-186.
- Baumslag, N., 1991. Anne Sutu ile Beslenme Egilimleri ve Etkileyen Etmenler. Cocuk Saglıgı ve Hastalıkları Dergisi, 34: 321-344.
- Coskun, T., 2003. Anne Sutu ile Beslenme, Katkı ve Pediatri Dergisi, Sosyal Pediatri II, 25: 163-202.
- Cetinkaya, F., V. Senol, R. Celer, A. Bebek, and Y. Ozturk, 1999. Kayseri'de Kentsel Alanda 12-36 Aılık Cocuklarda Anne Sutu Alma Durumu. Cocuk Saglıgı ve Hastalıkları Dergisi, 42: 375-388.
- Dalgıc, N., S.ve Hızel and M.R. Kose, 1998. Ankara'nın On Merkez Ilcesinde Anne Sutu Ile Ilgili Bilgi, Tutum ve Davranıslarının Incelenmesi. A.U. Tıp Fakultesi Mecmuası, 51: 137-143.
- Genc, M., Gunes and E. Pehlivan, 1998. Bebeklerimizi Nasıl Buyutuyoruz?. Turgut Ozal Tıp Merkezi Dergisi. 5 (2,3). Sy 170-175, Malatya.
- Gunay, I., G. Mermer, N. Mermer, T.ve Gunay and T. Oguz, 2003. Kemalpasa Ilce Merkezinde Emzirme Durumu. II. Ulusal Ana Cocuk Saglıgı Kongresi. Program ve Ozet Kitabı, Istanbul.
- Kahraman, H., S. Ozsan, I. Koporal, A.ve Ecevit and M.K. Caglar, 1994. Anne Sutu ile Beslenme ve Altı Aylık izlem Sonucları. Cocuk Saglıgı ve Hastalıkları Dergisi, 37: 139-146.

- Luleci, N., A. Egemen and A. Mandıracıoglu, 1997. Turkiye'nin Batısında Bir Yerlesim Yerinde 0-24 Aylık Cocuklarının Anne Sutu Ile Beslenme Durumu. V. Halk Saglıgı Gunleri (Beslenme ve Yasal Durum). 8-10 Eylul, Suleyman Demirel Universitesi Tıp Fakultesi Halk Saglıgı Anabilim Dalı, Isparta.
- Michaelsen, K.F., P.S. Larsen and B.L. Thomson, 1994. The Copenhegan Cohart Study on Infant Nutrition and Growth. Breast-Milk Intake, Human Milk Macronutrient Content and Influencing Factors, Beslenme ve Diyet Dergisi, 23: 600.
- Ok, S. and G. Genc, 1992. Saglıklı Cocuk Poliklinigine Basvuran Annelerin Anne Sutu Verme Egilimi ve Buna Etki Eden Faktorlerin Incelenmesi. Ege Universitesi Hemsirelik Yuksekokulu Dergisi, 8: 1, sy 23-30.
- Onay, D., 2005. Bebegi Olan Annelerin Anne Sutu Konusundaki Bilgileri ve Davranısları. Ankara Universitesi Ev Ekonomisi (Beslenme Bilimleri) Anabilim Dalı Doktora Semineri (Yayınlanmamıs). Ankara.
- Ozturk, M., F. Oktem and M. Dincturk, 1997. Isparta Yedisehitler Saglık Ocagı Bolgesindeki 0-24 Aylık Bebek ve Cocuklarda Anne Sutu Alma Durumu. V. Halk Saglıgı Gunleri (Beslenme ve Yasal Durum). 8-10 Eylul, Suleyman Demirel Universitesi Tıp Fakultesi Halk Saglıgı Anabilim Dalı, Isparta.

- Ozatay, B., 1994. Ankara IIi Aktepe Gecekondu Bolgesinde 1991 Yılında Dogum Yapan Annelerin Anne Sutu Konusunda Bilgi ve Davranıslarının Incelenmesi. Hacettepe Universitesi Saglık Bilimleri Enstitusu. Halk Saglıgı Bilim Uzmanlıgı Tezi (Yayımlanmamıs), Ankara.
- Toksoz, P., V. Ozkaynak, M. Ertem and E. Iclin, 1991. Emzirme IIe IIgili Uygulamalarda Annenin Egitim Duzeyinin Rolu. Beslenme ve Diyet Dergisi. J. Nutr. and Diet., 20: 171-179.
- Tuncel, E., C. Dundar, S.ve Canbaz and Y. Peksen, 2006. Bir Universite Hastanesine Bavuran 0-24 Aylık Cocukların Anne Sutu ile Beslenme Durumlarının Saptanması. C.U. Hemsirelik Yuksekokulu Dergisi, 10, sy 1-6.
- Yucecan, S., G. Pekcan, E. Akal, G. Eroglu, S. Acık, N.ve Rakıcıoglu and M. Tayfur, 1992. Ailelerin Cocuk Beslenmesi Konusundaki Bilgi Duzeyleri. I. Ulusal Beslenme ve Diyetetik Kongresi. Hacettepe Universitesi Saglık Teknolojisi Y.O. Beslenme ve Diyetetik Bolumu. Bildiri Ozeti.
- WHO/Protecting, Promoting and Supporting Breastfeeding, 1989. The Special Role of Maternity Services. A joint WHO/UNICEF Statement. Geneva: WHO.