

Awareness and Attitudes of Health Workers About Breastfeeding and Baby Friendly Hospital Practices

Sağlık Çalışanlarının Emzirme ve Bebek Dostu Hastane Pratikleri Açısından Farkındalık ve Tutumları

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This study was presented as an oral presentation in '1st International Congress of Breastfeeding Reality', 30th September-3rd October 2019, Ankara, Turkey.

ABSTRACT Objective: Baby Friendly Hospital Initiative (BFHI) programme was developed to train health workers, to promote and support breastfeeding. Healthcare providers play a key role in the beginning and continuity in breastfeeding. This study was carried out to determine the knowledge and awareness of health workers about breastfeeding and BFHI. **Material and Methods:** This descriptive study was carried out in 4 different hospitals among health workers (residents, nurses, midwives and specialized physicians). An interview with a structured questionnaire was applied to health workers via face to face. **Results:** Of 269 participants, 143 (53.1%) were residents, 72 (26.7%) were nurses 54 (20.0%) were specialized physicians. Of all participants 39.3% had training on breastfeeding at their institution. Almost half of the health workers knew the definition of Baby Friendly Hospital and 21.6% of them knew Code of Marketing of Breast Milk Substitutes. Knowledge about baby friendly hospital initiative and international code of marketing of breast milk substitutes was significantly lower among residents than specialist and nurses. Of all participants, 51.7% felt themselves proficient about breastfeeding. Feeling proficient was significantly high among nurses. Requesting training on breastfeeding was 74.7% among all participants and residents requested training about breastfeeding more than two other professions. **Conclusion:** Our study showed that most of the health workers did not have proper training about breastfeeding and BFHI. There were significant differences in the level of awareness between professions. Curriculum of the medical schools and in-service trainings of health workers should be improved in relation to BFHI and breastfeeding practices.

ÖZET Amaç: Bebek Dostu Hastane Girişimi programı emzirmenin başlatılması ve sürdürülmesi için sağlık çalışanlarının eğitilmesi için geliştirilmiştir. Sağlık çalışanları emzirmenin başlatılması ve devamında anahtar rol oynamaktadırlar. Çalışmamızın amacı, sağlık çalışanlarının anne sütü ve emzirme hakkındaki bilgi düzeyi ve farkındalıklarını saptamaktır. **Gereç ve Yöntemler:** Çalışmamız tanımlayıcı bir çalışmadır. Dört farklı hastanede sağlık çalışanları (asistan doktor, hemşire, ebe, uzman doktor) arasında yapılmıştır. Sağlık çalışanlarına yüz yüze görüşme ile yapılandırılmış bir anket uygulanmıştır. **Bulgular:** İki yüz altmış dokuz katılımcının 143 (%53,1)'ü asistan doktor, 72 (%26,7)'si hemşire, 54 (%20,0)'ü uzman doktor idi. Katılımcıların %39,3'ü çalıştığı kurumda emzirme eğitimi almıştır. Sağlık çalışanlarının neredeyse yarısı Bebek Dostu Hastane kavramını, %21,6'sı Uluslararası Mama Kodu'nu bilmekteydi. Bebek dostu hastane girişimi ve uluslararası mama kodunu bilme oranları asistan doktorlarda, hemşire ve uzman doktorlara oranla daha düşük idi. Katılımcılardan %51,7'si kendini emzirme konusunda yeterli görmekteydi, bu oran hemşirelerde belirgin oranda yüksek idi. Tüm katılımcılar arasında emzirme konusunda eğitim almayı isteme oranı %74,7 idi, asistan doktorların bu konuda eğitim isteme oranları diğer iki gruba göre daha yüksek idi. **Sonuç:** Çalışmamızın sonuçlarına göre sağlık çalışanları emzirme ve bebek dostu hastane girişimi konusunda düzenli eğitim almamaktadırlar. Sonuçlarımıza göre meslek grupları arasında farkındalık düzeylerinde anlamlı farklılıklar bulunmaktadır. Tıp fakültelerinin eğitim müfredatı ve sağlık çalışanlarının hizmet içi eğitimleri, emzirme pratikleri ve bebek dostu hastane girişimi uygulama açısından geliştirilmelidir.

Keywords: Breastfeeding; baby friendly hospital initiative; health workers

Anahtar Kelimeler: Emzirme; bebek dostu hastane girişimi; sağlık çalışanları

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Peer review under responsibility of Türkiye Klinikleri Journal of Pediatrics.

Received: 15 Dec 2019

Received in revised form: 01 Jun 2020

Accepted: 16 Jun 2020

Available online: 17 Sep 2020

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Every infant have the right to have a healthy start in life with breastfeeding. The initiation and maintenance of breastfeeding after birth is crucial to increase breastfeeding rates.^{1,2} According to Turkish Population and Health Survey 2018, 86% of the newborns were breastfed in the first day after birth, and 42% of them had prelacteal feeding. Exclusively breastfeeding rates were 45% in the 3rd month, and 14% in the 5th month.³

The Baby Friendly Hospital Initiative (BFHI) was launched in 1991 by UNICEF and the World Health Organization, to support breastfeeding in all maternity services. A maternity facility can be designated 'baby-friendly' when it implements ten steps for successful breastfeeding including Code of Marketing of Breast Milk Substitutes (The Code). One of the 10 steps in this initiative is to have a written infant feeding policy that is routinely communicated to staff and parents. Controlling the knowledge, competence and skills of the staff to support breastfeeding is required.^{4,5} Healthcare providers play a key role in the beginning and continuity of the correct applications in breastfeeding and "Baby Friendly Hospital" criteria in the society.⁶⁻⁹ In controlled studies, it was seen that training of health workers about BFHI tools increases their knowledge scores and also exclusive breastfeeding rates.^{10,11} Therefore it is necessary to determine the level of awareness and attitudes among health workers, and take actions according to the findings.

The aim of this study was to evaluate the knowledge, awareness and attitudes about breastfeeding and BFHI among health workers in 4 different health centers.

MATERIAL AND METHODS

This descriptive study was carried out in June 2019 among 4 different hospitals; Istanbul University Istanbul Medical Faculty, Marmara University Medical Faculty, Health Science University Okmeydanı Training and Research Hospital and Sadi Konuk Training and Research Hospital. Residents, nurses, midwives and specialized physicians were the participants. Nurses and midwives were included in one group and named as nurses. All the 4 hospitals were baby friendly hospitals.

A structured questionnaire consisting of 21 items about sociodemographic features (profession, date of graduation, year in profession, age, marital status), breastfeeding and baby friendly hospital practices was formed. Definition of baby friendly hospital was asked with an open-ended question. The answers supporting the newborn for breastfeeding, helping the mother to breastfeed, providing breastfeeding counselling to the mother, not allowing formulas to the newborn were accepted as the right answers. We asked the participants if they knew The Code, and the answer was yes or no. If the answer was yes one should answer the next question. The next question was "Which is right about The Code?" a) It means giving free formulas to newborns at the hospital, b) Not allowing marketing and advertising the formulas at hospitals, c) Giving the formulas only sold at the pharmacies, d) I do not have an opinion. Whether they have received training on breastfeeding policies in their institution, where they got their information about breastfeeding practices, where should the newborn sleep, how often should the mother breastfeed her baby, if it is necessary or not to give water to babies who are exclusively breastfed in the first 6 months, what is the right way to give the breastmilk if the baby doesn't latch the breast, when to start complementary feeding for babies who are exclusively breastfed, if the participant felt sufficient in terms of breastfeeding knowledge level or not, would the participant like to receive training at the institution about breastfeeding or not, were asked with the questionnaire. A pilot study was applied among 20 participants.

This study was planned in accordance with the World Medical Association Declaration of Helsinki and ethical approval (48670771-514.10 numbered and 11/06/2019 dated) was taken from Okmeydanı Training and Research Hospital. The data were collected via face to face interview through this questionnaire.

The data was analyzed via Number Cruncher Statistical System (NCSS) 2007 Statistical Software (Utah, USA) package program. While evaluating the study data, Shapiro Wilk test and box plot charts were used for descriptive statistical methods (mean, standard deviation, median, frequency, ratio) as well as

for the normal distribution of variables. For evaluating variables and to compare qualitative data Pearson chi-square test was used and post-hoc tests were made based on adjusted standardized residuals. P value <0.05 accepted as significant.

RESULTS

Of 269 participants, 143 (53.1%) were residents, 72 (26.7%) were nurses, 54 (20.0%) were specialized physicians (Table 1). The ages of participants were between 23-61 years (mean 31.5±7.1 years), times spent in profession were changing between 1-37 years (mean 7.5±3.7 years).

Of 269 participants 39.3% declared that they had proper training at their institution about breastfeeding and breast feeding policies. At university hospitals this ratio was 51.0%, and at state 25.9%. Between the residents and specialization of physicians (n=197) the ratio of having breastfeeding education during undergraduate training, by themselves, breastfeeding counselling course, during postgraduate training were 39.8%, 26.4%, 16% and 15.6% respectively (Table 2).

Participants' answers ratio about newborn's sleep with mother in the same room, breastfeeding on demand, offering no water during exclusive breastfeeding, exclusive breastfeeding period at the first 6 months of age, starting complementary feeding at 6 months of age were 91.8%, 64.7%, 94.8%, 97% and 93.7% respectively (Table 3).

Of all participants, 149 (55.4%) knew what "BFHI" means. Seventy six (28.3%) participants told

TABLE 1: Distribution of health professionals (n=269).

	n	%
Nurses	72	26.7
Resident and specialized physicians (total)	197	73.1
Pediatrics	101	51.2
Family health	27	13.7
Internal health	15	14.8
Orthopedics and traumatology	10	5.0
Hyperbaric medicine	10	5.0
Gynecology and obstetrics	9	4.5
Ear-nose-throat disease	6	3.0
Others	19	9.6

TABLE 2: Way of learning breastfeeding practices (n=197).

	n	%
During undergraduate training	101	37.5
By themselves (reading, from friends etc)	104	38.7
Breastfeeding counselling course	43	16.0
During postgraduate training	42	15.6
No answer	14	5.2

TABLE 3: Participants' knowledge about rooming-in and breastfeeding practices.

	n (%)
Newborn's sleep accommodation	
With mother in the same room	247 (91.8%)
Other	22 (8.2%)
Breastfeeding frequency	
On demand	174 (64.7%)
Every hour	18 (6.7%)
Every two hours	32 (11.9%)
Eight times a day	45 (16.7%)
Offering water to the exclusive breastfeeding	
No	255 (94.8%)
Yes	14 (5.2%)
Way of feeding for expressed milk	
By bottle	81 (30.1%)
With cup or spoon	184 (68.4%)
No answer	4 (1.5%)
Exclusive breastfeeding period	
6 months	261 (97.0%)
Other	8 (3.0%)
Time of starting complementary feeding	
At 6 th month	252 (93.7%)
At 4 th month	12 (4.5%)
No opinion	5 (1.8%)

that they knew The Code. But only, 58 knew the code right. Knowledge about BFHI was different between three profession groups (p=0.002) (Table 4). It was significantly lower among residents than specialists and nurses. There was no difference between nurses and specialists. Knowledge about the Code was different among three professional groups (p=0.001) (Table 4). This ratio was significantly lower among residents than specialist and nurses. There was no difference between nurses and specialists. Feeling proficient in terms of breastfeeding practices was

TABLE 4: Knowledge about BFHI and the code.

	Profession			*p
	Specialist (n=54)	Resident (n=145)	Nurse (n=72)	
Knowledge of BFHI	33 (61.1%)	66 (45.5%)	50 (69.4%)	0.002*
Knows "The Code"	17 (31.5%)	27 (18.6%)	32 (44.4%)	<0.000*

*Pearson Chi-square test; *Residents versus specialist and nurse-midwives.

TABLE 5: Feeling proficient about breastfeeding and request education or not.

	Profession			*p
	Specialist (n=54)	Resident (n=145)	Nurse (n=72)	
Feeling proficient about breastfeeding practices	30 (55.6%)	54 (37.8%)	55 (76.4%)	<0.000*
Eager for training about breastfeeding	34 (63.0%)	117 (83.6%)	53 (73.6%)	0.008*

*Pearson Chi-square test; *Residents versus specialists and nurses.

TABLE 6: Subgroup analysis by profession groups.

	Profession		
	Specialist-Resident	Specialist-Nurse	Resident-Nurse
Knowledge of BFHI	0.050*	0.329	<0.000*
Knows "The Code"	0.052	0.140	<0.000*
Feeling proficient about breastfeeding practice	0.024*	0.014*	<0.000*
Eager for training about breastfeeding	0.002*	0.201	0.085

Post hoc p values.

different among three professions. It was significantly low among residents than specialists and nurses. There were no difference between nurses and specialists ($p=0.001$) (Table 5). Subgroup analysis by profession groups were given in Table 6.

DISCUSSION

In our descriptive cross-sectional study, most of the health workers at tertiary hospitals did not have enough knowledge and awareness about breastfeeding and baby friendly hospital initiative. Some health workers learned about breastfeeding by themselves (38.7%) or during their undergraduate training (37.5%). In systematic reviews, studies showed that healthcare providers were playing a critical role in promotion and support of breastfeeding therefore training of health workers is crucial in this respect.^{12,13}

WHO revised 'Ten steps to successful breastfeeding' in 2018. Before this revision to have a writ-

ten breastfeeding policy was enough, but now establishing ongoing monitoring and data systems in order to control the execution of this policy is essential.¹⁴ All hospitals in our study were baby friendly hospitals. Our study shows that to monitor the system and staff's competency is crucial.

Breastfeeding is traditionally a common practice in Turkey, but exclusive breastfeeding rates are low for the first 6 months of life. In our study, health workers mostly believed (94.8%) that exclusive breastfeeding was enough in the first 6 months of life. They also knew the rooming-in practices and the right time to begin complementary feeding. The awareness of health workers about exclusive breastfeeding rates in our study were better than in many studies. In a study from Nigeria which was carried out among 250 health workers, only 19.2% of the participants believed there is no need apart from breast milk in the first 6 months.¹⁵ In Schanler et al's study, it

was found out that only 65% of the pediatricians offered exclusive breastfeeding in the first six month of life.¹⁶

Our study demonstrated that half of the health workers knew the BFHI, and only 21.6% was knowledgeable about The Code. In USA 72% of pediatricians were unfamiliar of BFHI.¹⁶ In a study from Canada, only 16.9% of the health workers had good knowledge about BFHI.⁹ Awareness about Baby Friendly Hospital Initiative was 10% among 327 health workers in Georgia.⁸ In Pakistan, 30.4% of health workers were knowledgeable about the International Code, 90% of health workers had never heard the code in West Africa.^{17,18}

According to our results there were significant differences in the level of awareness between professions. Residents had the least awareness rate about these two items, nurses-midwives had the highest. In a study from USA, it was reported that younger pediatricians were less confident than older pediatricians in managing breastfeeding problems.¹⁹ In another study it was seen that pediatricians have an interest in breastfeeding but mostly they delegated the practical aspects of breastfeeding to midwives.²⁰

In our study, nearly half of the health workers felt themselves proficient about breastfeeding. Among health workers, residents had the lowest rate, nurses-midwives had the highest rate about feeling proficient. Residents were aware of their limited knowledge that they mostly requested training about breastfeeding.

In our study we evaluated knowledge of health workers about BFHI and breastfeeding practices by a questionnaire. Participants may have given answers which they think it is more acceptable. To reduce this possibility, we asked some open ended questions to minimize this effect. The questionnaires were applied to the participants who were volunteer to attend the study. When we explained the study and invited the health worker to the study some of them did not attend. Nonparticipating health workers may have insufficient knowledge about the subject. So health workers' knowledge may be lower than we measured.

In the systemic review by Singletary et al., it is emphasized that breastfeeding educations are necessary in various school settings.²¹ In our study, gen-

eral knowledge about breastfeeding practices was high but only half of the participants knew about BFHI and The Code.

CONCLUSION

There are not many studies about awareness of health workers in relation with The Code. Knowledge gaps about breastfeeding practices of healthworkers are sometimes ignored while struggling with low breastfeeding rates. It is clear that every maternity service has to have a written breastfeeding policy. But our study showed that it was not enough. As WHO mentioned in the revised form of 'Ten Steps to Successful Breastfeeding'; establishing ongoing monitoring and controlling the staff's competency are also essential. Curriculum and trainings of health workers should be improved in relation to BFHI. In conclusion, according to our findings there is an urgent need to have education on breastfeeding practices at school on health sciences.

Informing

Due to the presence of the name of the journal editor's among the authors, the assessment process of the study was conducted by the guest editor.

Source of Finance

During this study, no financial or spiritual support was received neither from any pharmaceutical company that has a direct connection with the research subject, nor from a company that provides or produces medical instruments and materials which may negatively affect the evaluation process of this study.

Conflict of Interest

No conflicts of interest between the authors and / or family members of the scientific and medical committee members or members of the potential conflicts of interest, counseling, expertise, working conditions, share holding and similar situations in any firm.

Authorship Contributions

Idea/Concept: Gülbin Gökçay, Pinar Yılmazbaş, Perran Boran; **Design:** Pinar Yılmazbaş, Gonca Keskindemirci; **Control/Supervision:** Perran Boran, Gülbin Gökçay; **Data Collection and/or Processing:** Öykü Özbörü, Bahar Kural, İrem Cantürk; **Analysis and/or Interpretation:** Pinar Yılmazbaş, Bahar Kural; **Literature Review:** Pinar Yılmazbaş, Bahar Kural; **Writing the Article:** Pinar Yılmazbaş, Gonca Keskindemirci; **Critical Review:** Gülbin Gökçay, Bahar Kural; **References and Fundings:** Gonca Keskindemirci, İrem Cantürk.

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