

The Attitudes and Practices Among Neonatal Nurses Regarding Breastfeeding Support in The Neonatal Intensive Care Unit During Covid-19

Yenidoğan Hemşirelerinin Covid-19 Pandemisi Sırasında Yenidoğan Yoğun Bakım Ünitesinde Emzirme Desteğine Yönelik Tutum ve Uygulamaları

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Abstract

Background: Neonatal nurses have a main role which include promote and facilitate breastfeeding in the Neonatal Intensive Care Unit (NICU). This study was conducted to determine the practices and attitudes of nurses towards breastfeeding support, in NICU during the Covid-19 pandemics.

Materials and Methods: The study was a cross-sectional descriptive survey design conducted with 252 nurses who were members of the Neonatology Nurses Society. The Data Collection Form, Survey Questionnaire, and the Iowa Infant Feeding Attitude Scale (IIFAS) were used for data collection.

Results: The IIFAS median score of the participants was 70.0 (IQR=9.0). Statistically differences in the IIFAS scores were found according to age ($\chi^2=11.703$, $p=0.008$), education status in nursing ($\chi^2=9.257$; $p=0.01$), and status of attending to international scientific meetings ($Z=-2.360$; $p=0.018$). Participants who were age between 26-30 years ($n=76$, 30.2%), had post-education degree in nursing ($n=32$, 12.7%), and attended to international scientific meetings ($n=47$, 18.6) had higher positive attitudes of breastfeeding. The nurses ($n=126$, 50%) stated that it was difficult to reach mothers in terms of breastfeeding for newborns, and 61.8% of them ($n=156$) stated that they had difficulty initiating the mother-baby attachment process in the NICU.

Conclusions: Although the attitudes of NICU nurses towards breast milk and breastfeeding were at a moderate level in our study, they struggled to support and maintain the lactation and they implemented to a number of supportive feeding practice in NICUs.

Key Words: Covid-19 pandemics, Lactation, Attitude, Practice, Neonatal nurse

Öz

Amaç: Yenidoğan hemşireleri, Yenidoğan Yoğun Bakım Ünitesi'nde (YYBB) emzirmeyi teşvik eden ve kolaylaştıran temel role sahiptir. Bu araştırma, Covid-19 pandemisi sırasında emzirme desteğine yönelik hemşirelerin uygulama ve tutumlarını belirlemek amacıyla yapılmıştır.

Materyal ve Metod: Neonatoloji Hemşireleri Derneği üyesi 252 hemşire ile gerçekleştirilen araştırma kesitsel tanımlayıcı araştırma desenindedir. Verilerin toplanmasında Veri Toplama Formu, Anket Anketi ve Iowa Bebek Besleme Tutum Ölçeği (IBBTÖ) kullanılmıştır.

Bulgular: Katılımcıların IBBTÖ medyan puanı 70.0 (IQR=9.0) idi. IIFAS puanlarında yaşa ($\chi^2=11.703$, $p=0.008$), hemşirelik eğitim durumuna ($\chi^2=9.257$; $p=0.01$) ve uluslararası bilimsel toplantılara katılma durumuna ($Z=-2.360$; $p=0.008$) göre istatistiksel olarak anlamlı farklılık belirlenmiştir. 26-30 yaş arası ($n=76$, %30.2), hemşirelik mezunu ($n=32$, %12.7) ve uluslararası bilimsel toplantılara katılan ($n=47$, 18.6) katılımcıların emzirmeye yönelik tutumlarının daha pozitif olduğu saptanmıştır. Hemşireler ($n=126$, %50) yenidoğan emzirme konusunda annelere ulaşmanın zor olduğunu, %61.8'i ($n=156$) YYBB'de hemşireler anne-bebek bağlanma sürecini başlatmakta zorlandıklarını ifade etmiştir.

Sonuç: Çalışmamızda YYBB hemşirelerinin anne sütü ve emzirmeye yönelik tutumları orta düzeyde olmasına rağmen emzirmeyi desteklemekte ve sürdürmekte zorlandılar ve YYBB'lerde destekleyici beslenme uygulamaları gerçekleştirdiler.

Anahtar Kelimeler: Covid-19 pandemisi, Emzirme, Tutum, Uygulama, Yenidoğan hemşiresi

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Introduction

The World Health Organization (WHO) declared the Covid-19 a pandemic on March 11, 2020 (1). During the pandemic, various infection control measures, including physical distancing and wearing a high-quality mask have been taken to prevent the spread of the virus in the world (2). Healthcare providers have also enforced visitation restrictions to control infection and protect the healthcare providers and patients (3). In the neonatal intensive care units (NICU), those restrictions have also been implemented (4-6). In addition to the policies of health institutions, the frequency and duration of visits in hospitals have been reduced to control SARS-CoV-2 spread (4). This situation caused mother-baby separation in NICUs, unable to properly breastfeed the newborn, delays in the initiation of lactation, or disruption of its continuation (7-9). In a study, parents have reported crucial effects on their ability to visit, care for and bond with their infants due to NICUs visitation procedure during Covid-19 pandemic (4).

World Health Organization (WHO) recommend that breastfeeding should be initiated within the first hour after birth (10). The WHO and the Centers for Disease Control and Prevention emphasize that during the pandemic, mothers with suspected or confirmed Covid-19 should be supported to start, they should be given counseling that the clinical outcomes of breastfeeding significantly outweigh the risks for transmission and infants should be given breast milk by taking hand hygiene or protective barrier measures (11,12).

Neonatal nurses have a main role which include promote and facilitate breastfeeding in NICUs (13). Explaining the benefits of breast milk and providing mothers with breastfeeding support in the lactation process are some of the roles of NICU nurses (14). Moreover, they have the ability to assist the mother and infant with an early introduction to breastfeeding (15). Thus, the nurses need to have a positive attitudes towards the breastfeeding and procedure on how to deal with the support lactation for mother whose newborn hospitalized in NICU during pandemic. In prior studies, nurses have a positive or neutral attitude towards breastfeeding (16). Working lives of neonatal nurses were changed profoundly due to restriction of parental visitation due to COVID-19 pandemic (17). However, there are some studies which evaluate to the effect of visitation policy at the NICU during the Covid-19 pandemic on parents views towards newborn feeding (7, 8), it is little known about neonatal nurses's view, practice, and attitudes towards breastfeeding support in the NICUs during Covid-19 pandemic (17). In this study, it was aimed to determine the practices and attitudes of nurses towards breastfeeding support, which has critical importance in breastfeeding for newborns hospitalized in NICU during the Covid-19 pandemic.

Materials and Methods

Design

A descriptive cross-sectional study was conducted with 252 NICUs nurses. The aim of the present study was to determine

the neonatal nurses' attitudes and practices towards breastfeeding support in the NICU during Covid-19 pandemic.

The primary outcome are attitudes and practices towards breastfeeding support in NICU during Covid-19 pandemic. We also planned to determine which factors related NICU nurses including age, educational status in nursing, experience in NICU (year), shift, number of mothers given breastfeeding support (monthly), number of beds in NICU, level of NICU, participation in national/international scientific meetings effect on attitudes infant feeding as secondary outcomes.

Participants

The population of the study consisted of 1200 neonatal nurses who were members of the Neonatology Nursing Society between May 10, 2021 and June 10, 2021.

Out of this population, 252 nurses who worked in NICU participated. Nurses were eligible to participate in the study if they worked in NICU and worked directly with patients and were not in an administrative position during the Covid-19 pandemic. The exclusion criteria were neonatal nurses (i) not being a staff in the NICU during the Covid-19 pandemic.

Measures

Data collection tools included a data collection form, Survey Questionnaire, and Iowa Infant Feeding Attitude Scale (IIFAS).

The data collection form: The form included 21 questions addressing: sociodemographic characteristics, such as age, working style, and educational status, and information resources on breastfeeding counseling and the number of mothers who were provided counseling.

Survey Questionnaire: The questionnaire comprised 2 parts: the first 21 questions focused on demographic characteristics of the nurses, such as age, working style, and status of education, and information resources on breastfeeding counseling and the number of mothers who were provided counseling, and the second part contained 29 questions, 17 of them was multiple choice, and questions were organized around 3 aspects of care in NICU during Covid-19 pandemic: (1) challenges to maintain lactation, (2) procedures to maintain lactation, (3) nurses' practices for maintaining lactation. Then reviewed by neonatal nurses (n=5), academicians (n=4), and instructors (n=2) and the final form of the survey questionnaire was given. This questionnaire was piloted in eight NICU nurses and no changes were made.

The Iowa Infant Feeding Attitude Scale: This scale was developed by Mora to evaluate attitudes of women towards breastfeeding and the choice of infant feeding method (18). This scale include 17 items and has a 5-point Likert-type with options ranging from "1=strongly disagree" to "5=strongly agree". Nine of the items on the scale are about breastfeeding, and eight are about formula feeding. The items about formula feeding are reverse scored. The total attitude score ranges from 17 (reflecting a positive attitude towards bottle feeding) to 85 points (reflecting a positive attitude towards breastfeeding). Cronbach's alpha internal consistency coefficient was 0.86 for the originally version (18), it was 0.71 for

Turkish version (19) and it was 0.813 for the present study.

Data collection

Data collection tools were created via Google forms. They were sent to members of the Neonatology Nursing Society. No financial or other incentives were offered to participants of this present survey. The introduction text which provided information about the tools, data collection process and privacy were placed in the data collection form. Informed consent was then confirmed by checking a confirmation box. The participants who accepted to include to this research and confirmed informed consent continued to answer the questions.

Statistical Analysis

Data was analyzed by using SPSS Statistics for Windows, Version 24.0 (IBM SPSS Statistics for Windows, Version 24.0. Armonk, NY: IBM Corp). Descriptive statistics (mean, SD, median, min-max values, percentage, and frequency) were used to evaluate the sociodemographic data. The normal distribution of the sample data was checked with the Kolmogorov-Smirnov and Shapiro-Wilk tests. The Mann-Whitney U test (Z-table value) was used to compare the measurement values of two independent groups, and the Kruskal-Wallis H test (χ^2 -

table value) was used to compare the measurement values of three or more independent groups. Bonferroni correction was applied for paired comparisons of variables that yielded a significant difference for three or more groups. A p-value less than 0.05 was considered to be statistically significant.

Results

In the current study, 246 (97.6%) of nurses were female, mean age of them was 30.29 ± 6.76 years. Of the participants, 151 (59.9%) had a graduate degree, 157 (62.3%) had experience in the NICU for less than a year (Table 1).

Table 2 presents the NICU nurses' IIFAS scores according to their characteristics. The IIFAS median score of the participants was 70.0 (IQR=9.0). Differences in the IIFAS scores were found according to age ($\chi^2=11.703$, $p=0.008$), education level ($\chi^2=9.257$; $p=0.01$), and status of attending to international scientific meetings ($Z=-2.360$; $p=0.018$). Participants who were age between 26-30 years, had post education degree in nursing, and attended to international scientific meetings had a higher positive attitudes of breastfeeding.

Table 1. Characteristics of NICU nurses (N=252)

	n	%
Age (year)		
≤25	73	28.9
26-30	76	30.2
31-35	46	18.3
>35	57	22.6
Educational status		
High school	69	27.4
Graduate	151	59.9
Postgraduate	32	12.7
Experience in NICU (year)		
≤1	157	62.4
2-5	33	13.0
6-10	28	11.1
>10	34	13.5
Shift		
Days	64	25.4
Nights	9	3.6
Rotating	179	71
Number of mothers given breastfeeding support (monthly)		
1-5	53	21.0
6-10	59	23.4
11-15	45	17.9
16-20	29	11.5
21-25	12	4.8
>25	54	21.4
Caring for babies of mothers with COVID-19 positive		
Yes	99	39.3
No	153	60.7
Educational topics to support breastfeeding for mothers in NICU*		
Pump breast milk and using breast pump if necessary	214	84.9
Breastfeeding frequency	246	97.6
Breastfeeding position	238	94.4
Breast Milk Storage	245	97.2
Sign of good attachment during breastfeeding	228	90.5
Importance of breast milk	245	97.2
The importance of colostrum	217	86.1
Breast care	194	69.0
Breastfeeding of Covid-19 positive mother at home	174	69.0

NICU: Neonatal Intensive Care Unit

* Multiple choice

Tablo 2. Outcomes of the Iowa Infant Feeding Attitude Scale (N=252)

Variable	n	IIFAS score Median (IQR)	Test* p
Total score	252	70.0 (9.0)	
Age (year)			
≤25 ⁽¹⁾	73	70.0 (8.5)	$\chi^2=11.703^a$ p=0.008** [2-1,3,4]
26-30 ⁽²⁾	76	73.0 (8.8)	
31-35 ⁽³⁾	46	70.0 (8.3)	
>35 ⁽⁴⁾	57	70.0 (10.0)	
Educational level in nursing			
High school-Associate degree ⁽¹⁾	69	69.0 (10.0)	$\chi^2=9.257^a$ p=0.010** [1-2,3]
Graduate ⁽²⁾	151	71.0 (18.0)	
Postgraduate ⁽³⁾	32	72.5 (8.0)	
Experience in NICU (year)			
≤1	157	71.0 (7.0)	$\chi^2=3.322^a$ p=0.345
2-5	33	71.0 (7.8)	
6-10	28	70.0 (7.8)	
>10	34	68.0 (8.0)	
Shifts			
Days	64	70.0 (10.0)	$\chi^2=1.252^a$ p=0.535
Nights	9	69.0 (15.5)	
Rotating	179	71.0 (9.0)	
Number of beds			
≤50	204	70.0 (9.0)	Z=-1.176 ^b p=0.240
>50	48	71.0 (7.8)	
Level of NICU			
Level 1	6	69.0 (6.3)	$\chi^2=6.877^a$ p=0.076
Level 2	24	71.0 (6.4)	
Level 3	192	70.0 (10.0)	
Level 4	30	72.5 (7.5)	
Number of mother provided lactation support (monthly)			
1-5	53	70.0 (10.5)	$\chi^2=3.199^a$ p=0.669
6-10	59	70.0 (11.0)	
11-15	45	72.0 (5.0)	
16-20	29	70.0 (6.5)	
21-25	12	68.0 (16.8)	
>25	54	71.0 (15.3)	
Participation in national scientific meetings			
Yes	82	71.0 (11.3)	Z=-0.019 ^b p=0.985
No	170	70.0 (8.0)	
Participation in international scientific meetings			
Yes	47	68.0 (14.0)	$\chi^2=-2.360$ p=0.018**
No	205	71.0 (8.0)	

NICU: Newborn Intensive Care Unite, ^{1,2,3,4} Significant differences detected by post hoc test (Bonferroni) at the 0.05 level, a=Kruskall-Wallis H test, b=Mann-Whitney U test p**<0.05

A number of supportive feeding procedure were implemented with this population in NICU during Covid-19 (Table 3). The first feed of newborn was breast milk (n=114, 45.2%). Mothers whose babies hospitalized to the NICU should to give up their milk to unit in the first 24 hours (n=130, 51.6%). Mothers were provided with the opportunity to see their babies remotely, via camera or by appointment system (n=147, 58.4%).

Table 3 presents the NICU nurses' responds to Survey Questionnaire. Participant indicated that the initiation of the mother-infant attachment process was even more difficult (n=156, 61.8%), it was difficult to reach mothers for

breastfeeding (n=76, 30.2%), there was a decrease in breastfeeding practices (n=91, 36.1%). 37.7% of participant (n=95) stated that there was a decrease in the number and duration of training on breastfeeding.

During Covid-19, a number of supportive feeding practice were implemented by NICU nurses. The majority of participants made an effort to ensure that mothers deliver breast milk to the NICU (n=201, 79.7%), mothers were given breastfeeding education before hospital discharge by 76.6% of them (n=193). Newborn were discharged when newborn attached to breast good, suck effectively, and the mother could breastfeed the baby by herself effectively.

Table 3. Distribution of NICU Nurses' Attitudes and Practices towards Breastfeeding during Covid-19 (N=252)

Statement	Totally agree	Partially agree	Undecided	Partially Disagree	Totally disagree
	n (%)	n (%)	n (%)	n (%)	n (%)
Challenges to maintain lactation in NICU					
The initiation of the mother-infant attachment process was even more difficult	156 (61.8%)	75 (29.8%)	9 (3.6%)	9 (3.6%)	3 (1.2%)
There has been a decrease in the number and duration of training on breastfeeding	89 (35.3%)	95 (37.7%)	26 (10.3%)	34 (13.5%)	8 (3.2%)
It was difficult to reach mothers	126 (50.0%)	76 (30.2%)	8 (3.2%)	40 (15.8%)	2 (0.8%)
There was a decrease in breastfeeding practices	47 (18.7%)	91 (36.1%)	28 (11.1%)	57 (22.6%)	29 (11.5%)
Newborns had to be fed more formula	34 (13.5%)	82 (32.5%)	32 (12.7%)	70 (27.8%)	34 (13.5%)
Clinical Implications					
The first feed of newborn is breast milk	114 (45.2%)	109 (43.3%)	10 (4.0%)	16 (6.3%)	3 (1.2%)
Mothers whose babies hospitalized to the NICU should to give up their milk to unit in the first 24 hours.	130 (51.6%)	92 (36.5%)	16 (6.3%)	11 (4.4%)	3 (1.2%)
Skin-to-skin contact and support mothers to initiate breastfeeding continues to following rules apply for wearing face masks, hand hygiene.	67 (26.6%)	49 (19.4%)	17 (6.7%)	60 (23.8%)	59 (23.5%)
Mothers are provided with the opportunity to see their babies remotely, via camera or by appointment system.	147 (58.4%)	54 (21.4%)	10 (4%)	21 (8.3%)	20 (7.9%)
Nurses' practices for maintaining lactation in NICU					
I made an effort to ensure that mothers deliver breast milk to the NICU.	201 (79.7%)	41 (16.3%)	8 (3.2%)	1 (0.4%)	1 (0.4%)
I gave a photo to help increase breast milk to mothers who cannot see their babies	126 (50%)	64 (25.4%)	33 (13.1%)	18 (7.1%)	11 (4.4%)
I ensured that the mothers had sufficient knowledge, competence and skills to breastfeed.	167 (66.2%)	66 (26.2%)	11 (4.4%)	6 (2.4%)	2 (0.8%)
I facilitated skin-to-skin contact	82 (32.5%)	67 (26.6%)	21 (8.3%)	46 (18.3%)	36 (14.3%)
I counselled mothers on the use breast pump.	121 (48.0%)	55 (21.8%)	20 (7.9%)	41 (16.3%)	15 (6.0%)
Mothers were given breastfeeding education before hospital discharge	193 (76.6%)	49 (19.4%)	8 (3.2%)	2 (0.8%)	-
Mothers received their first education about breast milk and breastfeeding from the neonatal nurse.	127 (50.5%)	79 (31.3%)	19 (7.5%)	21 (8.3%)	6 (2.4%)
Newborn were discharged when newborn attached to breast good, suck effectively, and the mother could breastfeed the baby by herself effectively	194 (77.0%)	44 (17.4%)	11 (4.4%)	3 (1.2%)	-

NICU: Neonatal Intensive Care Unit

Discussion

This is the first study to report on the use of the IIFAS to describe the attitudes of NICU nurses during Covid-19 who are member of Neonatology Nursing Society in Turkey. This study allowed us to detect which factors related NICU nurses contributed to attitudes infant feeding. The research is also important to show the challenges and facilitators for breastfeeding support of NICU nurses during Covid-19 which causes changes health care deliver in NICU. The main findings obtained in the present research work showed that the attitudes of NICU nurses towards breast milk and breastfeeding were at a moderate level in our study, in which we also determined the supportive breastfeeding practice of neonatal nurses towards infant feeding. In a study on the attitudes of midwifery students towards infant feeding, it was reported that the mean score of the students from the IIFAS was at a moderate level (20). Froh et al. (2017) found that they had a neutral

attitude towards breast milk and breastfeeding, similar to our finding (21). When compared with the literature, outcome of IIFAS in the current study were similar to those of other nursing studies. It is thought that this finding of our study stemmed from the evaluation of NICU nurses' breastfeeding attitudes (BFA) in the Covid-19 pandemics.

The knowledge and attitudes for nurses surrounding breastfeeding is often influenced by many factors such as age, educational status, breastfeeding experiences, and working experience (22-26). In the present study, the scores of those in the 26-30 age group was higher, contrast to studies of Amin (27) and Bernaix et al. (28). This made us think that perhaps the nursing education which update through researches and guidelines would be represented as opportunity to BFA for nursing students when NICU nurses have just graduated from nursing program in the this study.

Hospital workplace where nurses may practice to the nursing staff that possesses a higher level of education (baccalaureate level or higher), and training has been associated with safe, high-quality, and improved patient outcomes (29,30). In this study, NICU nurses with postgraduate degrees were significantly high toward to BFA. Similarly, Hallowell et al. (31) showed that better educated nurses were more likely to support breastfeeding. Moreover, considering that education positively affects neonatal nurses' attitudes towards breast milk and breastfeeding, attending international scientific meetings during pandemics contributed to positively BFA for NICU nurses in our study. The presence of parents, giving to chance to being with their babies at every opportunity are important strategies, can be applied for overcoming parent-infant separation in NICUs (17). However, Farnck et al. (32) showed that one of the parents could visit the NICU for a short time so that the spread of Covid-19 infection could be prevented (32). Due to the single-parent policy, fathers could not often see their babies for weeks. Restricting the presence of parental in NICU could be barrier for parent-infant attachment, parental mental health, and breastfeeding (33). In our study, in their statements about the initiation and continuation of breastfeeding during the Covid-19 period, the nurses stated that it was difficult to reach mothers during this period, the Covid-19 infection made the mother-baby bonding process difficult, the rates of breastfeeding decreased, and that babies were fed on formula more frequently. This finding is supported by other similar studies on breastfeeding and breast milk during the Covid -19 period (8). Providing knowledge on the benefits of breastfeeding or methods for addressing any difficulties encountered, as well as support and assistance to women who are breastfeeding, should be prioritized to strengthen the role of breastfeeding, increase the number of women who choose breastfeeding, and extend the duration of breastfeeding (34, 35). In our study, the nurses spent efforts to reach breast milk, provide the necessary materials such as breast pumps and help for expressing milk, questioned the knowledge of mothers about breastfeeding, did not discharge the mother without making sure that she could breastfeed her baby on her own, and provided breastfeeding counseling for mothers on issues such as expressing and storing breast milk and breast care before discharge. Skin-to-skin contact and kangaroo mother care facilitate breastfeeding as well as improve thermoregulation, blood glucose control, and maternal-infant attachment, and decrease the risk in mortality and severe infection among low birth weight infants (36, 37). Approximately one in four nurses fully agreed on maintaining skin-to-skin contact practice, which makes a great contribution to the lactation process, by taking protective barrier measures such as mask and hygiene, and one out of three nurses helped mothers perform skin-to-skin contact in the NICU at least once. In a study conducted with mothers in NICUs, it was reported that mothers were often not supported for

providing skin-to-skin care for their babies or they were not encouraged to breastfeed soon after birth (3). However, WHO recommend that skin-to-skin contact, breastfeeding, and rooming-in practices can be performed after birth by taking precautions such as washing hands and wearing a mask (38).

A 2005 Cochrane review of support for breastfeeding mothers found that professional support had a significant beneficial effect on exclusive breastfeeding in the first few months after an infant was born (39). In our study, however, NICU nurses had a neutral attitude towards breastfeeding which did not have to signify a lack of a well-established approach in this area, they continued many practices including support mothers to deliver breast milk to the NICU, giving to help increase breast milk to mothers who cannot see their babies, breastfeeding education before hospital discharge. Unlike this finding, studies conducted before the pandemics indicate that very few neonatal nurses actually provide support to mothers about breast milk and breastfeeding (14,32). It is thought that the fact that all of the nurses had a Breastfeeding Counseling Certificate was an effective factor in maintaining lactation.

Limitations

There are has two limitations in current study. First, our results can not be generalized because the sample of our study included 21% of the nurses who were members of the Neonatology Nursing Society in our country. Some factors influencing the response rate of survey may have been related to having workload during pandemics, and more exhausted due to workload. Second, the study only was conducted a quantitative method so that BFA of NICU nurses could be determined Thus, in the future, it is better to investigate the issue deeply via qualitative methods.

Conclusion

Nursing practices that contribute to maintaining lactation such as breastfeeding and skin-to-skin contact in neonatal intensive care units should be applied with zero distance. Although the social distance rule practiced in the new normal is thought to be a major barrier to these practices, in our study, it was concluded that although the neonatal nurses had a neutral attitude towards breast milk and breastfeeding during the pandemics, their practices were found to support lactation.

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Ethical Approval: The study protocol was approved by Gulhane Non-Invasive Research Ethics Review Board (Decision No: 2021/246, Date: May 6, 2021). The participants who accepted to include to this research and they confirmed informed consents. The study was carried out following the principles of the Declaration of Helsinki.

Author Contributions:

Concept: D.S., N.İ.Y

Literature Review: D.S., N.İ.Y

Design : D.S., N.İ.Y

Data acquisition: D.S., N.İ.Y., F.Ç.

Analysis and interpretation: D.S., N.İ.Y., E.S.Ş.

Writing manuscript: D.S., N.İ.Y., D.Y.

Critical revision of manuscript: D.S., N.İ.Y., E.S.Ş., D.Y.

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