**ABSTRACT**

**Objectives:** This study aimed to identify the birth-related experiences and expectations of the men who became fathers for the 1st time.

**Methods:** The research was carried out between March 2020 and March 2021. A qualitative approach using individual interviews was applied using an interview guide consisting of semi-structured open-ended questions. Fathers who were 1st-time fathers and whose spouses had vaginal birth were included in the study.

**Results:** A total of 12 fathers were included in the study. The interview form was analyzed through qualitative thematic content analysis. First, a total of 19 codes were designated. Subsequently, these codes were combined and categorized into four main themes and 15 sub-themes. The analysis brought four main themes into being: (1) Emotional reactions, (2) childbirth experience, (3) expectations, and (4) recommendations for prospective fathers. Prospective fathers were experiencing the emotions such as excitement, happiness, and uneasiness simultaneously. It was found that the fathers who were not allowed to accompany their spouses during childbirth were disappointed.

**Conclusion:** Fathers reported that during childbirth, they expected to get attention from health professionals and be informed about the childbirth process by the health professionals. Thus, it can be recommended that the health professionals not be solely focused on the incident of childbirth but also address the pregnant woman as a whole with her environment and take the fathers’ needs into consideration in this process.

**Keywords:** Fathers, life change events, obstetric delivery

---

**INTRODUCTION**

Pregnancy and childbirth are unique experiences for both prospective mothers and fathers. On the other hand, most studies in relation to this period focused on the relationship between the mother and child and the effects of the father’s support on childbirth. While the studies addressed how father involvement with these practices affected the mother and child’s health, they neglected the experiences and needs that the men becoming fathers for the 1st time had. In the process of transition to parenthood, the prospective fathers need as much support as the prospective mothers do. Although these needs are not satisfied, the prospective fathers are expected to assume a supportive role. The previous studies advocate the view that fathers are excluded and the health system does not meet their needs.

If the support which the fathers need is not provided, and they do not get prepared for the fatherhood role during pregnancy, it gets hard for both the mother and father to have a positive birth experience. So that the fathers can be supported in the process of transition to fatherhood, the experiences and needs that they have during childbirth must be evaluated in
their own sociocultural contexts. In the relevant literature, there are certain studies which were performed in other countries to identify the experiences and needs that the fathers had during childbirth. In these studies, the fathers stated that they felt excluded and to prevent them from having the feeling of exclusion, information on the progress of birth activity should be given to them. Moreover, during childbirth, the fathers’ expectations are that the midwife explains the procedures to be executed during delivery and the reasons for these procedures, that they have the chance to ask questions directly to the midwife, and that they have the prospect of receiving a congenial and honest response. However, to the best of researchers’ knowledge under this study, the literature review indicated that there was no study which specifically took Turkish society into consideration. The study aimed to determine the experiences and needs of Turkish men who became fathers for the 1st time during pregnancy and childbirth.

**METHOD**

In the research, which was designed as a qualitative study, the purposive sampling technique was used. This approach was ideal for the preliminary research of the nature of a phenomenon. The problem of this research was designated as the following: “What are the fathers’ birth experiences and expectations?”

The men who became fathers for the 1st time and whose spouses had vaginal delivery took part in the study. As the in-depth interviews were to be held in such type of studies, the participation in the study was on a voluntary basis. The researchers contacted the men who became fathers through social media for the 1st time. Information on the study was announced through the researchers’ Instagram and Facebook accounts. The fathers interested in partaking in the study and satisfied the research criteria were asked to contact the researchers by e-mail. After the aim of the study was explained, the fathers were invited to pay a visit in the 1st week after childbirth to the institution where the researchers worked, and those who agreed to take part in the study were included in the research. The fathers were informed that the interviews would be recorded, and their written and verbal consent to participate in the study was obtained. The men who became fathers for the 1st time and whose spouses had vaginal delivery were included in the research.

The sample size was designated as per the principle of saturation. It is typical for such type of a study to have data saturation with 10–15 participants. Data collection was finalized when the same themes were repeated in the individual interview process, and subsequently, the data were analyzed. As no new theme emerged from the research data after ten interviews, it was considered that data saturation was attained after 12 interviews.

The interviews were conducted in March 2019–March 2020. While one of the researchers had an interview with the participant’s father, the other researcher served as the reporter and recorded the speech. The interviews were held in a room convenient for the study at the institution for approximately 45–60 min. First, the questions intended for identifying the descriptive characteristics were directed by the researchers to the fathers. Subsequently, the interview proceeded with the experiences and expectations that the fathers had during childbirth.

**Personal Information Form:** The form created by the researchers as per the literature review comprises 16 questions. This form contains questions on the fathers’ descriptive characteristics (age, education level, monthly income, and so on). Income level is classified as low, medium, and high and below 11,000 TL (food poverty line) was evaluated as low income, below 33,000 TL (poverty threshold) as medium, and above 33,000 TL as high income.

**Semi-structured Interview Form:** It is comprised of open-ended questions designed to identify the experiences and expectations that the fathers had during pregnancy and childbirth processes.

Statistical analyses were performed using IBM SPSS (Statistical Package for the Social Science) 20.0. Descriptive statistics were expressed as the mean, standard deviation for continuous data, and frequency and percentage for categorical data. Moreover, a document portrait and code map of the collected data were created using MAXQDA 11.0, a qualitative data analysis software. All interviews were recorded in digital format, copied to the database, and uploaded to MAXQDA 18.1.0 for analysis. The data collected in this research were analyzed through the content analysis technique. In the content analysis, the first four phases of analysis were successively followed in conformity with the relevant literature: (1) Coding and sorting phase, (2) sample metaphor image editing phase, (3) category development phase, and (4) phase of ensuring validity and reliability.

**RESULTS**

A total of 12 fathers were included in the study. The fathers had a mean age of 28.5±2.1 years, and 1 (8.3%) of the fathers were primary school graduates, 3 (25.0%) high school graduates, 7 (58.4%) bachelor’s, and 1 (8.3%) master’s degree. The sociodemographic and birth-related characteristics of the fathers are summarized in Table 1.
The coding was performed by comprehensively evaluating the answers that the fathers gave to the questions, and the responses were examined by the researchers. First, a total of 19 codes were designated. Subsequently, these codes were combined and categorized into four main themes and 15 sub-themes. The main themes in relation to the fathers’ experiences and expectations were specified as emotional reactions, childbirth experience, expectations, and recommendations for prospective fathers. The main themes and sub-themes determined for the fathers’ childbirth experiences and expectations are shown as the theme tree in Figure 1. On reviewing the coding frequencies of the main themes, it is discerned that “emotional reactions” with 78 coding frequencies and “childbirth experience” with 36 coding frequencies were the most accentuated themes.

**Theme 1: Emotional Reactions**

The participant’s fathers reported that during pregnancy and childbirth, they had numerous emotions simultaneously, such as fear, uneasiness, stress, excitement, happiness, and fatherhood.

**Table 1. Socio-demographic and birth-related characteristics of the fathers**

<table>
<thead>
<tr>
<th>Father</th>
<th>Age (years)</th>
<th>Education Level</th>
<th>Income Level</th>
<th>Birthplace</th>
<th>Infant’s Gender</th>
<th>Delivery Type</th>
<th>Postpartum Interview Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Father 1</td>
<td>28</td>
<td>High school</td>
<td>Medium</td>
<td>Public hospital</td>
<td>Male</td>
<td>Vaginal</td>
<td>5th day</td>
</tr>
<tr>
<td>Father 2</td>
<td>27</td>
<td>High school</td>
<td>Medium</td>
<td>Public hospital</td>
<td>Female</td>
<td>Vaginal</td>
<td>6th day</td>
</tr>
<tr>
<td>Father 3</td>
<td>26</td>
<td>Primary school</td>
<td>Medium</td>
<td>Public hospital</td>
<td>Male</td>
<td>Vaginal</td>
<td>7th day</td>
</tr>
<tr>
<td>Father 4</td>
<td>26</td>
<td>Bachelor’s Degree</td>
<td>High</td>
<td>Private hospital</td>
<td>Male</td>
<td>Vaginal</td>
<td>4th day</td>
</tr>
<tr>
<td>Father 5</td>
<td>30</td>
<td>Bachelor’s degree</td>
<td>High</td>
<td>Private hospital</td>
<td>Male</td>
<td>Vaginal</td>
<td>6th day</td>
</tr>
<tr>
<td>Father 6</td>
<td>38</td>
<td>Bachelor’s degree</td>
<td>High</td>
<td>Private hospital</td>
<td>Male</td>
<td>Vaginal</td>
<td>5th day</td>
</tr>
<tr>
<td>Father 7</td>
<td>25</td>
<td>High school</td>
<td>Medium</td>
<td>Public hospital</td>
<td>Male</td>
<td>Vaginal</td>
<td>4th day</td>
</tr>
<tr>
<td>Father 8</td>
<td>31</td>
<td>Bachelor’s degree</td>
<td>High</td>
<td>Public hospital</td>
<td>Female</td>
<td>Vaginal</td>
<td>3rd day</td>
</tr>
<tr>
<td>Father 9</td>
<td>31</td>
<td>Bachelor’s degree</td>
<td>High</td>
<td>Private hospital</td>
<td>Female</td>
<td>Vaginal</td>
<td>4th day</td>
</tr>
<tr>
<td>Father 10</td>
<td>29</td>
<td>Bachelor’s degree</td>
<td>High</td>
<td>Public hospital</td>
<td>Male</td>
<td>Vaginal</td>
<td>6th day</td>
</tr>
<tr>
<td>Father 11</td>
<td>31</td>
<td>Master’s degree</td>
<td>Medium</td>
<td>Private hospital</td>
<td>Female</td>
<td>Vaginal</td>
<td>5th day</td>
</tr>
<tr>
<td>Father 12</td>
<td>30</td>
<td>Bachelor’s degree</td>
<td>High</td>
<td>Private hospital</td>
<td>Male</td>
<td>Vaginal</td>
<td>4th day</td>
</tr>
</tbody>
</table>

**Figure 1.** Fathers’ childbirth experiences and expectations.
Sub-theme: Fear, uneasiness, and stress

The participant’s fathers stated that they experienced different emotions from the first moment of learning that their spouses were pregnant until the moment of childbirth. The fear, uneasiness, and stress were primarily relevant to the health of the infant and mother. I was afraid that the fetus would get harmed in the mother’s womb. Of course, my God knows everything, and we cannot know what will happen; however, we felt nervous about whether the infant would be healthy. During each examination we had, whenever we visited the hospital, we asked the doctor if the fetus had good health and if its heartbeat. If something terrible happens, it brings about stress, trouble (Father 10).

Sub-theme. Excitement

The participant’s fathers said that they got highly excited when they learnt for the 1st time that they would become fathers. I started to talk about the pregnancy on the 1st day when I learnt about it, but I cannot describe it. I asked my wife how she was so sure about her pregnancy. I felt an incredible excitement; I had no sleep at night due to feeling overexcited. I felt something different (Father 9).

The participant’s fathers said that their excitement levels got even higher as the pregnancy period progressed and as they started to feel the infant’s movements. It is considered that this situation also stemmed from the fact that the delivery date approached. Slowly, my spouse’s abdomen started to get larger. 1 day, at approximately 2:00 am, I felt the kick when my spouse held my hand and took it to her abdomen. That day, at that moment, I felt excitement just in the middle of my chest for the 1st time. I can even tell you the date (Father 12).

...As the fetus grew up, the level of my excitement went up (Father 3).

Sub-theme. Happiness

All participant’s fathers willingly had a child/children. Becoming a father preferably and for the 1st time was a very pleasing occasion for the participant’s fathers. I was thrilled when I was first informed about my spouse’s pregnancy. It was something which I wished for, we wished for (Father 4).

A participant’s father defined the child as the “fruit of marriage.” Of course, we were delighted. The child is the fruit of marriage; anyone who is normal aspires to have a child (Father 8).

Sub-theme. Feeling of fatherhood

The participant’s fathers were excited and happy as they were to become fathers for the 1st time. The fathers agreed that the feeling of motherhood developed during pregnancy. In contrast, the sense of fatherhood slowly came into being after the child was born, even after the father took the newborn on his lap. The feeling of motherhood emerges after the conception of the child, but the fatherhood… The sense of fatherhood took hold of me when I saw the newborn for the 1st time. In other words, I took it on my lap and then noticed that I had become a father. Before that, whether this feeling existed or not, I did not have such a sense (Father 4).

Theme 2: Childbirth Experience

The participant’s fathers who supported their spouses during labor had a more positive birth experience, whilst those who were left outside the delivery room felt disappointed. In addition, they asserted that waiting at the gate of the delivery room and being occupied with specific procedures prevented them from feeling like their father.

Sub-theme. Willingness to support the spouse

When the participant’s fathers waited outside the delivery room, their biggest wish was to support their spouses by being next to them. In this study, it was ascertained that the fathers whose spouses gave birth at private hospitals were allowed to stand by their spouses. The fathers who supported their spouses by being next to them when they felt labor pains said they were happy supporting them. When the labor pain hit her back, her elder sister and I rubbed her back. Her elder sister arrived one or 2 h before the delivery. From 3.30 pm in the evening until 10 am, I took care of her (Father 5).

I accompanied her all the time, including the delivery. I was next to her during the delivery as well (Father 4).

A participant’s father, who was not allowed to stand by his spouse during childbirth, stated that he felt disappointed and was even angered. The father must be next to his spouse. Of course, I would like to. Even I got very angry since they did not let me in (Father 3).

Sub-theme. The intolerability of waiting at the gate

In childbirth, as health professionals focus on the mother and fetus, the fathers can be neglected. In this process, the prospective fathers wait at the gate of the delivery room, and when they wait, they feel different emotions. ... of course, staying outside is harder. That is, you do not know what happened, what was up there. Rush, joy, grief, and curiosity all
are together simultaneously. You feel different emotions. From second to second, the change is in effect… (Father 6).

**Sub-theme. Being occupied with the procedures**

The participant’s prospective fathers remained passive until the childbirth was set in motion. They reported that only after delivery took place were they occupied with several procedures, and this situation prevented them from having the excitement of being fathers as they aspired to do so. Fathers’ job is hard, irrespective of whether it is a private or public hospital; unavoidably, there are many procedures. Before the delivery, I put the signature 14–15 times. Each nurse asked me to put a signature. For instance, we got umbilical cord blood drawn; I spent a long time there. I signed, made the payment, and dealt with several procedures (Father 6).

**Sub-theme. The first meeting with the infant**

In contrast to the women, the men have trouble expressing their emotions. On the other hand, the participant’s fathers mentioned that they felt numerous different emotions simultaneously and even wept when they first met with the newborn. … when I saw it, I got emotional in next to no time; I started to weep (Father 3).

**Theme 3: Expectations**

In general, the participant’s fathers expected to get attention from the health professionals and be informed by them about the childbirth process.

**Sub-theme. Showing interest**

Childbirth is an exclusive experience also for prospective fathers, just as it is for prospective mothers. The participant’s prospective fathers stated that nobody discerned them and no attention was paid to them when they waited at the gate of the delivery room. The prospective fathers whose spouses gave birth at public hospitals mainly complained about not being able to get information about the delivery process. It was stressful and troubling. We telephoned; in response, they told us not to telephone, inquired why we telephoned, and asked us to telephone only once in 3 h. I also applied to the hospital manager and filed a complaint; the manager said that he/she would take care of it; even so, the manager took no action (Father 10).

Besides, a participant’s father stated that even if the fathers were not allowed to be in the delivery room, contacting the spouses through video calls would be a good option. … I could not see my spouse, but what could I do? For example, by installing a camera system in a room, I could at least see my spouse in that room through a live broadcast. Unfortunately, I could not be with my spouse until the moment of delivery. If there was a system in the delivery room that would allow me to have contact with my spouse through teleconference, namely, video call, maybe we would feel a little bit more relaxed (Father 12).

**Sub-theme. Getting information on the birth process**

The participant’s fathers whose spouses gave birth at public hospitals complained in general that they could not obtain information on the childbirth process and were unable to get in contact with the health staff. They took my spouse to the delivery room, and a nurse came to the gate. I gently asked the nurse how my spouse’s situation was. She said that they would inform me and closed the door. After the shift change, the next nurse arrived. I asked how my spouse’s situation was. She said that they waited for the birth in the delivery room, and my wife had labor pain for the time being. How nicely the nurse talked to us, and we were relieved. We took a seat in front of the door and kept waiting (Father 10).

You have no chance of having communication with a person. Only if there is someone who goes out of the delivery room, then you have the opportunity to ask them. They say they do not know and work for another unit, for instance (Father 2).

**Theme 4: Recommendations for the Prospective Fathers**

The participant’s fathers stated that childbirth was a unique experience. They recommend that the prospective fathers stand by their spouses during pregnancy and delivery, have training on childbirth, abide by the recommendations of health staff, and look for a good birth team and health facility.

**Sub-theme. Being next to the spouse during childbirth**

The participant’s fathers recommend that the prospective fathers help their spouses during pregnancy and also be next to them during delivery. As I have just said, if prospective fathers love their spouses, they must always be constructive and positive, whatever happens during labor. They must be positive enough to put on her sock and to wipe her sweat, if necessary (Father 11).

I think that the men must be next to their spouses during childbirth… (Father 3).

**Sub-theme. Having trained in childbirth**

Only one of the participant’s fathers reported that he could have training with his spouse for 1 day in the antenatal period, and even this training was beneficial. In general, the participant’s fathers told that they would have training in
the context of the following delivery of their spouses and thought that all prospective fathers must participate in such training.

… even having training for 1 day made us feel at ease and made us unbelievably happy. I think of having professional training before my spouse’s next delivery (Father 9).

**Sub-theme. Abiding by the recommendations of health staff**

Grandmothers try to get involved with the decisions made in conjunction with childbirth. The doctor asks us to come on time on the prearranged day. What the people say: Do not use this medication. If the doctor is not competent in the profession, he/she does not prescribe that medication. Regularly have the medication which is prescribed by the doctor (Father 10).

**Sub-theme. Choosing a good birth team and health facility**

The health facility and the team which was responsible for performing the delivery were highly important to the participant’s fathers. The participant’s fathers recommend that the prospective fathers designate in advance the health facility where the delivery will take place and complete all necessary preparations for the delivery ahead of time.

The prospective fathers should not solely count on the last week because it is never clear when the baby will be delivered. The prospective fathers should take the necessary measures. When there are 3–4 weeks ahead of the delivery, they must designate the hospital where the delivery will take place and make their birth plans (Father 12).

**Sub-theme. Supporting the spouse during pregnancy**

Even though the participant’s fathers did not actually feel like the fathers before the delivery took place, they were aware of their responsibilities during the pregnancy period. They should not skip their therapies; they should always be next to their spouses, they should take care of them all the time (Father 1).

For instance, I even made my spouse put on her socks. As of the past 6 months of her pregnancy, I always made her put on her socks. While setting the table for meals, I always helped her. These are beneficial to both the child and the mother (Father 7).

**DISCUSSION**

In this study, it was identified four main themes encompassing the experiences and expectations of 1st-time fathers during pregnancy and childbirth.

**Theme 1 – Emotional Reactions**

Pregnancy and childbirth are an experience which is challenging for men and evokes a range of different emotions in them.\[14\] In this study, the participant’s fathers asserted that, besides the feelings such as happiness, excitement, and fear, the feeling of fatherhood started to come into being slowly during pregnancy and childbirth. A study which was carried out in Taiwan explored the experiences which the men becoming fathers had in the last trimester of the pregnancy period. It was ascertained that the prospective fathers simultaneously had emotions such as happiness, uncertainty, and worry about getting prepared for becoming a father and about the infant’s health.\[19\] The study by Poh et al. stated that the prospective father had a number of different emotions, such as enthusiasm, happiness, shock, and anxiety during pregnancy and childbirth.\[14\] Moreover, as per a study performed in Turkey, the men stated that they mostly had a feeling of excitement which was followed by a feeling of pride.\[20\] The study by Baldwin et al. examined 22 studies in which the mental health and well-being of the men who became fathers for the 1st time were analyzed in their transition to fatherhood. Three main factors which affected the mental health of the men in their transition to fatherhood were identified as follows: The formation of the fatherhood identity, the challenges posed by the new fatherhood role, and the negative emotions and fears relevant to these challenges. Role-related restraints and changes imposed on the lifestyle gave rise to the feeling of stress. The fathers asked for more guidance and support on the topic of getting prepared for fatherhood and having changes in their relationship with their partner.\[21\]

Focusing on the emotional well-being of the fathers in the perinatal period is important to the fathers themselves as well as their spouses and children.\[22\] Even if the men do not experience the pregnancy and birth process directly, they are affected biologically by this process.\[23\] In a study, it was found that prolactin and cortisol levels of the men whose spouses were pregnant went up, and, in the postpartum period, their testosterone levels went down, and the low testosterone level was associated with postpartum depression. Moreover, it was discerned that there was an association between the hormonal levels of prospective mothers and fathers.\[24\] Programs which advocate screening the maternal, perinatal affective disorder, and anxiety disorder should include the investigation of the father’s emotional state. As per the investigation, the father diagnosed with a problem should be orientated toward receiving support and having the necessary treatment.
Theme 2 – Childbirth Experience

While the participant’s fathers who were allowed to stand by their spouses during labor had a positive birth experience, those who waited at the gate of the delivery room experienced a challenging process. During pregnancy and delivery, the fathers feel themselves as “the spouse and parent.” However, as health professionals focus more on the health of the mother and baby, they perceive the prospective fathers neither as patients nor visitors. Consequently, a large number of prospective fathers feel excluded and have fears. In the previous studies, the fathers stated that they were perceived as “the football match spectator” and “an invisible parent” during the pregnancy and delivery process. Not organizing the antenatal care appointments as per the fathers’ work schedules, preparing the antenatal training programs solely in line with the mothers’ needs without paying attention to the fathers’ needs, and not including the fathers in labor in any way play a significant role in making the fathers feel as such. By taking the principle of equality into account also in conjunction with having access to the delivery services as in the case of all domains of life, it is considered that all prospective fathers willing to stand by their spouses during delivery should be allowed to do so.

Theme 3 – Expectations

The men said that they wanted to receive information on the situation of their spouses and get attention from the health staff during the intrapartum period. There is evidence which shows that the men would evaluate the experience positively when they perceived that they were well-supported by the midwives who cared for their spouses. In the study performed by Ledenfords with the men who became fathers for the 1st time, it was asserted that the fathers wanted to be appreciated and sufficiently informed by the midwives. The communication with the midwife is a significant aspect of alleviating the fear and vulnerability of the father and including him in the entire process. In addition, it enables the men to feel more secure and not to lose their emotions of control. During pregnancy and delivery, the men, in general, feel excluded and want to be viewed as the parent. In light of the findings of this study and the relevant literature, it is thought that healthy communication should be established between the fathers and health professionals and the fathers should be adequately informed so that they could have a positive childbirth experience.

Theme 4 – Recommendations for the Prospective Fathers

Becoming a father for the 1st time is an exceptional experience for the fathers. The fathers who participated in this study made specific recommendations for improving this experience. First, the participant’s fathers recommend that the prospective fathers support their spouses during pregnancy and delivery. The education level of the fathers participating in the study is high. For this reason, it is thought that the awareness of fathers on the subject is high, and they want to support their spouses during pregnancy and childbirth. It is discerned that the women whose spouses were involved with their care during pregnancy had lower levels of depressive symptoms. Moreover, the men are interested in participating in medical examinations in the antenatal period and attending antenatal training programs. The fathers who partake in antenatal training courses believe that they can support their spouses more actively during delivery.

Fathers’ birth experiences and expectations were not previously addressed to a large extent in the studies performed in Turkish. The focus of this study is to cover the characteristics peculiar to an incident, the reactions to the incident across time, and the effects of the incident. However, the findings of this research cannot be generalized to all men becoming fathers for the 1st time. The key findings in this study also acquired new dimensions by virtue of being supported by the findings of international studies.

Father candidates were reached through social media. Therefore, the results obtained from the study cannot be generalized to the country. In addition, the fathers participating in the research are extremely willing to share their feelings. Therefore, these fathers are expected to give more emotional reactions. In future studies, it is recommended that the candidates participating in the research be selected by a different method.

CONCLUSION

While the prospective fathers are happy and excited at the beginning of the pregnancy, they get disappointed if they are not allowed to accompany their spouses during delivery. So that the fathers can have a more positive childbirth experience, they should be allowed to participate actively in the activities in the perinatal period in light of their aspirations and recommendations. Moreover, it is thought that performing studies on the prospective fathers’ experiences and aspirations in societies with different sociocultural structures and making the necessary arrangements in light of the results to be obtained from these studies will contribute positively to the health of parents and infants.
Disclosures

**Peer-review:** Externally peer-reviewed.

**Conflict of Interest:** None declared.

**Funding:** None.

**Ethics Committee Approval:** This study was performed with the approval of the Selcuk University Faculty of Health Sciences Non-Invasive Clinical Research Ethics Committee (Approval date: Feb 06, 2019, and Approval number: 019/57). The verbal and written information about the study and its aim was given to the participants.


**REFERENCES**


