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Evidence-Based Practices During Spontaneous and Cesarean Delivery

Normal Spontan Doğum ve Sezaryen Doğumda Kanıta Dayalı Uygulamalar

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Abstract

The aim of this research is to investigate evidence-based practices used for maternal optimal care during birth. Investigating the use of evidence-based practices for spontaneous and cesarean deliveries will contribute to maternal optimal care during delivery. This descriptive and cross-sectional study was completed with 371 women giving birth. The study was conducted in a maternity hospital in Turkey. The Descriptive Information Form and the Optimality Index-Turkey (OI-TR) were used in the data collection. The data were analyzed using descriptive statistics. In spontaneous and cesarean delivery groups, the nonstress test was performed in 100%. Skin-to-skin contact was not ensured between the mother and neonate in any of them (100%). Also, for spontaneous delivery group labor induction or augmentation was applied to 73.1%, there was no person providing support during labor (except the medical team) in any of them (100%), the non-supine position was not used at birth in any of them (100%) and episiotomy was applied to 59.1%. Our study results point to non-evidence-based routine clinical practices in delivery were determined. This situation made the delivery process in the hospital far from optimal. This study revealed that midwives, nurses and clinicans should make knowledge and behavioral changes in their evidence-based practices.

Keywords: Evidence-based practice, midwifery, obstetrics, parturition

Özet

Normal spontan doğum ve sezaryen doğumlar için kanıta dayalı uygulamaların kullanımının araştırılması, doğum sırasında annenin optimal bakımına katkı sağlamaktadır. Bu doğrultuda araştırmada, doğum sırasında annenin optimal bakımı için kullanılan kanıta dayalı uygulamaların araştırılması amaçlanmıştır. Tanımlayıcı ve kesitsel tipte olan bu araştırma, Türkiye'de bir kadın doğum hastanesinde 193 normal spontan doğum ve 178 sezaryen doğum yapan toplam 371 kadın ile tamamlanmıştır.Verilerin toplanmasında Tanımlayıcı Bilgi Formu ve Optimalite İndeksi-TR (OI-TR) kullanılmıştır. Veriler tanımlayıcı istatistikler kullanılarak analiz edilmiştir. Spontan ve sezaryen doğum gruplarında nonstres testi %100 uygulanmış, grupların ikisinde de hiçbir anne ile yenidoğan (%100) arasında ten tene temas sağlanmamıştır. Ayrıca spontan doğum grubunun %73,1'ine doğum indüksiyonu uygulanmış, hiçbirinde doğum sırasında (tıbbi ekip dışında) destek sağlayan kimse bulunmamış (%100) ve doğumda dik pozisyon kullanılmamıştır (%100). Spontan doğum grubunda epizyotomi uygulanma oranı %59,1 olarak bulunmuştur. Çalışma sonuçlarımız doğumda kanıta dayalı olmayan rutin klinik uygulamalara dikkat çekmekte ve bu durumun hastanedeki doğum sürecini optimal olmaktan uzak hale getirdiğini göstermektedir. Bu çalışma ebe, hemşire ve klinisyenlerin kanıta dayalı uygulamalarında bilgi ve davranış değişikliği yapmaları gerektiğini ortaya koymaktadır.

Anahtar Kelimeler: Ebelik, normal doğum, kanıta dayalı uygulamalar, sezaryen

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1. Introduction

The concept of perinatal optimality refers to achieving maximum perinatal outcomes with minimum intervention by taking into account the past and current conditions of pregnant women (van Olphen Fehr, 2013). At the same time, ensuring an optimal approach in perinatal care may also prevent the unnecessary medicalization of births (Fontein-Kuipers et al., 2019). In parallel with the optimal approach in perinatal care, the World Health Organization (WHO) recommends using evidence-based practices (EBP) for perinatal care, eliminating non-evidence-based interventions, and providing favorable conditions for women to have a positive birth experience (World Health Organization, 2018). As examples to EBP during labor and delivery, a companion of choice, encouraging the adoption of mobility and an upright position during labour in women, skin-to-skin contact of newborns with their mothers during the first hour after birth are recommended and routine nonstress test and routine use of episiotomy are not recommended (World Health Organization, 2018).

The Optimality Index-Turkey (OI-TR) is a research tool that can be used for normal spontaneous delivery and cesarean section delivery to measure evidence-based perinatal care processes and outcomes and is accepted to be valid and reliable by adapting the Optimality Index-United States (OI-US) to Turkish (Thompson et al., 2018; van Olphen Fehr, 2013; Yucel et al., 2015).

According to the results of the latest research conducted across Turkey, it was determined that 48% of births were vaginal births and 52% of them were cesarean births. Furthermore, it was revealed that almost all of the births (99%) occurred in a healthcare institution and were accompanied by an obstetrician (99%) (Hacettepe Universitiy Institute of Population Studies, 2018). It is known that the fact that births occur in maternity centers or hospitals outside home leads to a decrease in poor perinatal outcomes, but it is also predicted to lead to the medicalization of births (Bolten et al., 2016; Brocklehurst et al., 2011; Davis et al., 2011; Hollowell et al., 2017; National Institute for Health and Care Excellence, 2014). Therefore, there are concerns that low-risk women give birth in the hospital will be subjected to unnecessary interventions and birth will be far from optimal. Thus, this study was conducted to investigate evidence-based practices for maternal optimal care during spontaneous and cesarean delivery.

2. Method

2.1. Aim of the Research

This study was conducted to investigate evidence-based practices for maternal optimal care during spontaneous and cesarean delivery.

2.2. Research Questions

-What is the optimality level in the perinatal period, depending on the mode of delivery?

-Which delivery method uses more evidence-based practices?

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2.3. Population and Sample of the Research

This research is a descriptive cross-sectional study. As a place where the study would be conducted,

a hospital with a high number of births and that could meet the population in Istanbul, the most crowded city in the country where people from all regions of Turkey live, was selected. The study was carried out in the delivery room and postpartum care services of the hospital. The total number of births of the institution in one year is 4055 (T.C. Ministry of Health, 2017). By taking this number into account, the sample was calculated with a 95% confidence interval, and it was determined that 371 women who gave birth would constitute the sample. Considering that the rate of cesarean section in our country according to the 2013 TNSA data is 48%, according to the quota method, 193 of 371 women in the sample giving birth were taken from those giving birth by normal spontaneous delivery and 178 were taken from those giving birth by cesarean section (Hacettepe Universitiy Institute of Population Studies., 2013).

The criteria for inclusion in the study are being a pregnant woman at low risk, being between the 38th-42nd weeks of gestation, having a singleton pregnancy, being able to speak/understand Turkish, and agreeing to participate in the study. The criteria for exclusion from the study are intrauterine fetal loss, pregnancy complications, and being illiterate.

2.4. Data Collection Tools Used in the Study

2.4.1. Descriptive Information Form

This form is a questionnaire consisting of a total of 13 questions, 8 questions about the socio-demographic (age, education, employment, etc.) characteristics of the participants and 5 questions about their obstetric histories (the number of births, the number of living children, the number of miscarriages, etc.).

2.4.2. Optimality Index-Turkey (OI-TR)

The Optimality Index-TR (OI-TR) was accepted to be valid and reliable as a result of carrying out the Turkish validation study of the Optimality Index-United States (OI-US) by Yucel et al. in 2012 (Yucel et al.,2013; Yucel et al., 2015). The Optimality Index-TR (OI-TR) is designed to be used for both normal spontaneous delivery (NSD) and cesarean section (C/S). The Optimality Index-TR (OI-TR) that can be used for the NSD group is a scoring system with 42 EBP, while the Optimality Index-TR (OI-TR) that can be used for the C/S group is a scoring system with 23 EBP. Each item in the index is scored as optimal (1 point) or non-optimal (0 points). The Optimality Index-TR (OI-TR) score is calculated by dividing the total score obtained from the index by the number of items in the index and multiplying by 100. The highest score that can be obtained from the Optimality Index-TR (OI-TR) is 100, and the lowest score is 0. The fact that the score obtained from the index approaches 100 indicates that the perinatal process and outcomes are close to being optimal, while the fact that it moves away from 100 points indicates that they are far from optimality. Since the EBP in the Optimality Index-TR (OI-TR) for NSD and C/S have differences, it is not possible to compare the mean scores of the two groups (Yucel et al., 2013).

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2.5. Ethical Approval

The ethics committee approval (59491012-604.01.02) and the written permission from the institution where the study would be conducted were obtained from the Clinical Research Ethics Committee of Istanbul University Cerrahpasa Faculty of Medicine in May 2018.

2.6. Limitations of the Research

The results of the research are limited to the hospital where the research was conducted and the number of samples. And also the research results only cover the group in which the study was conducted.

2.7. Analysis and Evaluation of Data

The data obtained within the scope of the study were evaluated using the Statistical Package for Social Sciences (SPSS) 21.0 software. The Shapiro-Wilk test was used for testing the suitability of the data to normal distribution, the descriptive analysis was used for mean, standard deviation, and percentage evaluations, the chi-square test was used for the comparison of the groups for categorical data, and the Mann-Whitney U test was used for the comparison of categorical data and continuous data. The results were evaluated at a significance level of $p<0.05$.

3. Results

The socio-demographic and obstetric features of the NSD and C/S groups are presented in Table 1. The mean age of the NSD group was found to be 24.47±5.52 years, and the mean age of the C/S group was found to be 27.39±4.91 years.

Table 1. Socio-demographic and obstetric features of the participants (n = 371)

	NSD (n= 193) **Mean ± SD**	**C/S (n= 178)** **Mean ± SD**
Age (Years)	24.47±5.52	27.39±4.91
Number of Births	1.94±1.24	2.37±0.97
Number of Miscarriages	0.20±.60	0.22±0.46
Number of Abortions	0.01±.10	0.05±0.26
Total Number of Pregnancies	2.15±1.47	2.59±1.18
	n (%)	**n (%)**
Educational Status		
Primary education	155 (84.4)	158 (80.3)
High school and above	38 (13.5)	20 (17.6)
Employment Status		
Employed	6 (2.1)	4 (2.2)
Unemployed	187 (97.9)	174 (97.8)
Income Status		
Income is less than expenses	28 (36.3)	70 (15.7)
Income is equal to expenses	118 (55.4)	107 (66.3)
Income is more than expenses	32 (8.3)	16 (18.0)

Mean= Mean; SD= Standard Deviation

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The mean OI-TR score of the NSD group is 83.39±3.79, and the mean OI-TR score of the C/S group is 88.73±3.68. The OI-TR evaluation criteria of the NSD and C/S groups and whether they are optimal or not are presented in Table 2 and Table 3 in numbers and percentages.

Table 2. The participants' Optimality Index-TR (OI-TR) mean scores (n= 371)

	NSD (n= 193) Mean ± SD	**C/S (n= 178) Mean ± SD**
OI-TR mean score	83.39±3.79	88.73±3.68

OI= Optimality Index; TR= Turkey; NSD= Normal Spontaneous Delivery; C/S= Birth by Cesarean Section; Mean= Mean; SD= Standard Deviation

Upon examining the OI-TR of the NSD group, it was determined that the nonstress test, contraction stress test, or biophysical profile were performed in 100%; labor induction or augmentation was applied to 73.1%; oral, IM, or IV medication administration was performed in the first or second stages of labor in 87.6%; there was no person providing support during labor (except the medical team) in any of them (100%); the non-supine position was not used at birth in any of them (100%); episiotomy was applied to 59.1%; medication was administered in the third stage of labor in 55.4% (except oxytocin or local anesthetics used for perineum repair); skin contact was not ensured between the mother and neonate in any of them (100%); 89.6% were not prescribed medications for health conditions (including pain) diagnosed during or after birth (except iron and vitamins, oral contraceptives, RhoGam©, and rubella vaccine) (Table 3).

Table 3. The Optimality Index-TR (OI-TR) evaluation of the NSD group (n= 193)

Evidence-Based Practices	**Optimal % (n)**	**Non Optimal % (n)**
The woman did not experience intrauterine fetal loss.	100 (193)	-
The woman was not exposed to domestic violence during pregnancy.	100 (193)	-
The woman did not experience pregnancy complications.	100 (193)	-
The woman received sufficient prenatal care.	100 (193)	-
Amniocentesis or chorionic villus sampling was not performed.	100 (193)	-
The nonstress test, contraction stress test, or biophysical profile were not performed.	-	100 (193)
The woman did not use any prescription or non-prescription medication during pregnancy, except vitamins and iron.	99 (191)	1 (2)
The time between the first vaginal examination performed after the opening of the membranes and delivery was shorter than 24 hours.	97.9 (189)	2.1 (4)
When the membranes were opened, the amniotic fluid was clear.	98.4 (190)	1.6 (3)
Labor induction or augmentation was not applied.	26.9 (52)	73.1 (141)
Amniotomy was not performed.	99 (191)	1 (2)
Oral, IM, or IV medication administration was not performed in the first or second stages of labor.	12.4 (24)	87.6 (169)
Epidural analgesia was not used at birth.	100 (193)	-
Intermittent electronic fetal monitoring was used.	99 (191)	1 (2)
No fetal heart rate abnormalities were observed.	98.4 (190)	1.6 (3)
Thre was a person providing support during labor (except the medical team)	-	100 (193)
The woman strained spontaneously.	100 (193)	-
The birth occurred at the place planned at the beginning of labor.	100 (193)	-

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The non-supine position was used at birth.	-	100 (193)
The birth took place with a cephalic presentation.	99 (191)	1 (2)
Vaginal delivery occurred without intervention.	99 (191)	1 (2)

Table 3. The Optimality Index-TR (OI-TR) evaluation of the NSD group (n= 193) (continued)

Evidence-Based Practices	Optimal % (n)	Non Optimal % (n)
Vaginal delivery took place.	100 (193)	-
Episiotomy was not applied.	40.9 (79)	59.1 (114)
1st or 2nd-degree laceration requiring suture did not develop in the perineum or perineal tissue.	100 (193)	-
There was no progression/enlargement in episiotomy or 1st and 2nd-degree tears.	96.9 (187)	3.1 (6)
No medication was applied in the third stage of labor (except oxytocin or local anesthetics used for perineum repair).	44.6 (86)	55.4 (107)
Skin contact was ensured between the mother and neonate.	-	100 (193)
The placenta was delivered spontaneously.	100 (193)	-
No postpartum hemorrhage developed.	99 (191)	1 (2)
No blood transfusion was performed.	96.9 (187)	3.1 (6)
No intrapartum complications developed.	100 (193)	-
The gestational age was evaluated as 37-42 weeks.	100 (193)	-
The birth weight was measured to be between 2500-4000 grams.	92.2 (178)	7.8 (15)
The 5th minute Apgar score was evaluated as 7 points and above.	98.4 (190)	1.6 (3)
The neonate was not transferred to the intensive care unit.	97.4 (188)	2.6 (5)
Congenital anomalies were not observed.	100 (193)	-
No birth trauma or serious medical problems were observed.	100 (193)	-
The infant was fed with breast milk + formula until being discharged.	100 (193)	-
Perinatal death was not observed.	100 (193)	-
No fever was observed when the mother was in the hospital, no infection or major complication was diagnosed.	100 (193)	-
No prescription medications (except iron and vitamins, oral contraceptives, RhoGam©, and rubella vaccine) were administered for health conditions (including pain) diagnosed during or after birth.	10.4 (20)	89.6 (173)
No maternal death was observed.	100 (193)	-

Upon examining the OI-TR of the C/S group, it was determined that the nonstress test, contraction stress test or biophysical profile were performed in 100%; skin contact was not ensured between the mother and neonate in any of them (100%); 97.8% were prescribed medications for health conditions (including pain) diagnosed during or after birth (except iron and vitamins, oral contraceptives, RhoGam©, and rubella vaccine) (Table 4).

Table 4. Optimality Index-TR evaluation of the C/S group (n= 178)

Evidence-Based Practices	Optimal % (n)	Non Optimal % (n)
The woman did not experience intrauterine fetal loss.	100 (178)	-
The woman was not exposed to domestic violence during pregnancy.	100 (178)	-
The woman did not experience pregnancy complications.	100 (178)	-
The woman received sufficient prenatal care.	100 (178)	-

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Amniocentesis or chorionic villus sampling was not performed.	100 (178)	-
The nonstress test, contraction stress test, or biophysical profile were not performed.	-	100 (178)
The woman did not use any prescription or non-prescription medication during pregnancy, except vitamins and iron.	100 (178)	-

Table 4. Optimality Index-TR evaluation of the C/S group (n= 178) (continued)

Evidence-Based Practices	**Optimal % (n)**	**Non Optimal % (n)**
The time between the first vaginal examination performed after the opening of the membranes and delivery was shorter than 24 hours.	100 (178)	-
Skin contact was ensured between the mother and neonate.	-	100 (178)
No postpartum hemorrhage developed.	98.9 (176)	1.1 (2)
No blood transfusion was performed.	98.9 (176)	1.1 (2)
No intrapartum complications developed.	100 (178)	-
The gestational age was evaluated as 37-42 weeks.	100 (178)	-
The birth weight was measured to be between 2500-4000 grams.	93.8 (167)	6.2 (11)
The 5th minute Apgar score was evaluated as 7 points and above.	100 (178)	-
The neonate was not transferred to the intensive care unit.	93.8 (167)	6.2 (11)
Congenital anomalies were not observed.	100 (178)	-
No birth trauma or serious medical problems were observed.	100 (178)	-
The infant was fed with breast milk + formula until being discharged.	100 (178)	-
Perinatal death was not observed.	100 (178)	-
No fever was observed when the mother was in the hospital, no infection or major complication was diagnosed.	100 (178)	-
No prescription medications (except iron and vitamins, oral contraceptives, RhoGam©, and rubella vaccine) were administered for health conditions (including pain) diagnosed during or after birth.	2.2 (4)	97.8 (174)
No maternal death was observed.	100 (178)	-

4. Discussion

The OI-TR scores of the NSD and C/S groups are 83.39 and 88.73, respectively. In the hospital-based study conducted in our country, the OI-TR score of healthy pregnant women was determined to be 77.65 (Yucel et al., 2015). In another study conducted by Çifçi and Yücel (2023) in our country, OI scores of women performing NSD and women performing C/S were compared. In this study, OI scores of women who gave birth by NSD were found to be 76.11% and women who gave birth by C/S were 82.12%, but no significant difference was detected between them (Çifçi &Yücel 2023). In the hospital-based study conducted with 3.425 pregnant women abroad, the OI-US score of the healthy pregnant group was found to be 84 (Low et al., 2008). It can be said that the results of this study are a bit higher than the results obtained in our country and parallel to the result of the study carried out abroad (Low et al., 2008; Yucel et al., 2013).

In this study, some practices that caused the decrease in the optimality level during the evaluation of the NSD and C/S groups according to the OI-TR were determined. The routine application of NST for

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both groups emerged as a parameter decreasing the optimality index. A systematic review of 13 studies involving more than 37.000 women compared intermittent and continuous NST monitoring. There was no difference in perinatal death and cesarean section rates between the two applications (Alfirevic et al., 2017). It is known that NST is performed in order to detect an adverse condition such as hypoxia that may occur in terms of the health of the fetus in advance. Routine antenatal NST is not recommended in the WHO 2016 Antenatal Care Guide (World Health Organization, 2016).

It is known that the administration of medications (by the oral, IM, or IV route) during the first and second stages of labor and labor indication or augmentation are among the frequent medical interventions performed in our country during labor (Demirel & Bilgiç Çelik, 2015; Özcan & Aslan, 2015). In a study conducted in Norway, it was found that one out of every ten inductions was performed without medical indications and 86% of these inductions resulted in vaginal delivery (Dögl et al., 2018). In this study, it was also determined that induction was applied to approximately three-quarters of the NSD group.

The presence of a person who provides support at birth is recommended by the WHO (Bohren et al., 2017, 2019; Fontein-Kuipers et al., 2019). In a study conducted in Turkey, mother-friendly hospitals were compared with hospitals without the title of mother-friendly. While the rate of those receiving birth support in the mother-friendly hospital was 60%, it was 55.2% in the non-mother-friendly hospital (Bilgin, 2022). Another study reported that 63.4% of women received partially supportive care from healthcare personnel during the birth process (Dasikan et al., 2020). However in this study, it was determined that there was no person providing support at birth with any of the pregnant women, except for healthcare personnel. The absence of anyone to support the birth other than the medical staff seems to be a parameter that reduces optimality.

When birth positions are examined, many studies are encountered. Especially in EBP studies, it is reported that the use of upright positions (including walking, sitting, standing, and kneeling) in the first stage of labor shortens the second stage of labor (1 hour and 22 minutes) and reduces the need for episiotomy and the risk of cesarean section (Basgol & Beji Kızılkaya, 2015; Demirel & Kaya, 2020; Gupta et al., 2017; Lawrence et al., 2013; Walker et al., 2018). The WHO also recommends encouraging upright birth positions, allowing the mobilization of women and being in the position they prefer (Lawrence et al., 2009). In a study comparing the lateral position and the lithotomy position in the second stage of labor, less perinatal trauma was observed to occur in the lateral position (Meyvis et al., 2012).

In the OI-TR evaluation of the normal spontaneous delivery group, another practice that took birth away from optimality was found to be episiotomy performed during labor. The American Gynecology and Obstetrics association and the WHO do not recommend the routine use of episiotomy (Cargill & MacKinnon, 2018; World Health Organization, 2018). In a systematic review conducted, routine episiotomy and episiotomy performed in case of an indication were compared. It was revealed that routine episiotomy does not prevent perineal tears and traumas, while episiotomy due to indication formed fewer tears and traumas (Jiang et al., 2017). However, routine episiotomy is common in our country (Demirel & Kaya, 2020; Toprak et al., 2017). Studies conducted in our country report that it

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varies between 90%-99% in primiparous women and between 50%-75% in multiparous women (Dönmez & Sevil, 2009; Karaçam & Eroglu, 2003; Sayıner & Demirci, 2007). According to studies conducted in various parts of the world, it is observed that the application of episiotomy varies between 50%-95% in primiparous women and between 6%-20% in multiparous women (Al-Ghammari et al., 2016; Althabe et al., 2002; Räisänen et al., 2010; Van Den Bergh et al., 2003). In the current study, episiotomy was applied to more than half of the women in the NSD group. The application of episiotomy takes the woman away from the optimal condition.

The WHO recommends ensuring skin contact between the mother and neonate immediately after birth (World Health Organization, 2018). It is emphasized in EBP study results that skin-to-skin contact should be maintained until the first breastfeeding. It has been reported that skin-to-skin contact encourages breastfeeding, extends the duration of breastfeeding, increases parental satisfaction, supports the mother-infant attachment, contributes to balancing the newborn's breathing rate, positively affects the sleep pattern of the neonate, and reduces pain perception during procedures applied to the neonate (Baley et al., 2015; Cho et al., 2016; Johnston et al., 2017; Moore et al., 2016; Sevda Korkut Oksuz & Sevil Inal, 2021; Toprak et al., 2017). However, in this study, it was determined that skin-to-skin contact was not provided to any mother and neonate in both the NSD and C/S groups. In a study involving 513 mothers and their babies in a baby-friendly hospital in our country, the rate of skin-to-skin contact between mothers and their babies within the first hour after birth was found to be 90.1% (Coskun Ercelik et al., 2023). It is thought that this difference is related to the status of being a baby-friendly hospital.

In this study, it was found out that medications (except iron and vitamins, oral contraceptives, RhoGam©, and rubella vaccine) were mostly prescribed for health conditions (including pain) diagnosed during or after birth in both the NSD and C/S groups. In both groups, it draws attention that the administration of analgesics usually in the postpartum period, the additional antibiotic administration in the C/S group, and the additional uterotonic drug use, besides oxytocin, in the NSD group are common. In the studies conducted, it is stated that the pain factor occurs in the normal delivery process due to the physiology of birth and the elimination of pain does not bring complete satisfaction (Smith et al., 2018; Smith, Collins, & Crowther, 2011; Smith, Collins, Crowther, et al., 2011; Yıldız et al., 2013). In the studies, it is argued that non-pharmacological methods such as aromatherapy, reflexology, acupuncture/acupressure, and hypnosis can be used instead of analgesics with regard to pain management and these practices will also not disrupt the physiology of the birth process (Smith et al., 2018; Smith et al., 2011; Smith et al., 2011; Yıldız et al., 2013).

5. Conclusion

According to the results, it was found that optimality score in C/S is higher than NSD optimality score. It is thought that this is due to the less use of evidence-based practices during NSD. It was determined that medicalization removes the birth process from optimality. The NSD process was more exposed to medicalization in the study. Therefore, it was found that the possibility of EBP use decreased during the cesarean birth process. The Optimality Index-TR may be valuable as a tool to detect situations showing the medicalization of birth in Turkey and to support the EBP in birth methods.

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6. Recommendations

It is thought that the level of optimality during the birth process can be increased by reducing parameters such as continuous NST monitoring, routine episiotomy, starting induction except when necessary, and administering medications (by the oral, IM, or IV route) during the first and second stages of labor. In addition, practices such as having someone other than the health personnel support the woman during birth, supporting the woman to stay in the non supine position during the birth, initiating and maintaining skin-to-skin contact between the mother and the baby immediately after birth are recommended in order to provide evidence-based care. It is thought that with all these improvements, evidence-based practices and the level of optimality will be increased by reducing the medicalization of the birth process

Authors Contributions

Topic selection: TB, TY; Design: TB, TY; Planning: TB, TY; Data collection and analysis: TB; Article writing: TB,TY; Critical review: TY.

Conflict of Interest

No potential conflict of interest was reported by the authors.

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