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Determining the Impact of Cervical Dilation at Admission on Intrapartum Interventions and Labor Satisfaction in Pregnant Women

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Abstract

Background: Admission to the delivery room with a low level of cervical dilation is associated with an increased likelihood of cesarean birth, additional birth interventions, and a negative impact on the woman's birth experience and satisfaction.

Aim: This study aimed to evaluate the effect of cervical dilation levels at admission to the delivery room on intrapartum interventions and labor satisfaction.

Methods: This study was conducted as a cross-sectional study and involved 285 pregnant women. It was carried out in the delivery rooms of Cengiz Gökçek Obstetrics and Pediatrics Hospital in Gaziantep, Türkiye, utilizing the "Personal Information Form" and the "Birth Satisfaction Scale" for data collection. T-test, ANOVA test and linear regression test was used for data analysis.

Results: The findings indicate that pregnant women with cervical dilation of 6-10 cm had lower cesarean section rates and reduced use of oxytocin and epidosin. Additionally, episiotomy incisions, vacuum applications, and amniotomy attempts were found to be less frequent in this group. It was discovered that the total mean score on the birth satisfaction scale for multiparous pregnant women was higher than that for primiparous pregnant women (P=0.001), and higher for those who had desired pregnancies compared to women with undesired pregnancies (P=0.037). Satisfaction with delivery was found to be lower among pregnant women with cervical dilation of 0-3 cm (P=0.012), those who received oxytocin induction, and those who underwent an episiotomy (P=0.001). A significant correlation was observed between the level of cervical dilation, parity, desire for pregnancy, and birth interventions with birth satisfaction (R=0.39, R^2=0.33, P<0.001). These factors together explain 33% of the total variance in birth satisfaction.

Conclusion: Low levels of cervical dilation at the time of admission to the delivery room are associated with an increase in birth interventions and a decrease in birth satisfaction.

Keywords: Delivery room, delivery of healthcare, patient satisfaction

Introduction

Today, the global incidence of cesarean sections is on the rise, with Türkiye experiencing particularly high rates.[1] Although the World Health Organization (WHO) has recommended since 1985 that the ideal cesarean section rate should be between 10-15% of all births, the frequency of cesarean sections worldwide reached 21.1% in 2020,[2] and a staggering 53% in Türkiye.[3] Cesarean sections are known to cause significant complications, mortality, and morbidity for both the mother and baby.[4]

Preventing unnecessary cesarean sections and other invasive deliveries can largely be achieved by delaying hospital admission until the onset of the active labor phase.[5] Traditional criteria for admitting pregnant women to the delivery room include complete cervical effacement, dilation of 3 cm or more, other cervical changes, and spontaneous rupture of membranes.[6] However, it has been observed that obstetric interventions during labor are fewer when cervical dilation is 6 cm or more.[7] Rahnama et al[8] discovered that late admission to the delivery room increased the rate of spontaneous normal vaginal delivery among low-risk nulliparous women. Similarly, the study by Mikolajczyk et al[9] revealed that admitting pregnant women with cervical dilation of less than 4 cm to the delivery room led to an increase in oxytocin induction, thereby raising cesarean section rates. The Cochrane Pregnancy and Childbirth Group's systematic reviews in 2001 and 2009 compared immediate labor room admission to expected delayed admission into active labor. They reported that delaying admission reduced labor room wait times, the

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need for intrapartum analgesia and oxytocin use, and allowed pregnant women to feel a greater sense of control.[10,11] Additionally, medically slowing labor may increase the use of amniotomy and oxytocin.[12]

Admitting women to the delivery room with cervical dilation of less than 4 cm, along with all associated unnecessary interventions, negatively affects women's labor experiences and satisfaction.[13] A meta-analysis indicates that birth satisfaction is higher when women are admitted to the delivery room later, can self-manage, and experience fewer obstetric interventions.[14] Birth satisfaction is extremely important for the health of both the woman and the baby, as well as for fostering positive family relationships. Therefore, assessing birth satisfaction is also essential in minimizing potential risks.[15-17]

Despite the abundance of studies in the international literature examining the impact of hospital admission timing on obstetric interventions among primiparous women, no study has been found that includes both primiparous and multiparous women. The aim of this study is to determine the effect of cervical dilation levels at the time of admission to the delivery room on labor interventions and labor satisfaction.

Research Questions

1. Does the level of cervical dilation affect labor interventions?
2. Is there a difference in birth satisfaction based on demographic characteristics such as age, educational status, income status and obstetric characteristics such as parity, planned pregnancy, unintended pregnancy of pregnant women?
3. Does the level of cervical dilation and the interventions applied during labor such as induction, episiotomy, amniotomy, vacuum or forceps assistance, and mode of delivery influence labor satisfaction?
4. Are the level of cervical dilation, demographic and obstetric characteristics, and birth interventions together significant predictors of labor satisfaction?

Materials and Methods

Research Design

This study was conducted as a cross-sectional analysis from September 1, 2022, to January 1, 2023. It targeted pregnant women who sought services at the delivery rooms of Cengiz Gökçek Obstetrics and Pediatrics Hospital in Gaziantep, Türkiye. The hospital's facilities included nine clinics, one family planning polyclinic, and one pregnant school where the research was conducted.

Population and Sample

The study population consisted of 1,189 pregnant women admitted to the maternity department of Cengiz Gökçek Obstetrics and Pediatrics Hospital during the study period. The sample size calculation utilized the G-Power software, version 3.9.1. Within this program, a t-test was conducted, comparing the means of two groups.[22,26] The analysis revealed that a minimum of 283 pregnant women were needed to detect a significant difference at a large effect size (Cohen's d=0.167) regarding satisfaction with delivery services (α=0.05, 1-β=0.80). The study initially reached 291 pregnant women. However, one did not meet the inclusion criteria, and five withdrew during the application process. Consequently, the study comprised 285 pregnant women. These women were assigned sequence numbers and were selected using the simple random sampling method.

Inclusion criteria for the study included age between 20 and 40 years, literacy, married status, no disabilities preventing communication, being either primiparous or multiparous pregnant woman. Also, exclusion criteria were illiteracy, single status, refusal to give consent.

Data Collection Tools

In the study, data collection tools were developed by the researcher after a thorough review of the literature on the subject.[18,19] Data were collected using the Personal Information Form and the Birth Satisfaction Scale - Revised (BSS-R).

Personal Information Form

The Personal Information Form was prepared by the researcher, who reviewed the literature on the subject.[18,19] The first section contains questions about the sociodemographic characteristics of the women, such as age, place of residence, level of education, type of family, and income level. The second section includes questions regarding fertility (number of children, number of pregnancies, desired pregnancy, week of pregnancy, etc.) as well as questions about the time of delivery and interventions (time of delivery, method of delivery, use of induction, performance of episiotomy, etc.).

Birth Satisfaction Scale - Revised

Birt Satisfaction Scale - Revised (BSS-R) scale is a 30-item Likert-type scale developed by Hollins-Martin and Martin in 2014.[20] Its adaptation to Turkish was carried out by Coşar-Çetin et al. in 2015.[21] The scale includes responses (1) strongly agree, (2) agree, (3) neither agree nor disagree, (4) disagree, and (5) strongly disagree. Scores obtained from the scale range from 30 to 150 points. As the score increases, satisfaction with childbirth also increases. This tool comprises three subscales. The first subscale, quality of care, includes subthemes such as home assessment, birth environment, adequate support, and relationship with health professionals. The second subscale, personal attributes, encompasses subthemes including ability to cope during labor, feeling in control, preparation for childbirth, and relationship with the baby. The third subscale addresses stress experienced during labor, with subthemes including distress experienced during labor, obstetric injuries, perception of having received adequate medical care, receipt of obstetric interventions, pain experienced, prolonged labor, and health of the baby. In the validity and reliability study of the scale, the Cronbach's alpha reliability coefficient was found to be 0.62.[21] In the internal consistency analysis of the scale in the current study, the Cronbach's alpha reliability coefficient was found to be 0.63.

Data Collection

The data collection instruments were administered by the researcher in the delivery rooms of Cengiz Gökçek Obstetrics and Pediatrics Hospital in Gaziantep. Prior to conducting the study, written authorization was obtained from the hospital, which served as the setting for the research. During the study, the purpose was clearly explained to the pregnant women, and both their written and verbal consent were obtained. This consent stated that their participation in the study was voluntary, and they were free to withdraw from the study at any time if they chose to do so. Pregnant women who agreed to participate in the study completed the data collection forms on an individual basis.

Data Analysis

After coding the data obtained from this research, it was transferred to the Statistical Package for the Social Sciences (SPSS) for Windows

25 (IBM Corp., Armonk, NY, USA) for analysis. In the present study, the level of cervical dilation was the independent variable, while the interventions at birth and the BSS-R total mean scores were the dependent variables. The variables "parity and desired pregnancy" were used as mediating variables.

The Shapiro-Wilk test was applied to determine whether the scores of the pregnant women from the scale showed a normal distribution. The mean scores were found to be normally distributed and were evaluated using the independent samples t-test, One-way Analysis of Variance (ANOVA) test with significance accepted at the $P<0.05$ level. Linear regression test was applied and Durbin-Watson test was used to test the presence of autocorrelation.

Ethical Consideration

To conduct this research, written permission was obtained from the Gaziantep University Clinical Research Ethics Committee (Date: 10. 23. 2017 – Approval Number: 351) and the hospital management. Written and verbal consent was secured from the participants, indicating that their involvement in the study was voluntary and they could withdraw at any time. This research adhered to the guidelines of the Declaration of Helsinki as revised in Brazil in 2013.

Results

The mean age of the pregnant women participating in the study was 25.9 ± 5.6 years, with ages ranging from 20 to 40 years. Table 1 illustrates the impact of cervical dilation levels on delivery interventions. Among the pregnant women who arrived at the delivery room with cervical dilation of 0-3 cm, 24.6% underwent cesarean section, compared to 15.9% of those with 4-5 cm dilation. None of the pregnant women with 6-10 cm dilation underwent a cesarean section. Examining the effect of cervical dilation level on the administration of oxytocin revealed that oxytocin was administered to 71.9% of the pregnant women who arrived at the delivery room with 0-3 cm cervical dilation, 82.5% of those with 4-5 cm dilation, and 3.9% of those with 6-10 cm dilation. An episiotomy incision was performed on 65.5% of the women with 0-3 cm dilation, 50.8% with 4-5 cm dilation, and 41.2% with 6-10 cm dilation. Consequently, a statistically significant difference was observed between the level of cervical dilation and the mode of delivery, oxytocin administration, and the performance of episiotomy. Further analysis to identify the source of this difference showed that cesarean section rates were higher in women who arrived at the delivery room with 0-3 cm cervical dilation compared to those with 6-10 cm dilation ($P=0.001$). Additionally, it was found that oxytocin induction rates for women with 0-3 cm (71.9%) and 4-5 cm cervical dilations were higher than for those arriving with 6-10 cm dilation. Moreover, the rate of episiotomy in women with 0-3 cm dilation was found to be higher than in women with 6-10 cm dilation ($P=0.02$). There was no statistically significant difference between cervical dilation level and the administration of epidosin ($P=0.11$), propess ($P=0.13$), vacuum application ($P=0.28$), or the state of membrane rupture ($P=0.25$) (Table 1).

The mean birth satisfaction score for multiparous pregnant women was 90.43 ± 14.1, while for primiparous pregnant women, it was 82.04 ± 4.7 points. Pregnant women who had planned their pregnancies reported a mean birth satisfaction score of 93.32 ± 16.01, compared to 88.52 ± 12.9 for those with unplanned pregnancies. It was found that multiparous pregnant women had higher delivery satisfaction levels compared to primiparous pregnant women ($P=0.001$), and those with desired pregnancies had higher satisfaction than those with undesired pregnancies ($P=0.037$). The mean birth satisfaction score for pregnant women aged 20-29 was 89.08 ± 12.8, compared to 89.53 ± 15.3 for those aged 30-40. When examining the mean birth satisfaction scores of pregnant women by educational status, literate women had a mean birth satisfaction score of 89.18 ± 1.6, primary-secondary school graduates had 89.07 ± 1.02, and high school and university graduates had 89.83 ± 2.14. The mean birth satisfaction score for women with planned pregnancies was 91.14 ± 14.07, and for those with unintended pregnancies, it was 88.50 ± 13.3. No statistically significant difference was found between age ($P=0.804$), educational level ($P=0.953$), pregnancy intentionality ($P=0.147$), and the total mean birth satisfaction score (Table 2).

Table 3 details the impact of cervical dilation level and birth interventions on satisfaction levels. The mean birth satisfaction score for pregnant women who underwent oxytocin induction was 86.82 ± 11.9, compared to 95.84 ± 15.4 for those who did not undergo oxytocin induction. For pregnant women who underwent episiotomy, the mean birth satisfaction score was 85.54 ± 10.3, versus 91.86 ± 14.9 for those who did not. Accordingly, the total mean birth satisfaction scale score for pregnant women who underwent oxytocin induction ($P=0.001$) and episiotomy ($P=0.001$) in the delivery room was statistically lower than for those who did not. The mean birth satisfaction score for pregnant women who arrived at the delivery room with 0-3 cm cervical dilation was 85.6 ± 1.3, for those with 4-5 cm dilation it was 91.1 ± 1.0, and for those arriving with 6-10 cm dilation it was 87.17 ± 1.8. There is a statistically significant difference between cervical dilation level and birth satisfaction. Further analysis to determine the source of this difference revealed that the total mean score of the Birth Satisfaction Scale for pregnant women arriving at the delivery room with 0-3 cm cervical dilation was lower than for those arriving with 6-10 cm dilation ($P=0.012$). No statistically significant difference was found between the mode of delivery ($P=0.035$), the use of progesterone ($P=0.091$), the use of vacuum extraction ($P=0.05$), the state of the membranes at the time of admission ($P=0.41$), and satisfaction with birth (Table 3).

The results of multiple linear regression analysis showed that cervical dilation level, parity, having a desired pregnancy, and birth interventions significantly correlate with birth satisfaction ($R=0.39$, $R^2=0.33$, $P<0.001$). Thus, the time of admission to the delivery room, parity, having a desired pregnancy, and birth interventions explain 33% of the total variance in birth satisfaction. Examination of the standardized (β) coefficients and t-values suggests that the time of admission to the delivery room and birth interventions are significant predictors of birth satisfaction (Table 4).

Discussion

Cervical dilation levels of less than 4 cm increase the rates of interventions such as oxytocin administration, episiotomy, and cesarean section. Furthermore, birth interventions impact the pregnant women's satisfaction with childbirth.[4,5] Considering these negative effects, the timing of admission to the delivery room is crucial. This study found that multiparous pregnant women experienced higher labor satisfaction compared to primiparous women, and women who desired their pregnancy reported higher labor satisfaction than those who did not. It was observed that pregnant women with greater cervical patency upon admission to the delivery room had lower rates of cesarean delivery and oxytocin use, and fewer

Table 1. The Effect of Cervical Dilatation Levels on the Interventions at Birth (n=285)

Interventions	0-3 cm (n=171) n(%)	4-5 cm (n=63) n(%)	6-10 cm (n=51) n(%)	F	*P*
Mode of delivery					
Vaginal delivery	129(75.4)	53(84.1)	51(100)	8.494	0.001
Cesarean section	42(24.6)	10(15.9)	0(0.0)		
Oxytocin administration					
Present	123(71.9)	52(82.5)	2(3.9)	3.859	0.02
Absent	48(28.1)	11(17.5)	49(96.1)		
Epidosine administration					
Present	83(48.5)	32(50.8)	5(9.8)	1.006	0.11
Absent	88(51.5)	31(49.2)	46(90.2)		
Propess administration					
Present	24(14)	3(4.8)	5(9.8)	2.057	0.13
Absent	147(86)	60(95.2)	46(90.2)		
Execution of episiotomy					
Present	112(65.5)	32(50.8)	21(41.2)	11.417	0.001
Absent	59(34.5)	31(49.2)	30(58.8)		
Vacuum application					
Present	3(1.8)	0(0.0)	2(3.9)	1.255	0.28
Absent	168(98.2)	63(100)	49(96.1)		
Opening state of the membranes					
Spontaneously	97(56.7)	34(54.0)	21(41.2)	2.355	0.25
Amniotomy	74(43.3)	29(46.0)	30(58.8)		

F: One way ANOVA

episiotomies were performed. Additionally, labor satisfaction was lower among pregnant women who received oxytocin induction, underwent episiotomies, or presented to the delivery room with a cervical dilation of 0-3 cm.

This study revealed that multiparous pregnant women reported higher childbirth satisfaction levels than primiparous pregnant women. This difference may be attributed to the fact that primiparous women are experiencing childbirth for the first time, and the unfamiliarity of the situation induces anxiety and fear. Additionally, the greater satisfaction among multiparous women in the study may be linked to their higher numbers compared to primiparous women. Multiparous women have the advantage of drawing from their previous experiences, allowing them to manage their expectations and emotions more effectively. This finding is supported by several studies in the literature. For instance, Çıtak Bilgin et al,[18] observed higher birth satisfaction among multiparous women compared to primiparous women in their study of 387 women. Similarly, research by Urbanova et al.[26] involving 584 women found that multiparous women reported greater birth satisfaction than their primiparous counterparts. Furthermore, studies by Hollins-Martin and Martin,[20] Fumagalli et al,[25] and Mortazavi and Mehrabadi[27] found that multiparous pregnant women reported higher birth satisfaction than primiparous pregnant women.

The current study also noted that women with planned pregnancies experienced higher birth satisfaction than those with unplanned pregnancies. It is important for women to experience desired pregnancies and engage in healthy behaviors that positively impact their own health during pregnancy, as well as fetal health and birth outcomes. Women with planned pregnancies are more likely to educate themselves about pregnancy and childbirth and steer clear of risky behaviors. This enables women to actively participate in the childbirth process, leading to increased satisfaction. Literature supports the notion that women with desired pregnancies report higher satisfaction with childbirth. For instance, a study by Yanıkkerem et al.[33] involving 550 pregnant women found that those with desired pregnancies were more satisfied with their delivery experiences. Similarly, Turan et al.[28] discovered that women with planned pregnancies exhibited higher levels of childbirth satisfaction, attributed to the childbirth preparation program they participated in.

This study identified that the level of cervical dilation upon admission to the delivery room influences the interventions undertaken during delivery. Pregnant women admitted to the delivery room in the early stages of labor were found to have higher cesarean section rates compared to those admitted later. The elevated cesarean section rates among pregnant women admitted to the delivery room

Table 2. Comparison of the Birth Satisfaction with Some Demographic and Obstetric Characteristics (n=285)

Characteristics	n	%	Satisfaction x±SD	t*/F**	*P*
Age					
Between 20 and 29 years old	210	73.7	89.08±12.8	-0.236*	0.804
Between 30 and 40 years old	75	26.3	89.53±15.3		
Educational Level					
Literate	72	25.3	89.18±1.6	0.048**	0.953
Primary School – Middle school graduate	176	61.8	89.07±1.02		
High school – University graduate	37	13.0	89.83±2.14		
Parity					
Primiparous women	42	14.7	82.04±4.7	-3.795*	0.001
Multiparous women	243	85.3	90.43±14.1		
Having a Planned Pregnancy					
Intentional	210	73.7	91.14±14.07	-1.454*	0.147
Unintentional	75	26.3	88.50±13.3		
Having a Desired Pregnancy					
Desired	245	86.0	93.32±16.01	-2.091*	0.037
Undesired	40	14.0	88.52±12.9		

*Independent samples t-test **One way ANOVA

Table 3. The Effect of Cervical Dilatation Levels and Interventions at Birth on the Level of Satisfaction

Interventions	n	%	Satisfaction x±SD	t*/F**	*P*
Mode of delivery					
Vaginal delivery	233	81.8	89.54±13.8	0.922*	0.35
Cesarean section	52	18.2	87.63±12.1		
Oxytocin administration[(a)]					
Present	168	72.1	86.82±11.9	5.169*	0.001
Absent	65	27.9	95.84±15.4		
Epidosine administration[(a)]					
Present	106	45.5	85.37±9.4	0.766*	0.36
Absent	127	54.4	87.74±15.6		
Propess administration[(a)]					
Present	27	11.6	88.96±13.3	0.597*	0.91
Absent	206	88.4	89.22±13.5		
Execution of episiotomy[(a)]					
Present	133	57.1	85.54±10.3	3.992*	0.001
Absent	100	42.9	91.86±14.9		
Vacuum application[(a)]					
Present	4	1.7	77.80±6.5	1.909*	0.05
Absent	229	98.3	89.4±13.5		
Opening state of the membranes[(a)]					
Spontaneously	110	47.2	88.5±11.9	0.819*	0.41
Amniotomy	123	52.8	89.9±15.1		
Cervical dilatation levels					
0-3 cm (A^1)	171	60.0	85.6±1.3	4.520**	0.012
4-5 cm (A^2)	63	22.1	91.1±1.0		
6-10 cm (A^3)	51	17.9	87.17±1.8		

[(a)]Those who gave birth normally were included. *Independent samples t-test **One way ANOVA *** Post- Hoc Test, Bonferroni
***Difference: (A^1)- (A^3)

during the latent phase of labor in this study could be attributed to a preference for elective cesarean sections, driven by anxiety, prolonged labor, and the consequent increase in the need for analgesia and interventions. The literature contains studies that corroborate the findings of this study. For instance, Kauffman et al,[12] Gjareum et al,[29] Lobst et al,[4] and Rahnama et al[8] observed that pregnant women admitted to the delivery room in the latent stage were more likely to undergo cesarean sections.

This study also noted an increased use of oxytocin induction in pregnant women admitted early to the delivery room. Approximately one third % of all pregnancies involve labor induction, highlighting its prevalence as a medical intervention. Elective labor induction results in women staying in the hospital for an additional 3-4 hours compared to those with spontaneous labor, incurring greater economic costs and leading to a higher rate of cesarean section, particularly among nulliparous women.[30] Lobst et al,[4] Shi et al,[31] and Rahnama et al.[8] found that pregnant women in the latent stage received more oxytocin induction. Our research findings align with these studies in the literature.

This study observed that more episiotomies were performed on pregnant women who were admitted to the delivery room early. The literature suggests that childbirth should be as uneventful as possible for the health of both mother and baby. Most women prefer to avoid medical interventions such as episiotomies unless they are necessary for the health of the mother and baby. It has been demonstrated that obstetric outcomes are more favorable in deliveries where the woman's autonomy is respected and unnecessary interventions are avoided.[23,32] This information may explain why more episiotomies are performed on pregnant women who arrive in the delivery room early, as a result of prolonged labor and an effort to expedite the process for both women and healthcare professionals. Contrary to the findings of the current study, Gjareum et al,[29] reported no difference in the rates of episiotomy between pregnant women who presented to the delivery room in the latent phase versus those in the active phase. This discrepancy might be attributed to their exclusive focus on primiparous pregnant women in their study.

Table 4. Multiple Linear Regression Analysis for the Prediction of Birth Satisfaction

Variables	B	Standard Error	β	t	p
Constant	-	4.105		20.942	0.001
Cervical dilatation levels	2.017	1.040	-.116	-1.939	0.005
Oxytocin administration	5.839	2.032	0.167	2.893	0.004
Execution of episiotomy	6.267	1.873	-.219	-3.345	0.001
Parity	0.485	0.404	0.077	1.200	0.023
Having a Desired Pregnancy	5.663	2.306	0.167	2.456	0.015

Enter mothod; F=30,155; p=0,001; R^2=0,33; Durbin-Watson=1,396.

Birth satisfaction is a multidimensional concept influenced by numerous factors.[22] One of the most significant factors affecting women's satisfaction with their birthing experience is the mode of delivery. In the present study, although it was observed that women who had vaginal births reported higher birth satisfaction compared to those who underwent cesarean sections. The findings of the current study align with those of other research indicating that maternal satisfaction is higher following vaginal deliveries compared to cesarean sections.[18,24,23,34] The ability of women who undergo vaginal deliveries to engage more actively in their own care and the care of their newborns, including the ability to move freely, use the toilet independently, and have earlier physical contact with their babies, is believed to contribute positively to birth satisfaction.[27] However, there are also studies showing that the mode of delivery does not affect satisfaction with birth.[24,33] This difference in results between the studies by Akça et al.[24] and Handelzalts et al.[33] may be related to the extent of women's participation in antenatal clinics, their active involvement in decisions made during the birth process, and the support they receive in labor. The literature emphasizes that labor should occur with the least possible intervention for the health of both mother and baby and a positive birth experience.[23,27] Interventions during labor alter the course of birth and negatively affect birth satisfaction.[25,34] In the present study, the use of oxytocin, episiotomy, and vacuum extraction were found to negatively affect birth satisfaction, while the use of propess and amniotomy did not. These findings are consistent with many studies in the literature.[4,5,25,32]

In the current study, it was found that the satisfaction with birth among pregnant women admitted to the delivery room in the latent phase was lower than among those admitted in the active phase. This difference can be attributed to the fact that more interventions are performed on pregnant women admitted to the delivery room in the early stage, which, although they speed up the delivery, also cause anxiety, pain, and fear.[34] While numerous studies in the literature investigate the effect of the timing of admission to the delivery room on the mode of delivery and on vaginal delivery with intervention, no study was found that investigated its effect on satisfaction. No study has yet been found in the literature that determines the effect of the timing of admission to the delivery room on birth interventions and birth satisfaction. This study sets itself apart from others by exploring a novel aspect, thereby offering a significant contribution to the literature.

Study Limitations

The study's limitations include its execution at a single institution, during a specific timeframe, and involving a select group of pregnant women. Differences in birth satisfaction may exist between multiparous and primiparous pregnant women, with different interventions applied to each group during birth. Thus, the inclusion of both primiparous and multiparous pregnant women, rather than focusing on a single group, restricts our research.

Conclusion and Recommendations

The findings indicate that pregnant women admitted to the delivery room with a cervical dilation of 6 cm or more experienced fewer obstetric interventions and reported higher satisfaction with their delivery. Based on these findings, we recommend the expansion of antenatal clinic services, the provision of comprehensive information to pregnant women and their spouses about the labor process and symptoms indicating hospital admission, and efforts to ensure a more positive birth experience. Furthermore, conducting additional studies with larger sample sizes is advised.

Ethics Committee Approval: Ethics committee approval was obtained from Gaziantep University Clinical Research Ethics Committee (Approval Number: 351, Date: 10. 23. 2017)

Informed Consent: Written and verbal consent was secured from the participants.

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Author Contributions: Concept – E.K.D., S.Ç.; Design – E.K.D.; Supervision – E.K.D.; Data Collection and/or Processing – E.K.D.; Analysis and/or Interpretation – E.K.D.; Literature Search – E.K.D.; Writing – E.K.D.; Critical Review – S.Ç.

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