ISSN: 2576-2842

Research Article

Journal of Gynecology & Reproductive Medicine

Maternal Satisfaction with Labor Induction Using Misoprostol: The Case of Mongolia

Ureltsetseg Batdelger[1]*, Sergelen Purev[2], Munkhzul Ganbat[2], Ganbold Sambuu-Yondon[2], Bolortuya Batbayar[2], Nyamtsetseg Buyankhishig[2], Odonchimeg Dagvajantsan[2], Tugsbayar Nanzaddorj[2], Davaatsetseg Batnasan[2], Khongorzul Adiyasuren[2], Namuunbaigali Tserendulam[2], Nandin-Erdene Ulziitogtokh[2] and Purevdorj Batdelger[3]

[1]*Ph.D.,Mongolian National Council for Education Accreditation (MNCEA), Ulaanbaatar, Mongolia*

[2]*Clinical Professor of Obstetrics and Gynecology, AMH, Ulaanbaatar, Mongolia*

[3]*Mongolian National University of Medical Sciences, Ulaanbaatar, Mongolia*

***Corresponding Author**
Ureltsetseg Batdelger, MPH, Ph.D., National Council for Education Accreditation (MNCEA), Ulaanbaatar, Mongolia.

Submitted: 2026, Aug 08; **Accepted:** 2026, Oct 28; **Published:** 2026, Nov 10

Citation: Batdelger, U., Purev, S., Ganbat, M., Sambuu-Yondon, G., Batbayar, B., et al. (2026). Maternal Satisfaction with Labor Induction Using Misoprostol: The Case of Mongolia. *J Gynecol Reprod Med, 10*(3): 01-08.

Abstract

Background: *Labor induction is an essential component of modern obstetric care, widely used to reduce maternal and fetal risks associated with prolonged pregnancy and other obstetric complications. Misoprostol, a synthetic prostaglandin, is commonly used for cervical ripening and the initiation of uterine contractions. Although numerous studies have examined the clinical effectiveness of misoprostol, few have addressed maternal satisfaction as an indicator of obstetric care quality, particularly in low- and middle-income settings.*

Objective: *This study evaluated maternal satisfaction with labor induction using misoprostol and examined the influence of pain management, communication and informed consent, respectful and supportive care, the induction-to-delivery process, and maternal and neonatal outcomes on overall satisfaction among women in Mongolia.*

Methods: *A cross-sectional, retrospective study was conducted among 504 postpartum women who underwent labor induction with misoprostol between 2025 and 2026 at maternity healthcare facilities in Mongolia. Data on induction characteristics, maternal and neonatal outcomes, and satisfaction were collected using a structured, five-point Likert-scale questionnaire and analyzed using partial least squares structural equation modeling (PLS-SEM) in SmartPLS.*

Results: *All seven constructs met the recommended thresholds for internal consistency and convergent validity (Cronbach's alpha 0.789–0.980; average variance extracted 0.567–0.927), supporting the reliability of the measurement model. In the structural model, only effective pain management showed a statistically significant positive association with maternal satisfaction ($\beta = 0.250$, $t = 2.824$, $p = 0.005$). Communication and informed consent, respectful and supportive care, the induction-to-delivery process, and maternal and neonatal outcomes were rated favorably in descriptive analysis but did not significantly predict maternal satisfaction in the structural model ($p > 0.05$).*

Conclusion: *Mongolian women were generally satisfied with misoprostol-based labor induction, particularly regarding interpersonal care. Effective pain management emerged as the principal driver of maternal satisfaction, suggesting that strengthening pain-control practices, alongside continued attention to organizational efficiency, may further improve women's childbirth experience.*

Keywords: Misoprostol, Labor Induction, Maternal Satisfaction, Vaginal Delivery, Neonatal Outcomes, Obstetric Care, Mongolia

1. Introduction

Improving maternal and neonatal health remains one of the primary objectives of healthcare systems worldwide. Despite advances in obstetric care, complications associated with prolonged pregnancy, hypertensive disorders, fetal growth restriction, and other pregnancy-related conditions continue to contribute to maternal and neonatal morbidity. In such circumstances, labor induction serves as an important intervention to reduce adverse outcomes and improve the safety of childbirth.

Labor induction refers to the artificial initiation of uterine contractions before the spontaneous onset of labor, with the objective of achieving vaginal delivery. International estimates suggest that labor induction accounts for approximately 15-25% of all deliveries, and its use continues to increase globally as obstetric indications expand. The success of labor induction depends on several factors, including cervical readiness, gestational age, maternal health status, and the method used.

Misoprostol has become one of the most widely used pharmacological agents for labor induction because of its effectiveness, affordability, stability at room temperature, and ease of administration. It promotes cervical ripening and stimulates uterine contractions, making it particularly useful in low- and middle-income countries where access to more expensive alternatives may be limited. Clinical studies have shown that low-dose vaginal misoprostol effectively promotes vaginal delivery while maintaining an acceptable safety profile for mothers and newborns.

In Mongolia, labor induction with misoprostol is increasingly used in accordance with national clinical guidelines and obstetric standards. Previous studies have focused primarily on clinical outcomes, such as delivery mode, induction-to-delivery interval, and maternal or neonatal complications, with comparatively little attention given to maternal satisfaction. Maternal satisfaction is increasingly recognized as a critical indicator of healthcare quality because childbirth is not only a physiological event but also a significant psychological and emotional experience.

Women's perceptions of labor, communication with healthcare providers, pain management, safety, and the overall childbirth experience influence their satisfaction with maternity services. Positive childbirth experiences are associated with improved maternal mental health, greater confidence in the healthcare system, and better postpartum well-being. Evaluating maternal satisfaction alongside clinical outcomes therefore provides a more comprehensive assessment of labor induction practice.

This study examines maternal satisfaction with labor induction using misoprostol in Mongolia and the associated maternal and neonatal outcomes. By integrating clinical effectiveness with patient-centered measures, the study aims to contribute to the improvement of obstetric care quality and evidence-based maternity services in Mongolia.

2. Theoretical Framework and Hypothesis Development

Maternal satisfaction is widely regarded as a multidimensional concept reflecting a woman's evaluation of her childbirth experience and the healthcare services received during pregnancy, labor, delivery, and the postpartum period. In contemporary healthcare research, patient satisfaction is considered an essential indicator of service quality and healthcare effectiveness.

One influential framework for understanding satisfaction is Expectation–Confirmation Theory (ECT). Originally developed in consumer behavior research, ECT proposes that satisfaction results from the comparison between an individual's expectations prior to receiving a service and the actual experience after the service is delivered: satisfaction increases when experiences meet or exceed expectations and decreases when they fall short.

Applied to maternity care, maternal satisfaction depends on whether the childbirth experience aligns with a mother's expectations regarding safety, comfort, communication, emotional support, and clinical outcomes. Women who perceive labor and delivery as safe, respectful, and professionally managed tend to report higher satisfaction, regardless of whether labor was spontaneous or induced.

A second relevant perspective is Donabedian's healthcare quality model, which evaluates quality through three dimensions - structure, process, and outcomes [1]. In obstetric care, structure includes healthcare facilities, staffing, and resources; process refers to the interactions between healthcare providers and patients; and outcomes include both clinical results and patient satisfaction. Maternal satisfaction, in this view, reflects both the quality of care provided and the outcomes achieved.

The present study is grounded in Donabedian's (1988) quality-of-care framework and the patient satisfaction theory developed by Ware et al. (1983) [1,2]. Donabedian (1988) argues that healthcare quality is reflected in care processes and outcomes, while Ware et al. (1983) propose that patient satisfaction is shaped by patients' perceptions of the care received and the outcomes experienced [1,2]. In maternal healthcare, satisfaction is influenced by clinical effectiveness, communication, emotional support, and maternal and neonatal outcomes [3,4].

Prior studies consistently show that women undergoing labor induction report higher satisfaction when pain is effectively managed, healthcare providers communicate clearly, respectful and supportive care is provided, the induction process proceeds smoothly, and maternal and neonatal outcomes are favorable [5,6].

Building on these theoretical and empirical foundations, this study proposes that maternal satisfaction with labor induction using misoprostol is influenced by six independent variables: effective pain management, clear communication and informed consent, respectful and supportive care, a favorable induction-to-delivery process, positive maternal outcomes, and positive neonatal outcomes.

I. **Effective pain management.** Pain management is a major determinant of childbirth satisfaction. Women who perceive labor pain as adequately managed are more likely to report positive birth experiences and greater satisfaction with maternity care [3,7]. Comfort theory holds that physical comfort is fundamental to patient satisfaction and healthcare quality; effective pain management reduces physical distress and anxiety, allowing women to experience childbirth more positively.

II. **Clear communication and informed consent.** Communication between healthcare professionals and patients contributes significantly to maternal satisfaction. Women who receive adequate information, understand the induction process, and participate in decision-making generally report higher satisfaction [4,8]. Patient-centered care theory holds that when mothers understand the reasons, risks, and benefits of induction and take part in decision-making, they are more likely to trust healthcare providers and report greater satisfaction.

III. **Respectful and supportive care.** The Respectful Maternity Care framework emphasizes dignity, privacy, emotional support, and freedom from mistreatment during childbirth. Respectful interactions with healthcare professionals are a key predictor of positive childbirth experiences women who perceive respectful treatment and emotional support generally report more positive experiences and higher satisfaction [3,9].

IV. **A favorable induction-to-delivery process.** The duration and smooth progression of labor induction shape women's perceptions of care. Shorter, less complicated induction processes are associated with greater maternal satisfaction [5]. Donabedian's model identifies process quality -including waiting time, continuity of care, monitoring, and smooth progression from induction to delivery - as a major determinant of quality outcomes.

V. **Positive maternal outcomes.** Maternal health outcomes, including the absence of complications and satisfactory recovery after childbirth, contribute to overall satisfaction with labor induction [6]. Donabedian (1988) proposed that healthcare quality should ultimately be evaluated through health outcomes; maternal recovery, absence of complications, and physical well-being after childbirth significantly influence mothers' perceptions of satisfaction [1].

VI. **Positive neonatal outcomes.** Women often evaluate their childbirth experience in light of their newborn's health status. Mothers whose infants are born healthy and free of complications generally report more positive childbirth experiences and greater satisfaction with maternity care [7].

Maternal satisfaction, the dependent variable, refers to a mother's overall evaluation of the labor induction experience, encompassing perceptions of healthcare quality, interpersonal interactions, emotional support, safety, and maternal and neonatal outcomes [2,4]. Consistent with Expectation–Disconfirmation Theory, satisfaction occurs when perceived performance meets or exceeds expectations regarding pain management, communication, support, safety, and clinical outcomes, while dissatisfaction occurs when performance falls short of these expectations, even when clinical outcomes are objectively acceptable.

Based on this framework, the following hypotheses were formulated and tested using the conceptual model shown in Figure 1:

H1: *Effective pain management positively influences maternal satisfaction*.

H2: *Clear communication and informed consent positively influence maternal satisfaction.*

H3: *Respectful and supportive care from healthcare professionals positively influences maternal satisfaction*.

H4: *A favorable induction-to-delivery process positively influences maternal satisfaction.*

H5: *Positive maternal outcomes positively influence maternal satisfaction.*

H6: *Positive neonatal outcomes positively influence maternal satisfaction.*

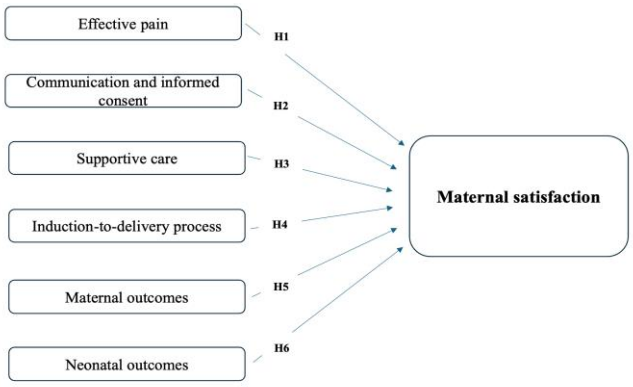


Figure 1: Conceptual model of maternal satisfaction

3. Methodology

This study employed a quantitative, cross-sectional design to investigate the factors associated with maternal satisfaction following labor induction with misoprostol. A quantitative approach was considered appropriate because it allows the systematic measurement of perceptions, attitudes, and experiences and

facilitates the examination of relationships among study variables through statistical analysis [10,11]. The cross-sectional survey design enabled data to be collected from participants at a single point in time following childbirth, providing an efficient method for capturing satisfaction levels within a defined population [12].

The target population comprised postpartum mothers who underwent labor induction using misoprostol at maternity healthcare facilities in Mongolia between 2025 and 2026. Eligible participants were women with direct experience of the induction procedure who were able to provide informed responses regarding the care received throughout the induction and delivery process. A purposive sampling technique was used, appropriate for research targeting respondents with specific knowledge or experience relevant to the study objectives [13,14]. A total of 504 postpartum women who underwent labor induction with misoprostol were included in the final analytic sample.

Data were collected using a structured questionnaire developed from previous instruments assessing maternal satisfaction, childbirth experience, and quality of maternity care [4,5,7]. The questionnaire measured maternal satisfaction and the six independent constructs-effective pain management, clear communication and informed consent, respectful and supportive care, the induction-to-delivery process, maternal outcomes, and neonatal outcomes-using a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree) [15,16].

Data were analyzed using SmartPLS software. Descriptive statistics summarized respondents' perceptions of each questionnaire item. Reliability and validity were assessed using Cronbach's alpha, rho_A, composite reliability, and average variance extracted (AVE). Structural relationships between the independent variables and maternal satisfaction were tested using partial least squares structural equation modeling (PLS-SEM); path coefficients, t-values, and p-values were used to evaluate the proposed hypotheses.

4. Results

4.1. Descriptive Findings

Among the maternal satisfaction indicators, Comfort and Safety (Ma.SAT3, 0.870) recorded the highest mean value, followed closely by Overall Satisfaction (Ma.SAT1, 0.864) and Expectation Fulfillment (Ma.SAT2, 0.837), suggesting that most mothers felt safe and generally satisfied with their induction experience. Recommendation Intention (Ma.SAT5, 0.622) showed the lowest score, indicating that although mothers were personally satisfied, they were less certain about recommending the service to others; Revisit Intention (Ma.SAT4, 0.770) was likewise lower than the overall satisfaction items.

Within the pain-management construct, Pain Relief Effectiveness (Eff.Pain4, 0.938) achieved the highest score, followed by Pain Relief Options (Eff.Pain3, 0.923) and Pain Support (Eff.Pain5, 0.916), indicating that respondents were highly satisfied with how labor pain was managed. Pain Control (Eff.Pain1, 0.806) had the lowest score in this construct, suggesting that while support and pain-relief interventions were available, complete pain control remained more difficult to achieve.

Clear communication and informed consent showed consistently high scores across all indicators. Opportunity for Questions (Com.Inf4, 0.973) was rated highest, followed by Understanding Necessity (Com.Inf2, 0.965) and Risk-Benefit Information (Com. Inf3, 0.942). The comparatively lower, though still high, score for Procedure Explanation (Com.Inf1, 0.898) indicates strong communication practice overall.

Respectful and supportive care achieved the highest scores of all constructs. Respectful Treatment (ReSuCa1, 0.973) recorded the highest value, while Privacy and Dignity (ReSuCa4, 0.967) and Active Listening (ReSuCa2, 0.966) were also exceptionally high; even the lowest-scoring indicator, Kindness and Encouragement (ReSuCa5, 0.944), remained very strong. These findings indicate that mothers perceived healthcare professionals as respectful, supportive, and attentive throughout the induction process.

The favorable induction-to-delivery process construct showed greater variability than the others. Labor Monitoring (Fa.De3, 0.849) achieved the highest score, followed by Process Duration (Fa.De4, 0.845) and Waiting Time (Fa.De2, 0.820). Process Organization (Fa.De1, 0.378), however, was substantially lower than every other indicator in the study, pointing to concerns regarding the organizational aspects of the induction process, such as scheduling, coordination, or service delivery.

For positive maternal outcomes, Recovery (Po.Ma3, 0.797) showed the highest mean score, followed by Absence of Complications (Po.Ma1, 0.782); Maternal Safety (Po.Ma4, 0.752) and Maternal Health Outcome (Po.Ma5, 0.752) were similar. Physical Stability (Po.Ma2, 0.675) recorded the lowest score, suggesting that some mothers experienced lingering physical discomfort despite generally positive outcomes.

For positive neonatal outcomes, Immediate Neonatal Care (Po. Ne3, 0.886) and Neonatal Outcome (Po.Ne5, 0.877) received the highest evaluations, and Neonatal Information (Po.Ne4, 0.838) also scored highly, reflecting effective communication about infant status. Neonatal Health (Po.Ne1, 0.643) and Absence of Neonatal Complications (Po.Ne2, 0.689) received comparatively lower ratings, suggesting that some mothers perceived neonatal health outcomes somewhat less positively than the quality of care provided.

Across constructs, respectful and supportive care emerged as the strongest-performing dimension, with all indicators exceeding 0.94, followed closely by clear communication and informed consent. Effective pain management also received favorable evaluations, particularly for pain-relief effectiveness and support. The favorable induction-to-delivery process construct exhibited the greatest variation, driven mainly by the low score for process organization (0.378), while positive maternal and neonatal outcomes showed

moderate scores, indicating room to improve post-delivery health outcomes and mothers' perceptions of newborn health (Table 1).

Variable	Code	Item Description	Loading
Maternal satisfaction	Ma.SAT1	Overall Satisfaction	0.864
	Ma.SAT2	Expectation Fulfillment	0.837
	Ma.SAT3	Comfort and Safety	0.870
	Ma.SAT4	Revisit Intention	0.770
	Ma.SAT5	Recommendation Intention	0.622
Effective pain	Eff.Pain1	Pain Control	0.806
	Eff.Pain2	Responsiveness	0.879
	Eff.Pain3	Pain Relief Options	0.923
	Eff.Pain4	Pain Relief Effectiveness	0.938
	Eff.Pain5	Pain Support	0.916
Clear communication and informed consent	Com.Inf1	Procedure Explanation	0.898
	Com.Inf2	Understanding Necessity	0.965
	Com.Inf3	Risk-Benefit Information	0.942
	Com.Inf4	Opportunity for Questions	0.973
	Com.Inf5	Informed Consent	0.904
Respectful and supportive care	ReSuCa1	Respectful Treatment	0.973
	ReSuCa2	Active Listening	0.966
	ReSuCa3	Emotional Support	0.962
	ReSuCa4	Privacy and Dignity	0.967
	ReSuCa5	Kindness and Encouragement	0.944
A favorable induction-to-delivery process	Fa.De1	Process Organization	0.378
	Fa.De2	Waiting Time	0.820
	Fa.De3	Labor Monitoring	0.849
	Fa.De4	Process Duration	0.845
	Fa.De5	Process Efficiency	0.776
Positive maternal outcomes	Po.Ma1	Absence of Complications	0.782
	Po.Ma2	Physical Stability	0.675
	Po.Ma3	Recovery	0.797
	Po.Ma4	Maternal Safety	0.752
	Po.Ma5	Maternal Health Outcome	0.752
Positive neonatal outcomes	Po.Ne1	Neonatal Health	0.643
	Po.Ne2	Absence of Neonatal Complications	0.689
	Po.Ne3	Immediate Neonatal Care	0.886
	Po.Ne4	Neonatal Information	0.838
	Po.Ne5	Neonatal Outcome	0.877

Note: Ma.SAT = Maternal satisfaction; Eff.Pain = Effective pain; Com.Inf = Clear communication and informed consent; ReSuCa = Respectful and supportive care; Fa.De = A favorable induction-to-delivery process; Po.Ma = Positive maternal outcomes; Po.Ne = Positive neonatal outcomes

Table 1: Descriptive Statistics of Study Constructs and Indicators

4.2. Reliability and Validity of the Measurement Model

All constructs met the recommended thresholds for internal consistency, reliability, and convergent validity. Cronbach's alpha values ranged from 0.789 to 0.980, indicating acceptable to excellent reliability across all latent variables, and rho_A values ranged from 0.820 to 0.985, further confirming the consistency of the measurement model.

Respectful and Supportive Care showed the highest reliability (α = 0.980, CR = 0.984), and Clear Communication and Informed Consent also demonstrated very strong reliability (α = 0.965, CR = 0.973). Effective Pain Management likewise showed excellent reliability (α = 0.936, CR = 0.952). For the dependent variable, Maternal Satisfaction, Cronbach's alpha (0.857), rho_A (0.862), and composite reliability (0.896) all exceeded the recommended threshold of 0.70, and its AVE of 0.636 indicates that more than 63% of the variance in its indicators is explained by the underlying construct.

Positive Neonatal Outcomes (α = 0.854, AVE = 0.629) and Positive

Maternal Outcomes (α = 0.817, AVE = 0.567) demonstrated good reliability and acceptable convergent validity. A Favorable Induction-to-Delivery Process reported the lowest reliability values among the constructs (α = 0.789, CR = 0.862) but remained above the minimum acceptable threshold. All AVE values exceeded the recommended criterion of 0.50, ranging from 0.567 to 0.927, with the highest observed for Respectful and Supportive Care (0.927) and the lowest for Positive Maternal Outcomes (0.567) (Figure 2, Table 2).

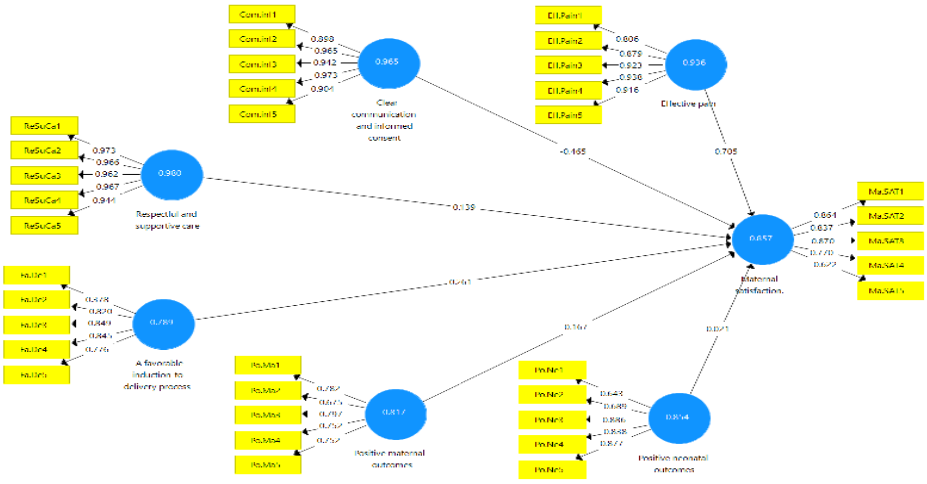


Figure 2: Structural model results (Cronbach's alpha, SmartPLS 3.0).

Note: Ma.SAT = Maternal satisfaction; Eff.Pain = Effective pain; Com.Inf = Clear communication and informed consent; ReSuCa = Respectful and supportive care; Fa.De = A favorable induction-to-delivery process; Po.Ma = Positive maternal outcomes; Po.Ne = Positive neonatal outcomes.

Construct	Cronbach's Alpha	rho_A	Composite Reliability	AVE
Respectful and supportive care	0.980	0.985	0.984	0.927
Clear communication and informed consent	0.965	0.978	0.973	0.878
Effective pain	0.936	0.937	0.952	0.799
Positive neonatal outcomes	0.854	0.904	0.893	0.629
A favorable induction-to-delivery process	0.789	0.820	0.862	0.571
Positive maternal outcomes	0.817	0.842	0.867	0.567
Maternal satisfaction	0.857	0.862	0.896	0.636

Table 2: Reliability and Convergent Validity of Study Constructs

A comparison across constructs shows that process-related variables-particularly respectful and supportive care, clear communication and informed consent, and effective pain management-demonstrated substantially higher reliability and convergent validity than outcome-related variables, indicating that respondents evaluated their interactions with healthcare professionals more consistently than they evaluated maternal and neonatal outcomes, which may reflect greater variability in individual clinical experience. Overall, the measurement model demonstrated strong psychometric properties, supporting its use for subsequent structural model analysis.

4.3. Structural Model and Hypothesis Testing

The structural model was assessed using bootstrapping to examine the relationships between the six independent variables and maternal satisfaction. Of the six hypothesized paths, only one was statistically supported (Table 3).

Hypothesis	Path	β	T-statistic	p-value	Result
H1	Effective pain → Maternal satisfaction	0.250	2.824	0.005	Supported
H2	Clear communication and informed consent → Maternal satisfaction	0.399	1.164	0.245	Not supported
H3	Respectful and supportive care → Maternal satisfaction	0.247	0.563	0.574	Not supported
H4	A favorable induction-to-delivery process → Maternal satisfaction	0.313	0.836	0.404	Not supported
H5	Positive maternal outcomes → Maternal satisfaction	0.284	0.072	0.942	Not supported
H6	Positive neonatal outcomes → Maternal satisfaction	0.295	0.567	0.571	Not supported

Table 3: Path Analysis and Hypothesis Testing Results

Effective pain management showed a statistically significant positive effect on maternal satisfaction (β = 0.250, t = 2.824, p = 0.005), supporting H1: mothers who perceived their pain as effectively managed during labor induction reported higher overall satisfaction, consistent with previous research emphasizing pain control as a key determinant of maternal satisfaction (Hodnett, 2002; [7]. None of the remaining five paths reached statistical significance. Clear communication and informed consent (t = 1.164, p = 0.245), respectful and supportive care (t = 0.563, p = 0.574), the favorable induction-to-delivery process (t = 0.836, p = 0.404), positive maternal outcomes (t = 0.072, p = 0.942), and positive neonatal outcomes (t = 0.567, p = 0.571) were all rated favorably in the descriptive analysis but did not independently predict maternal satisfaction once the other constructs were considered simultaneously; H2 through H6 were therefore not supported.

5. Discussion

This study examined maternal satisfaction with labor induction using misoprostol in Mongolia and the influence of six theoretically derived predictors. Descriptively, mothers were generally satisfied with their induction experience, particularly regarding comfort and safety, and interpersonal dimensions of care-respect, communication, and emotional support-received the highest ratings among all study dimensions, suggesting that healthcare professionals in this sample were successful in providing patient-centered, respectful, and informative care.

Despite these favorable perceptions, the structural model showed that effective pain management was the only factor with a statistically significant effect on maternal satisfaction. This finding is consistent with the broader literature identifying pain control as a central determinant of childbirth satisfaction (Hodnett, 2002;), and suggests that, once other constructs are considered jointly, mothers' subjective experience of pain relief carries more weight for overall satisfaction than communication, respect, process efficiency, or clinical outcomes considered individually [7].

The non-significant paths for communication, respectful care, the induction-to-delivery process, and maternal and neonatal outcomes do not imply that these dimensions are unimportant; rather, they suggest that in this sample their influence on satisfaction may operate indirectly, through pain management, or may be attenuated when several highly correlated predictor constructs are entered into the same model. The comparatively low score for process organization (Fa.De1 = 0.378) further indicates that logistical aspects of the induction pathway-scheduling, coordination, and workflow-represent a specific area where women's experience diverges from the otherwise strongly positive picture of interpersonal care, and warrant targeted quality-improvement attention even though this construct did not reach significance as a predictor of overall satisfaction.

These findings should be interpreted in light of the study's design. The cross-sectional, retrospective, single-country design limits causal inference and generalizability beyond the study setting, and purposive sampling, while appropriate for capturing the experience of women with direct exposure to misoprostol induction, may not be representative of all postpartum women in Mongolia. Self-reported Likert-scale measures are also subject to recall and social-desirability bias. Future research using prospective, multi-site designs, and qualitative methods to explore why interpersonal quality did not translate into a significant statistical effect on satisfaction, would strengthen these conclusions.

6. Conclusion

This study examined maternal satisfaction with labor induction using misoprostol in Mongolia and the influence of pain management, communication and informed consent, respectful and supportive care, the induction-to-delivery process, and maternal and neonatal outcomes. The measurement model demonstrated strong reliability and convergent validity across all constructs, confirming that the questionnaire was a valid instrument for assessing maternal satisfaction and its correlates.

Mothers were generally satisfied with their labor induction experience, particularly regarding comfort, safety, respectful treatment, and communication. However, the structural model indicated that effective pain management was the only factor that significantly influenced maternal satisfaction; communication, respectful care, process efficiency, and maternal and neonatal outcomes, although positively evaluated, did not independently

predict satisfaction. Process organization emerged as a specific area of concern warranting further attention.

These findings suggest that pain management plays a central role in shaping mothers' satisfaction with misoprostol-based labor induction in Mongolia. While healthcare providers in this sample appear to perform strongly in delivering respectful, supportive, and informative care, continued efforts to strengthen pain-management strategies and improve organizational efficiency may further enhance maternal satisfaction and support evidence-based improvements to maternity services in Mongolia.

Authors' Contributions

Ureltsetseg Batdelger conceptualized and designed the study, developed the research methodology, performed the formal statistical analyses, supervised data collection, and prepared the original manuscript draft. Sergelen Purev, Ganbold Sambuu-Yondon, Bolortuya Batbayar, Nyamtsetseg Buyankhishig, Odonchimeg Dagvajantsan, and Tugsbayar Nanzaddorj contributed to data collection and validation, conducted preliminary analyses, and critically reviewed and revised the manuscript for important intellectual content. Davaatsetseg Batnasan, Khongorzul Adiyasuren, Namuunbaigali Tserendulam, and Nandin-Erdene Ulziitogtokh supervised the overall project, provided methodological guidance, and critically reviewed and approved the final version for publication. All authors read and approved the final manuscript and agree to be accountable for all aspects of the work.

References

1. Donabedian, A. (1988). The quality of care: how can it be assessed?. *Jama, 260*(12), 1743-1748.
2. Ware Jr, J. E., Snyder, M. K., Wright, W. R., & Davies, A. R. (1983). Defining and measuring patient satisfaction with medical care. *Evaluation and program planning, 6*(3-4), 247-263.
3. Hodnett, E. D. (2002). Pain and women's satisfaction with the experience of childbirth: a systematic review. *American journal of obstetrics and gynecology, 186*(5), S160-S172.
4. Redshaw, M., & Heikkilä, K. (2010). Delivered with care. A national survey of women's experience of maternity care 2010.
5. Hildingsson, I., Karlström, A., & Nystedt, A. (2011). Women's experiences of induction of labour–findings from a Swedish regional study. *Australian and New Zealand journal of obstetrics and gynaecology, 51*(2), 151-157.
6. Green, J. M., Baston, H., & Easton, S. Greater expectations? Inter-relationships between women's expectations and experiences of decision making, continuity, choice and control in labour, and psychological outcomes: summary report. Leeds: Mother & Infant Research Unit; 2003.
7. Goodman, P., Mackey, M. C., & Tavakoli, A. S. (2004). Factors related to childbirth satisfaction. *Journal of advanced nursing, 46*(2), 212-219.
8. Hankivsky, O., Grace, D., Hunting, G., Giesbrecht, M., Fridkin, A., Rudrum, S., ... & Clark, N. (2019). An intersectionality-based policy analysis framework: critical reflections on a methodology for advancing equity. In The Palgrave handbook of intersectionality in public policy (pp. 133-166). *Cham: Springer International Publishing.*
9. Bohren, M. A., Vogel, J. P., Hunter, E. C., Lutsiv, O., Makh, S. K., Souza, J. P., ... & Gülmezoglu, A. M. (2015). The mistreatment of women during childbirth in health facilities globally: a mixed-methods systematic review. *PLoS medicine, 12*(6), e1001847.
10. Creswell, J. W., & Creswell, J. D. (2017). Research design: Qualitative, quantitative, and mixed methods approaches. *Sage publications.*
11. Saunders, M., Lewis, P., Thornhill, A., & Lewis, P. (2012). *Research methods for business students.*
12. Setia, M. S. (2016). Methodology series module 3: Cross-sectional studies. Indian journal of dermatology, 61(3), 261.
13. Patton, M. Q. (2015). Qualitative research & evaluation methods: Integrating theory and practice. (No Title).
14. Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American journal of theoretical and applied statistics, 5*(1), 1-4.
15. Likert, R. (1932). A technique for the measurement of attitudes. *Archives of psychology.*
16. Boone Jr, H. N., & Boone, D. A. (2012). Analyzing likert data. *The Journal of extension, 50*(2), 48.

Copyright: *©2026 Ureltsetseg Batdelger, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.*