

# Patient Preferences and Satisfaction with Neuraxial Labor Analgesia for Vaginal Deliveries: A Cross-Sectional Survey in a Diverse Urban Population

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# Introduction

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- Current Evidence Gap: Most neuraxial labor analgesia (NLA) satisfaction studies focus on homogeneous populations.
- Why It Matters: A diverse patient sample provides broader insight into satisfaction drivers.
- Aim: Determine which clinical and demographic factors most influence maternal satisfaction with NLA for vaginal delivery.
- Key Focus: Patient-centered outcomes (pain relief priorities, side effect tolerance) in an urban setting.

# Methods

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- Design: Cross-sectional survey (N=101) on postpartum day 1 at a large NYC hospital.
- Ten outcomes were ranked (1 = most important to avoid, 10 = least) and assigned a relative dollar value (total \$100).
- Patients rated their overall satisfaction with obstetric anesthesia from 1–100% (100%=highest).
- Analysis: Correlations between satisfaction scores and variables (e.g., parity, labor duration); SPSS for statistical tests.

# Results

Outcomes Ranked	Ranking	Relative Value (Dollar Amount)
<b>Pain during labor</b>	<b>2.14 ± 2.08</b>	<b>39.8 ± 25.9</b>
Vomiting	4 ± 1.94	8.73 ± 7.36
Nausea	4.6 ± 2.01	7.52 ± 6.51
Pain after delivery	4.71 ± 2.91	10.0 ± 9.50
Itching	5.95 ± 2.54	6.5 ± 8.31
Nervousness and anxiety	6.11 ± 2.61	5.85 ± 6.04
Shivering	6.57 ± 2.51	5.26 ± 5.08
Leg weakness	6.58 ± 2.45	5.5 ± 5.31
Excess pain medication	7.06 ± 2.82	5.99 ± 8.25
<b>Sleepiness</b>	<b>7.21 ± 2.39</b>	<b>4.83 ± 6.11</b>

Variable	Value	N	Mean Overall Satisfaction (%)	SD	P
<b>Length of Labor</b>	<b>Mean = 12:09:46</b>	<b>101</b>	<b>92.8</b>	<b>13</b>	<b>0.009*</b>
<b>Parity</b>	<b>Nulliparous</b>	<b>44</b>	<b>89.2</b>	<b>15.8</b>	<b>0.003</b>
	<b>Multiparous</b>	<b>57</b>	<b>95.6</b>	<b>9.42</b>	
<b>Race/ Ethnicity</b>	White non-Hispanic	46	92.93	9.6	0.268
	Other	55	92.69	15.3	
<b>Income</b>	Less than \$36,000	27	90.7	19.0	0.778
	\$36,001 to \$52,000	9	92.22	17.2	
	\$52,001 to \$140,000	21	93.29	8.73	
	More than \$140,001	44	93.98	8.82	
<b>Education Level</b>	Less than High School	8	98.75	3.54	0.632
	High School	25	91.36	19.4	
	Some College	11	94.09	10.7	
	Bachelor's Degree	19	90.74	13.5	
	Graduate Degree	38	93.16	8.67	
<b>Induction</b>	Yes	47	91.96	12.7	0.473
	No	54	93.54	13.3	

\*r=-0.26: inverse correlation between length of labor and overall satisfaction

# Conclusions

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- High overall satisfaction with NLA in a diverse population.
- Effective pain relief is the primary driver of satisfaction.
- Clinical factors (parity, labor duration) more important than demographic variables.
- Next Steps: Validate these findings in larger, multi-center studies to optimize NLA protocols for diverse patient populations.