Patient Satisfaction and Preference Valuation in Neuraxial Labor Analgesia Across a Diverse Population

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Background and Methods

NLA is the most effective method for labor pain relief[1]

- Compared to non-neuraxial methods, NLA:
  - Provides superior analgesia[2]
  - Reduces need for additional pain control[2]
  - Improves maternal satisfaction[2]

Disparities in LEA utilization:

- Lower use among Black, Hispanic, and Asian women[3,4]

Less is known about:

- Differences in patient satisfaction
- Variations in anesthesia-related preferences

Study Objectives:

- Assess differences in patient satisfaction with LEA
- Evaluate differences in patient preferences

Design: Cross-sectional, single-site survey

Population: Postpartum patients after vaginal delivery

Outcomes:

- Satisfaction with LEA (0–100 scale)
- Preference valuation: Allocation of hypothetical $100 across 10 anesthesia-related outcomes
  - Higher dollar amount = greater perceived importance

Variables: dichotomized by Race/Ethnicity, Income, Education, Insurance, Marital Status, Nationality

Analysis:

- Descriptive statistics
- Independent Welch's t-tests
- Significance threshold: $p < 0.05$

Results

Satisfaction: High overall: 92.8 ± 12.9

- No significant differences across demographic groups

Patient Preferences:

- Avoidance of labor pain = highest valued outcome
- Mean: $39.8 ± 25.9
- Consistent across subgroups

Key Differences in Pain Valuation:

- Higher among:
  - White non-Hispanic vs. non-White/Hispanic
  - Married vs. unmarried

	Demographics	Overall Satisfaction		$ Value of Labor Pain Avoidance	
Variable	*Mean (SD) [Range] OR n (%)*	*Mean (SD)*	*P-value*	*Mean (SD)*	*P- value*
Total	*101 (100%)*	*92.8 (12.9)*	–	*39.8 (25.9)*	–
Race/Ethnicity					
White, Non-Hispanic	46 (45.5%)	92.9 (9.60)	0.923	48.0 (25.6)	0.004*
Non-White and/or Hispanic	55 (54.5%)	92.7 (15.3)		33.0 (24.4)	
Insurance Status					
Commercial	68 (67.3%)	93.1 (10.1)	0.803	43.1 (25.5)	0.071
Medicaid	33 (32.7%)	92.2 (17.6)		33.1 (26.0)	
Annual Household Income					
Less than or equal to $52,000	36 (35.6%)	91.1 (18.3)	0.414	35.1 (26.6)	0.181
Greater than $52,000	65 (64.4%)	93.8 (8.73)		42.4 (25.4)	
Educational Attainment					
Less than a Bachelor's Degree	44 (43.6%)	93.4 (15.7)	0.707	37.3 (25.9)	0.398
Bachelor's Degree or greater	57 (56.4%)	92.4 (10.5)		41.7 (26.0)	
Marital/Cohabitation Status					
Married	71 (70.3%)	93.7 (9.71)	0.402	44.3 (26.1)	0.005*
Unmarried	30 (29.7%)	90.7 (18.6)		29.3 (22.7)	
Nationality					
US-Born	74 (73.3%)	91.7 (14.5)	0.051	40.7 (26.1)	0.588
Foreign-Born	27 (26.7%)	95.9 (6.55)		37.5 (25.8)	

Conclusion

Key Findings & Implications

- High overall satisfaction
- Neuraxial labor analgesia satisfaction was consistently high
- No significant differences across demographic or socioeconomic groups

Differences in patient priorities

- White, non-Hispanic and married patients:
  - Placed greater value on labor pain control compared to non-White/Hispanic and unmarried patients

Clinical implication

- Similar satisfaction scores may mask meaningful differences in patient priorities
- Highlights need for patient-centered counseling in NLA

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