

# The Association of Socioeconomic Variables with Cesarean Section: A Retrospective Study

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## Abstract

o Objective: To probe the relationship between socioeconomic variables and cesarean section (CS) by studying indicators of socioeconomic status (SES) previously unexamined in the United States (US). o Design: Retrospective review of government data. o Setting: New York City. o Population or Sample: Women (n=80,506) who gave birth to a live child during 2018. o Methods: Analysis of data from the New York City Department of Health and Mental Hygiene and from the US census. o Main Outcome Measures: Presence of CS. o Results: Multivariate logistic regression analysis showed higher odds for CS for higher median household income [US\$54,500-\$108,499 (OR:1.14, 95% CI:1.02, 1.28, p=0.03) and US\$108,500-\$380,499 (OR:1.36, 95% CI:1.14, 1.63, p<0.001)], and percent receiving supplemental nutrition assistance program (OR:1.01, 95% CI 1.002, 1.01, p=0.003). Lower odds for CS occurred for per capita income [US\$32,500-\$54,499 (OR:0.91, 95% CI:0.86, 0.97, p=0.002), US\$54,500-\$108,499 (OR:0.79, 95% CI:0.71, 0.88, p<0.001), and US\$108,500-\$380,499 (OR:0.82, 95% CI:0.71, 0.94, p=0.01)]. No significant association occurred for public assistance. o Conclusions: We recommend from a public health perspective that using neighborhood SES information has the potential to improve health systems to better deliver care. Patient preferences may be related to SES. There may be conflicts between obstetric care that is maximally beneficial and patient's desire for delivery mode. Clinicians should be aware of the potential implications of this dilemma.

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