Submission Id: 5215

Title

Obstetric and Neonatal Outcomes Assessment of Recent Immigrants in Maine

Priority 1 (Research Category)

Women's health

Presenters

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Abstract

Context

There has been an influx of immigrants to southern Maine in recent years, (11% of Portland's population, 2021) and Maine Medical Center (MMC) serves as the primary labor and delivery hospital for the region. We previously reported that this non-English preference (NEP) population has a significantly lower cesarean section rates compared to English preference (EP) (32% vs 37%). As new immigrant patients are at risk of health disparities due to inequities in social determinants of health, we analyzed C-section indications, NICU admission rates and APGAR scores.

Objective

We analyzed the infant outcome data by parental language preference (EP vs. NEP) to determine if the differences in parental language resulted in poorer neonatal outcomes. We aimed to assure that our health system was not providing substandard care to our New Mainer population in the setting of lower C-section rates, and in the setting of immediate greater needs.

Study Design and Analysis:

Retrospective data collection and analysis with descriptive analysis of the demographics and clinical characteristics of patients. Final analysis was completed with Chi-square testing.

Setting

MMC, a tertiary-care center in Portland, Maine.

Dataset/Population Studied:

All live deliveries at MMC 2020-2021.

Outcome Measures:

NICU admission rates, APGAR scores, and C-section indication.

Results

A total of 6192 patients delivered at MMC in 2020-2021, with 2255 delivering by C-Section. There was no difference between C-section indications in the populations. However, among infants delivered, 22% of all EP patients' infants were admitted to the NICU, while only 14% of NEP patients' newborns were. ($p<0.001$) The APGAR score at 5 minutes also varied significantly between language, with reassuring values of 5 minute APGAR scores (7-10) similar between the two populations (94.5% versus 95.5%), but the percent of very low (APGAR 0-3) were higher in the NEP than EP (3.35% vs. 1.83%), with $p= 0.007$.

Conclusion

Neonates of NEP parents had a significantly lower risk of NICU admission compared to EP. In a recent immigrant population, this can represent the well-known "healthy immigrant" effect. There were also significant differences in APGAR scores between the populations, though this represented variation in the distribution of low and very low values and accounted approximately 5% of all deliveries. Future work can reveal different maternal outcomes and areas of intervention to improve obstetrical practice.