

Preconception Primary Care Access and Preterm Birth: A Nested Case Control Study

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Published In/Presented At

Stutman, A., Banerjee, E., Johnson, M., Burgess, N., Jabbour, K., Nesbitt, K., Shaak, K., Hamadari, R., Careyva, B., & Kamath, A. (2022). *Preconception primary care access and preterm birth: A nested case control study*. Poster presented at Lehigh Valley Health Network, Allentown, PA.

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Background and Objective

Preconception care (PCC) counseling improves maternal wellbeing and pregnancy outcomes.¹ National recommendations support PCC to decrease the risk of preterm birth, as well as infant and maternal morbidity and mortality.^{2,3} However, the uptake of PCC remains low and nearly 50% of all pregnancies in the United States are unplanned.³⁻⁵

The purpose of this study is to identify gaps and opportunities in preconception care access that are associated with preterm births.

Methods

STUDY DESIGN: A quantitative analysis by electronic medical records review of the cases (221 preterm births) and controls (442 term births), matched 2:1 based on age, parity and history of preterm birth was performed. Preconception primary care access (office visit) within 2 years prior to pregnancy was the independent variable.

SETTING: Lehigh Valley Health Network (LVHN) primary care practices (Family Medicine, Obstetrics and Gynecology, Pediatrics and Internal Medicine)

INCLUSION CRITERIA: Women, 18 years and older, who delivered at one of the LVHN sites between 6/1/2018 to 5/31/2019.

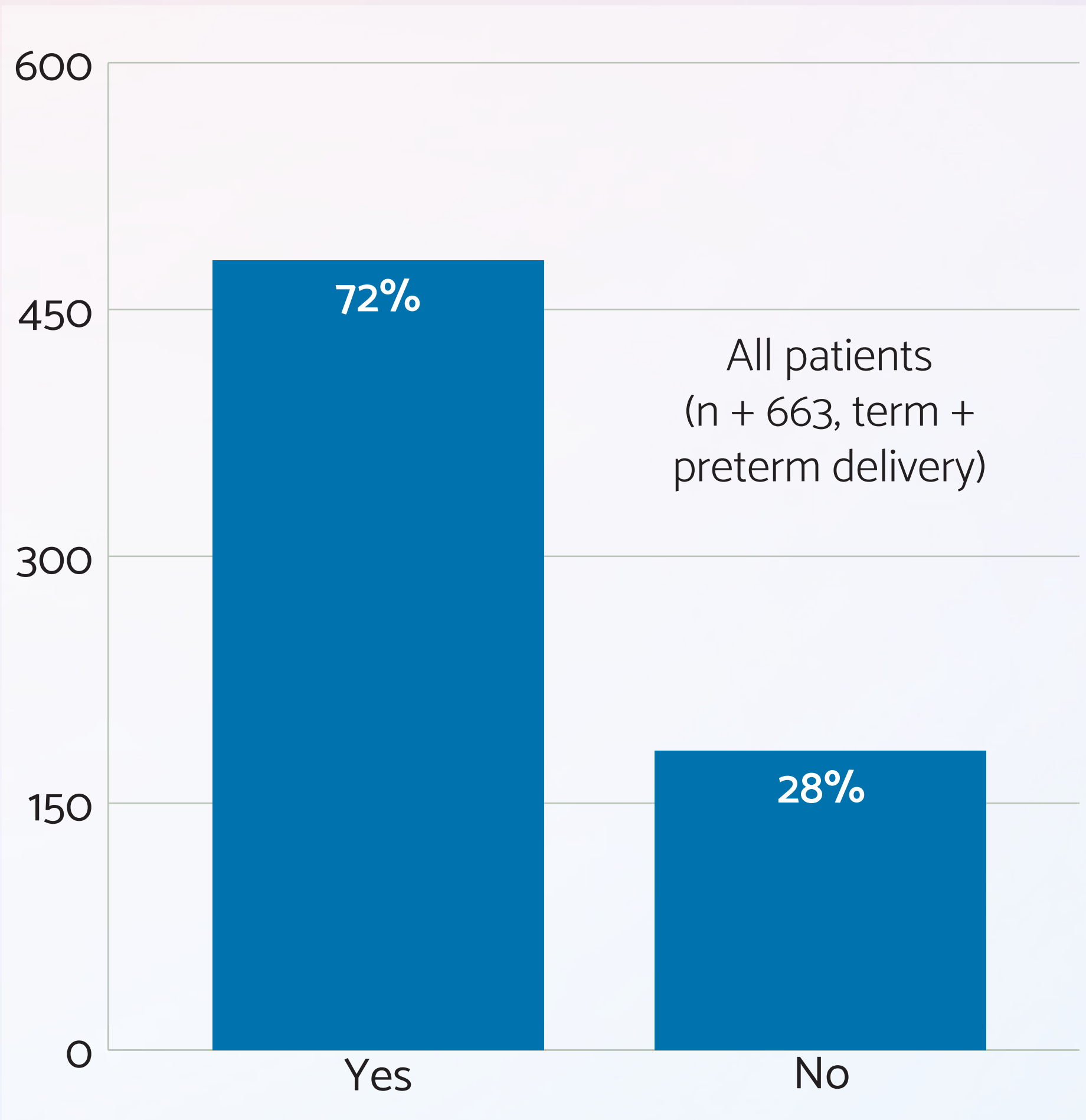
EXCLUSION CRITERIA: Any delivery prior to 20 weeks of pregnancy or maternal age under 18 years two years prior to pregnancy intake.

Results

DEMOGRAPHICS OF 663 PATIENTS: N (%) OR MEAN (SD)

| Age | 29.2 y. (5.6) |
|---------------------------|---------------|
| Race | |
| White or Caucasian | 445 (67.1%) |
| Multi-racial | 59 (8.9%) |
| Black or African American | 52 (7.8%) |
| Asian | 18 (2.7%) |
| Other | 89 (13.4%) |
| Ethnicity | |
| Hispanic or Latina | 187 (28.2%) |
| Preferred language | |
| English | 609 (91.9%) |
| Spanish | 42 (6.3%) |
| Other | 12 (1.8%) |

PRECONCEPTIOIN – DID PATIENT HAVE A PRIMARY CARE ENCOUNTER IN THE 2 YEARS PRIOR TO PREGNANCY?



| | Cases (preterm delivery) | Control (term delivery) | χ^2 | p |
|---|-----------------------------|----------------------------|----------|-------|
| Primary care encounter in 2 years prior to pregnancy* | 163 (76.9%) | 315 (71.9%) | 1.813 | 0.178 |

*preliminary data

Limitations

- Outside network care was not consistently documented
- Focused on primary care practices only
- Reproductive health care access elsewhere
- Confounders: multiple factors influence preterm delivery risk

Conclusion

About 1 in 4 women in both arms did not have a primary care visit within 2 years prior to their pregnancy. Our study does not demonstrate an association between primary care access in women and birth outcomes.

Future research looking into other modifiable preconception indicators, quality of health care, and community health education may help provide further insight into preconception care related opportunities.

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