

Introduction

- The pregnancy and postpartum periods are unique times that require increases in physical, mental, and emotional demands. This combination of changes can be associated with declines in mental and physical health, especially in socioeconomically disadvantaged birthing persons.¹
- Trust in healthcare providers is critical for an individual's willingness to share sensitive information, to participate in medical care, and to maintain a continuity of care during pregnancy and following a delivery.²
- Understanding influences of physician trust for birthing persons – including factors associated with decreased physician trust - can support healthcare teams improve efforts to strengthen patient-provider relationships to subsequently improve maternal health outcomes.

Study Aims

- Characterize physician trust levels of pregnant individuals in a high volume, high acuity, academic practice serving majority socioeconomically disadvantaged individuals
- Characterize longitudinal change in trust between third trimester to postpartum
- Evaluate the association of change in trust scores with adverse birth experiences

Hypothesis

A significant decrease in physician trust levels across the pregnancy and postpartum period among patients with adverse perinatal outcomes when compared to patients without.

Design

A prospective, observational study assessing levels of physician trust after a third trimester prenatal visit and after their postpartum visit from July 2021-July 2023.

Methods

Eligibility Criteria

Inclusion:

- Third trimester pregnancy (>27 weeks gestation)
- At least 16 years of age
- Accessing care with the Louisiana State University (LSU) OB/GYN clinic

Exclusion:

- Not willing to link survey responses to delivery data
- Unable to provide consent

Survey Time Points

- After 3rd trimester prenatal visit
- After postpartum visit

Instrument

10-item Wake Forest Physician Trust Scale (WFPTS) is a validated instrument to measure physician trust, scored on a five-point Likert Scale ("5=Strongly Agree" and "1=Strongly Disagree"), with scores ranging from 10-50 and higher scores indicating higher trust in their physician.

Outcomes and Covariates

- Physician trust:** Wake Forest Physician Trust Scale scores
- Sociodemographic:** race, ethnicity, gestational age at survey completion, weight, height, residential zip code, annual income, education, and assessment of barriers to healthcare (including lack of transportation and insurance).
- Obstetric:** A medical record abstraction was performed to construct an adverse perinatal outcome composite including: transfusion, hospital readmission, non-live birth, preterm premature rupture of membranes (PPROM), and pre-term birth.

Statistical Analysis

- Participant responses to the WFPTS were scored.
- Categorical covariates were reported using counts and percentages, and trust scores and continuous covariates were reported using means and standard deviations (SD).
- T-tests were used for trust scores when comparing within various groups of interest (higher/lower income, higher/lower age, Black vs. non-Black race, and higher/lower education).

Regulatory

This study was approved and monitored by the Woman's Hospital Institutional Review Board.

Population Characteristics

Table 2. Characteristics of study population	All (n=45)
Age	
18-24 years old	55.6%
25-29 years old	26.7%
30-34 years old	11.1%
35-39 years old	6.7%
Race	
Black	68.9%
White	8.9%
Asian	4.4%
More than one	6.7%
Other	11.1%
Ethnicity	
Hispanic	15.6%
Non-Hispanic	84.4%
Highest Level of Education	
College Degree or higher	15.6%
High School Degree	68.9%
Less than High School	15.6%
Annual Household Income	
Less than \$10,000	40.0%
\$10,000-\$24,999	24.4%
\$25,000-\$49,999	28.9%
\$50,000+	6.7%
Wake Forest Physician Trust Score	
Third trimester (Mean ± SD)	42 ± 6.1
Postpartum (Mean ± SD)	41 ± 8.1
No Adverse Perinatal Outcome	41 ± 8.0
Adverse Perinatal Outcome	39 ± 8.6

Results

Pregnancy, Postpartum, and Change in Trust Scores

	All (n=45)	Third Trimester Trust Score		Postpartum Trust Score		Change in Trust Score	
		Mean	SD	Mean	SD	Mean	SD
Income							
<\$25,000 per year	64.5%	41.9	6.5	41.1	7.6	-0.8	6.9
≥\$25,000 per year	35.5%	41.9	5.5	40.3	9.1	-1.6	6.5
Race							
Black	68.9%	43.2	5.6	42.0	7.3	-1.1	7.0
Non-Black	31.1%	39.1	6.4	38.1	9.3	-1.1	6.3
Age							
<25 years old	55.6%	41.0	6.3	39.4	8.6	-1.6	7.4
25+ years old	44.4%	43.0	5.8	42.6	7.2	-0.5	5.9
Education							
<High school education	15.6%	43.9	5.2	44.6	4.5	0.7	3.4
High school	68.9%	41.4	6.4	38.8	8.4	0.7	3.4
College	15.6%	42.1	6.1	45.7	6.2	3.6	7.3

Figure 1. Physician Trust Scores by Income, Race, Age, and Education Level.

Participants were categorized by Income level, Race, Age, and Education level. Third Trimester and Postpartum Physician Trust Scores (Mean and SD) and Change in Physician Trust Scores from Third Trimester and Postpartum (Mean and SD) were reported.

Peripartum Change in Trust Scores

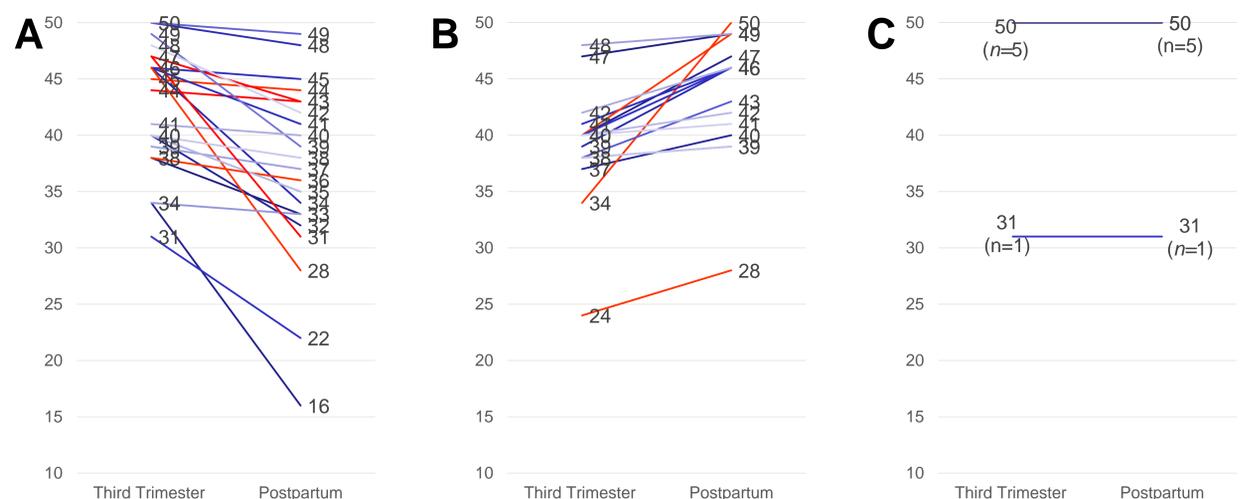


Figure 2. Within Participant Changes in Physician Trust Scores from Third Trimester to Postpartum Visit with A) Decreased Scores, B) Increased Scores, and C) No Change in Scores. Red line indicates a participant with "yes" to adverse perinatal outcome composite.

Conclusions

- Of the 45 participants, 56% were less than 25 years old, 69% were Black, 84% were non-Hispanic, 69% had a highest education level of high school, and 40% reported an annual household income of less than \$10,000.
- Participants reported similar moderately-high levels of trust in their physician after their third trimester prenatal visit and after their postpartum visit (p=0.213).
- No significant trends were observed between changes in physician trust scores and participant sociodemographic factors.
- Although third trimester trust scores were slightly lower for those who had experienced an adverse perinatal outcome, the difference was not significant (p=0.231). Among those who reported decreased physician trust (i.e. decrease change in trust score greater than one standard deviation; n=8), participants tended to be of Black race, have higher education, and have lower annual income, compared to those without marked change in physician trust score across childbirth.
- A strength of this study was the use of a prospective study design while limitations include a small sample size and the possibility of response bias when administering the Wake Forest Physician Trust Scale.
- Future research should examine changes in physician trust among socioeconomically disadvantaged birthing persons with adverse birth outcomes using a larger sample size. Additionally, further characterization of physician trust across other specialties and patient demographics may serve to better identify factors associated with decreased trust in healthcare teams, increase opportunities to strengthen patient-provider relationships, and improve overall patient retention and health outcomes.

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References

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