

2-2021

Racial discrepancies in interpregnancy intervals and postpartum contraception receipt in Centering Pregnancy prenatal care

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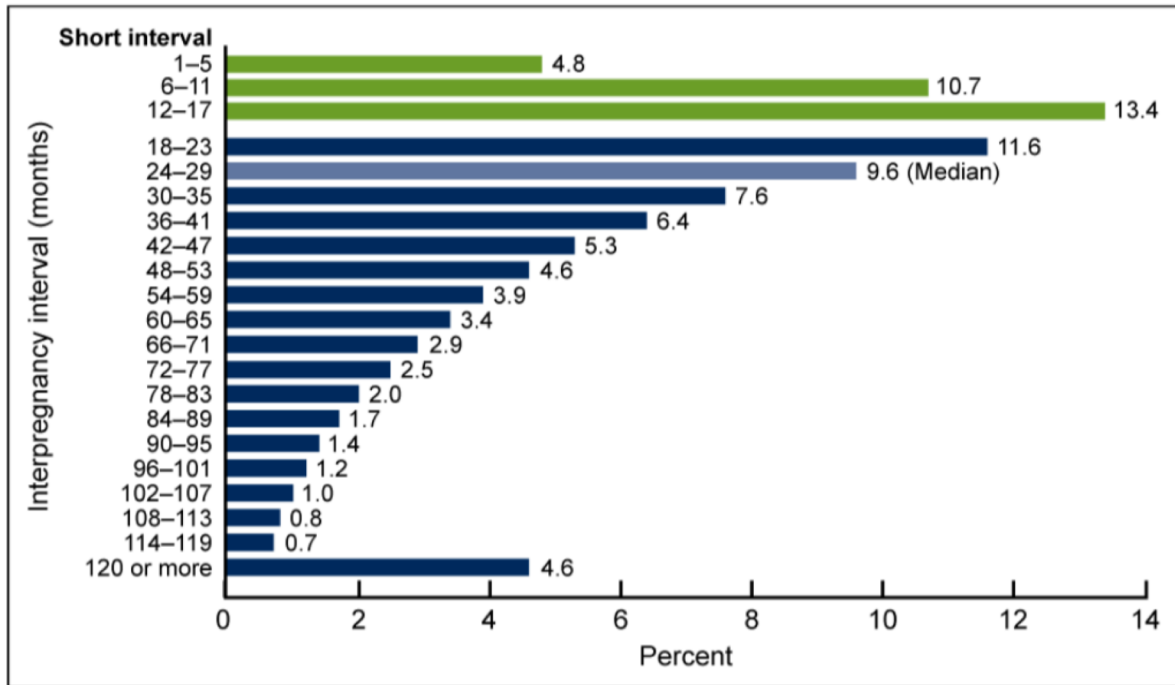
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Racial discrepancies in postpartum family planning outcomes of Centering Pregnancy prenatal care.

Amulya Raju, Dr. Dennis Hand*

Short interpregnancy intervals: a public health issue.

Figure 1. Percent distribution of second or higher-order births, by interpregnancy intervals: 47 reporting states and District of Columbia, 2014



In the US, **1/3** of all 2° or higher pregnancies are conceived within 18 months of previous birth.¹

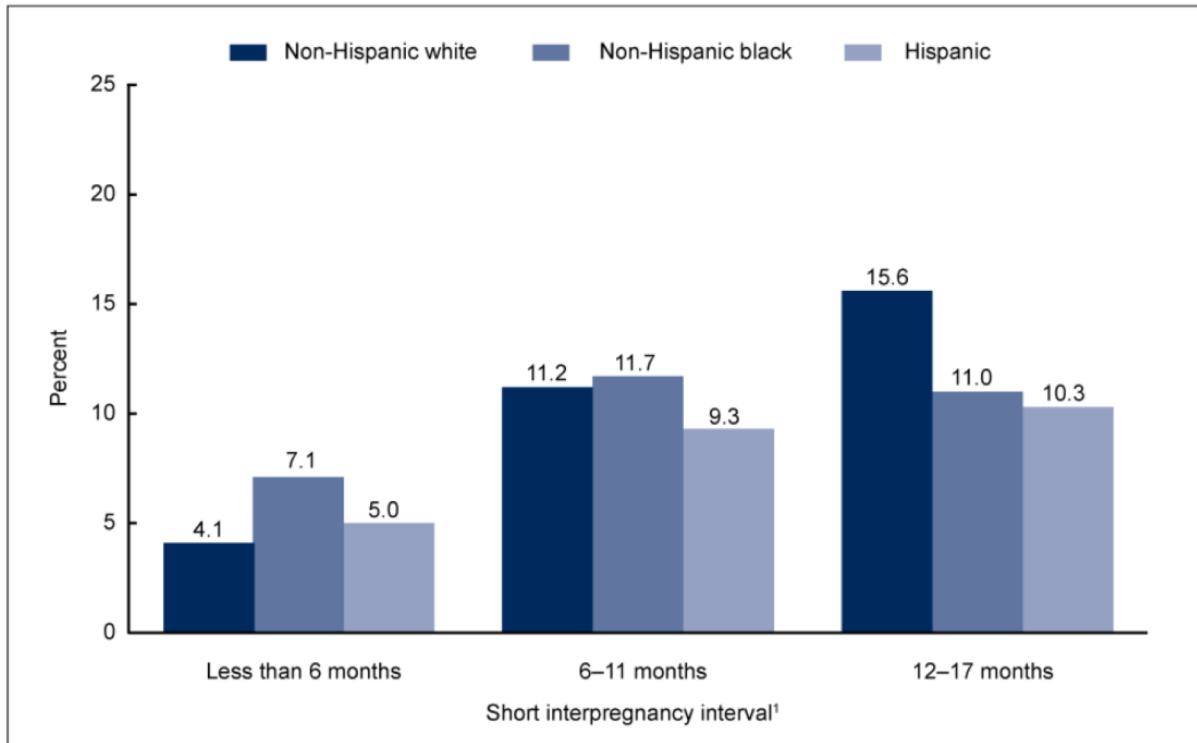
NOTES: Interpregnancy interval is the number of months between a live birth and the conception of the next live birth. Total percentages may not add to 100 due to rounding. Access data table for Figure 1 at:

http://www.cdc.gov/nchs/data/databriefs/db240_table.pdf#1.

SOURCE: CDC/NCHS, National Vital Statistics System.

Short interpregnancy intervals: a public health issue.

Figure 3. Short interpregnancy intervals, by race and Hispanic origin: 47 reporting states and District of Columbia, 2014



¹Each race and Hispanic-origin group is significantly different from one another in all three intervals.
NOTES: Interpregnancy interval is the number of months between a live birth and the conception of the next live birth. Findings are shown for the largest single-race and Hispanic-origin groups. Access data table for Figure 3 at: http://www.cdc.gov/nchs/data/databriefs/db240_table.pdf#3.
SOURCE: CDC/NCHS, National Vital Statistics System.

In the US, **1/3** of all 2° or higher pregnancies are conceived within 18 months of previous birth.¹

Non-Hispanic Black mothers are disproportionately affected by short interpregnancy intervals.²

Short interpregnancy intervals: a public health issue.

To address this **racial disparity** and improve **birth outcomes** in this community, research must be done on **contraceptive counseling** and **access to contraceptive methods** in the postpartum period.

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Introduction & Objectives



- **Centering Pregnancy** increases postpartum utilization of family planning services (LARCs).^{3, 4}
- **Hypothesis**: Non-Hispanic Black mothers participating in Centering Pregnancy group prenatal care (GPC) will have a higher rate of utilizing postpartum contraception than those who used individual prenatal care (IPC).
- **Aims**: How does Centering Pregnancy GPC impact the following in non-Hispanic Black mothers?
 - postpartum contraceptive preferences
 - postpartum contraception intent and receipt
 - repeat pregnancy intentions and resulting interpregnancy intervals

Methods

- **Study population**: Mothers who received prenatal care and delivered at Jefferson between 2018-2019, who:
 - Delivered a live birth
 - All required data can be extracted from the medical record
- **Study design**: retrospective medical chart analysis
- **Data sources**: 2019 TJUH Ob/Gyn Deliveries hospital records
 - Not using Medicaid claims/administrative billing to avoid misclassification
- IRB Exempt 7/20/2020

Methods

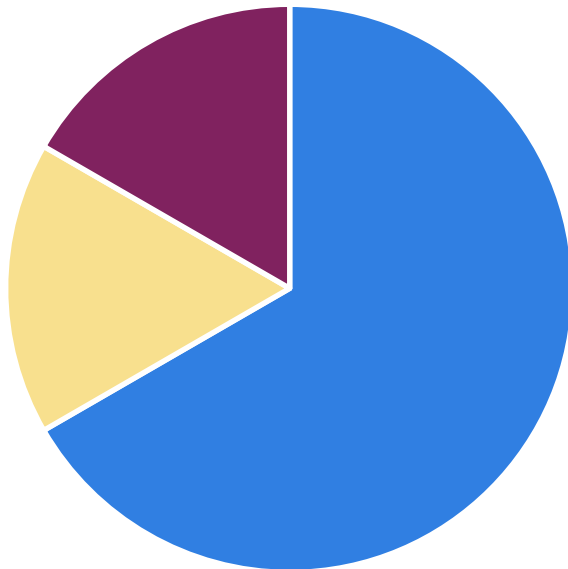
- **Main predictors:**
 - Race/ethnicity
 - Prenatal care type
 - Factors known to affect contraception and interpregnancy intervals (e.g. age, gravidity, education, etc.)
- **Main outcomes:**
 - Receipt of intended postpartum contraceptive
 - Non-receipt of intended postpartum contraceptive

Results

- When postpartum contraception differs from peripartum intent, the new contraception type is often of a lower efficacy. This **increases the risk of short interpregnancy intervals.**
- Black women and women who do not participate in GPC are at **higher risks** of changing contraception intent and thus **shorter interpregnancy intervals.**







Results: Importance of contraception intent

Overall contraception intent versus receipt



- Lower efficacy (to condom, OCP)
- Higher efficacy (to LARC, sterilization)
- Same efficacy

How effective are these types of birth control?

Long-Acting Reversible Contraception (LARC)		PILL	MALE CONDOM
IMPLANT	INTRAUTERINE DEVICES (IUD)		
HOW TO USE IT:	HOW TO USE IT:	HOW TO USE IT:	HOW TO USE IT:
<ul style="list-style-type: none"> • Placed by health care provider • Lasts up to 3 years 	<ul style="list-style-type: none"> • Placed by health care provider • Copper IUD lasts up to 10 years • Progestin IUD lasts 3-5 years 	<ul style="list-style-type: none"> • Take at the same time each day 	<ul style="list-style-type: none"> • Use correctly every time during sex
			
Chances of getting pregnant: Less than 1 out of 100 women*	Chances of getting pregnant: Less than 1 out of 100 women*	Chances of getting pregnant: 9 out of 100 women*	Chances of getting pregnant: 18 out of 100 women*
MOST EFFECTIVE		LEAST EFFECTIVE	

Condoms should always be used along with the preferred birth control to protect against sexually transmitted diseases.

*Number of pregnancies per 100 women using the method within first year of typical use.

SOURCE: Trussell J., Contraception, May 2011;
www.odc.gov/reproductivehealth/UnintendedPregnancy/Contraception.htm

Vital^{cdc}signs™
www.odc.gov/vitalsigns/LARC



Results: Characteristics Table

	Same contraception	Different contraception	P value (significance < .05)
Centering Pregnancy			
Did not attend (n=13)	57%	47%	.72
Attended (n=10)	90%	10%	
Race			
Non-Hispanic Black (n=8)	63%	37%	.29
White (n=12)	82%	18%	
Marital Status			
Unmarried (n=9)	67%	33%	.81
Married (n=14)	79%	21%	
Insurance			
No insurance (n=2)	50%	50%	.83
Public insurance (n=3)	67%	33%	
Private insurance (n=18)	72%	28%	

Results analysis: Chi-square testing - separately test race/ethnicity, prenatal care type, and factors known to affect contraception as predictors of dichotomized outcome. For factors with $p \leq 0.20$, multiple binary logistic regression analysis will be conducted. Significance set at $p < 0.05$. Sensitivity analyses will be conducted if deemed appropriate.

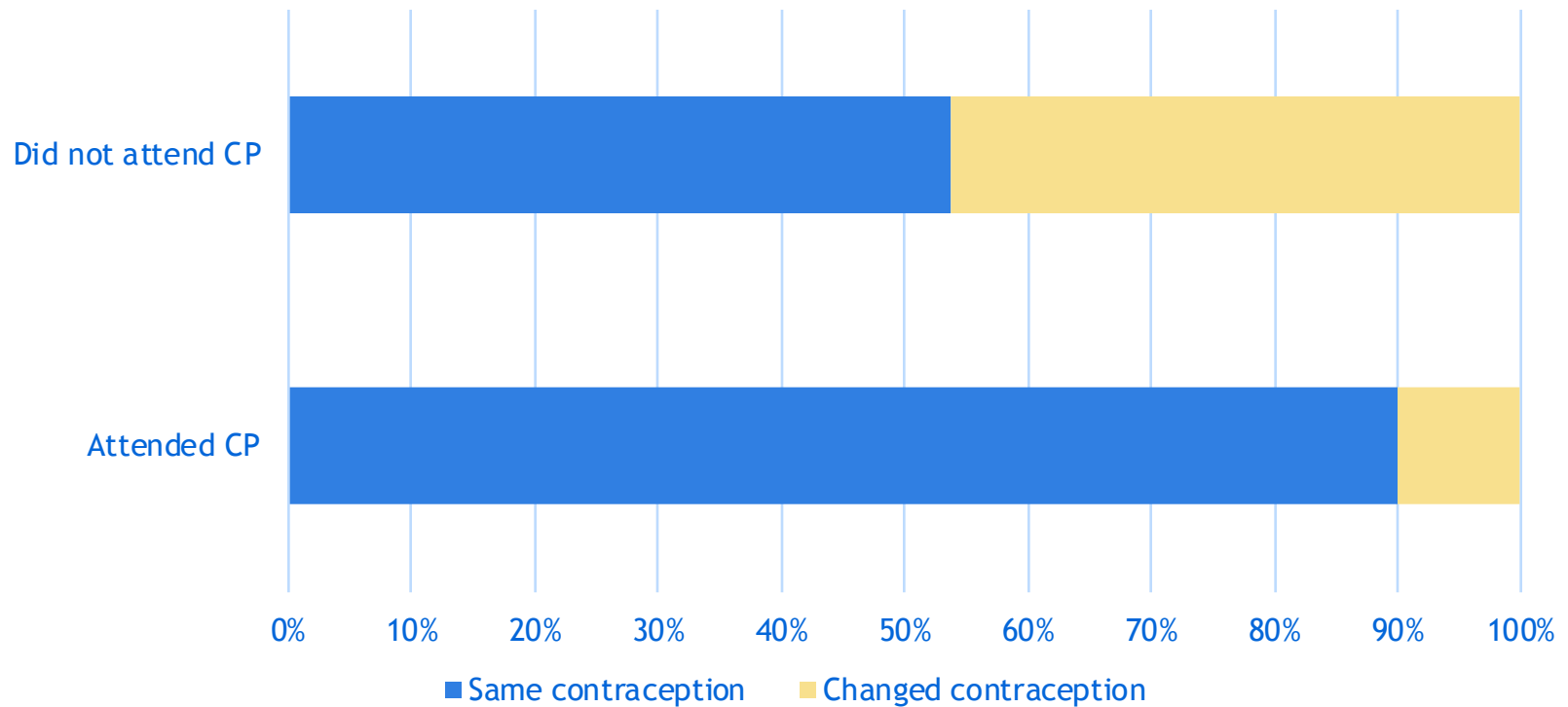
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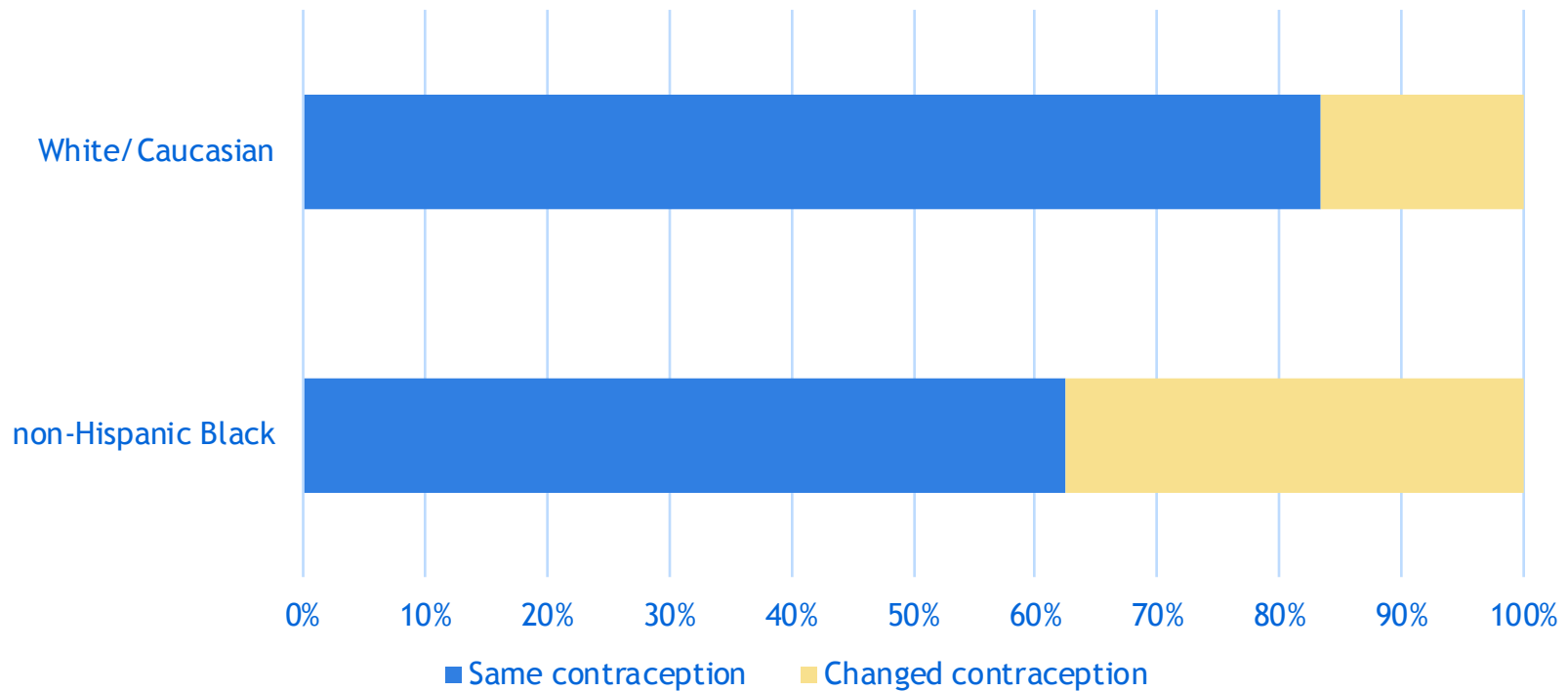
Results: GPC reduces discrepancies in contraception intent and receipt

Prenatal care type vs. Contraceptive choice consistency



Results: Black women experience greater discrepancies in contraception receipt

Race vs. Contraceptive choice consistency



Conclusions

- These results suggest that (1) non-Hispanic black women are unable to receive the contraception requested during prenatal care and (2) GPC may be an appropriate intervention in increasing autonomy over contraception receipt.
- Limitations: Limited sample size of GPC patients at Jefferson MATER. Poor postpartum follow-up documentation.
- Next steps: Increase sample size to compare non-Hispanic black women in GPC versus IPC. How do their contraceptive choices differ?

Acknowledgements

- Dr. Hand, MATER
- Dr. Plumb, Dr. Brawer, Dr. Abatemarco, SI PHR
- Dr. Foster, SI PHR
- Eva Bernstein, MS2

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