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Postpartum Reproductive Health Choices Vary by Race

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Background

- The infant mortality rate is a marker for community health and a way to identify disparities in population health.
- In Kalamazoo, MI, the racial disparity in infant mortality between African Americans and Caucasian individuals is especially high, with a 4x higher African American infant mortality than Caucasian infants (Figure 1)

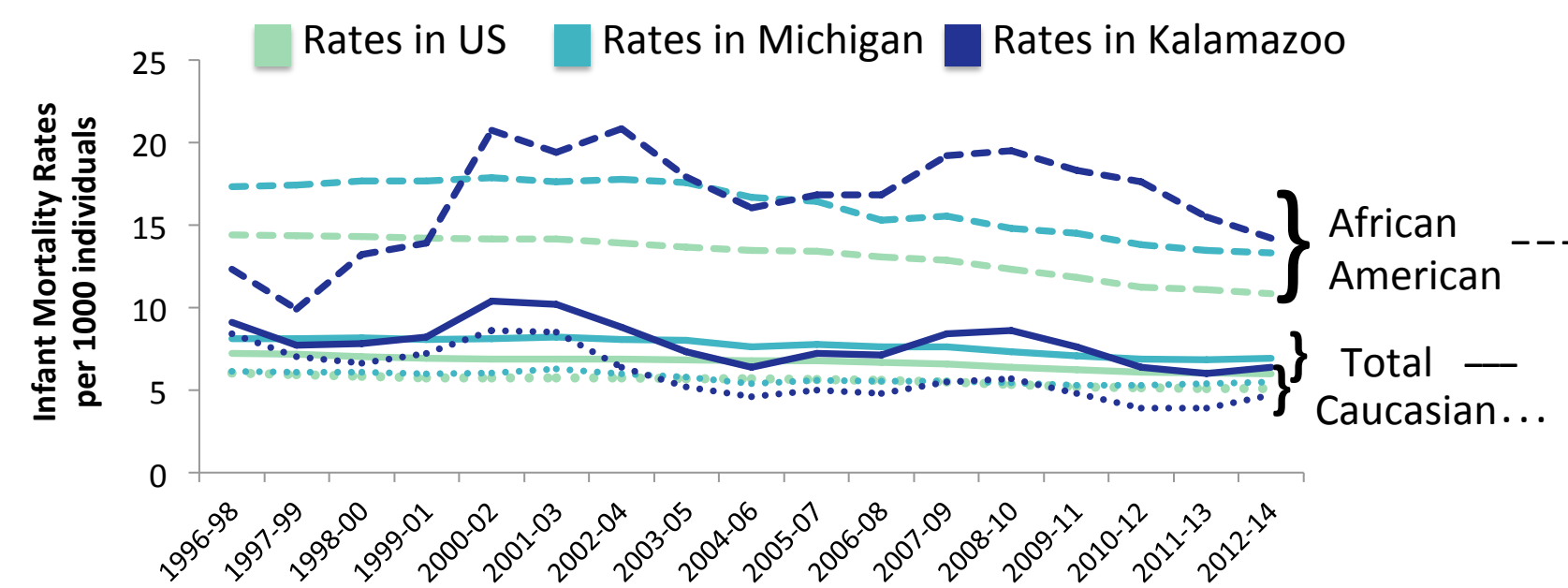


Figure 1. Three year Moving Average Infant Mortality Rates per 1000 Live Births. Data was obtained from the CDC.

- Rapid repeat pregnancies are associated with higher infant mortality rates
- Rapid repeat pregnancies are more common in African Americans overall in the U.S. than Caucasians
- The type of birth control a woman uses affects the time interval between pregnancies

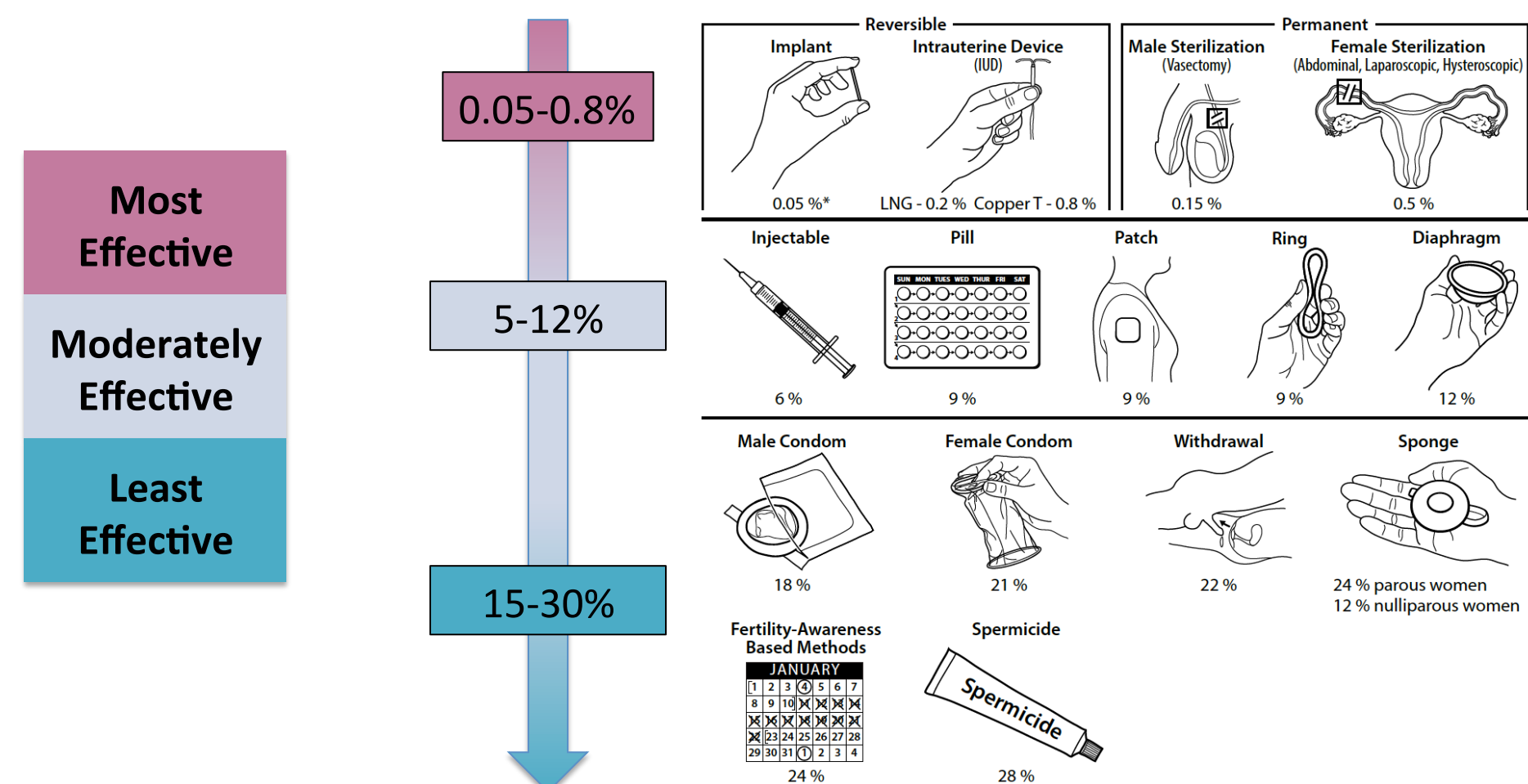


Figure 2. Effectiveness of Family Planning Methods according to the CDC. Percent unintended pregnancies is calculated for every 100 women who experience an unintended pregnancy during the first year of use of each contraception method.

Question: Is the racial disparity in poor birth outcomes in Kalamazoo County impacted by birth control choices?

Methods

An observational prospective study was conducted of 243 recently-delivered women from the postpartum floors of two local hospitals. Data was collected via telephone surveys administered 6-8 weeks post-delivery and an administrative record review for demographic and health information. Type of birth control, socioeconomic, or health variables that may impact access to birth control were examined stratified by race. Race was separated into Caucasian or "of Color" due to limited racial diversity in the dataset. Differences between racial groups were compared using Chi-square analysis.

Results

- 14% of 243 surveyed women at 6-8 weeks post-delivery indicated they were not using any birth control
- Of the 86% of women who reported having a birth control method, the top 3 birth control methods used by postpartum women in Kalamazoo are some of the least effective methods, including condoms, abstinence and oral birth control pills (Table 1).

Contraception Choice	Total % (N) N=243	Of Color % (N) N=96	Caucasian % (N) N=148	P Value
Nothing	14.4% (35)	12.6% (12)	15.5% (23)	.529
Condom	21.3% (49)	17% (17)	23.6% (35)	.268
Abstinence	18.4% (45)	25% (24)	14.2% (21)	.033*
Birth Control Pill	16.4% (40)	8.3% (8)	21.6% (32)	.006*
Tubal Ligation	7.8% (19)	11.5% (11)	5.4% (8)	.085
Injection	7% (17)	9.4% (9)	5.4% (8)	.234
IUD	6.6% (16)	3.1% (3)	8.8% (13)	.081
Withdrawal	5.7% (14)	5.2% (5)	6.1% (9)	.775
Vasectomy	3.7% (9)	1% (1)	5.4% (8)	.077
Implant	2.5% (6)	5.2% (5)	.7% (1)	.026*

Table 1. Post-partum Contraception Choice by women in Kalamazoo Michigan.

Barriers	Women of Color N=96	Caucasian Women N=148	Chi Square P Value
Lack of reliable transportation	11.5%	0%	<.001
Non-Private Insurance	62.5%	25.7%	<.001
Poverty	42.7%	16.2%	<.001
Medical Home	88.4%	95.9%	0.32
Primary Care Physician	34.7%	54.7%	.002

Table 2. Prevalence of Reported Barriers to Postpartum Birth-Control Access

Conclusions

- There are differences in postpartum birth control choices between Caucasian women and women Of Color in Kalamazoo County
- A majority of post-partum women are using some of the least effective options of birth control methods
- Abstinence is one of the leading postpartum birth control methods chosen by women Of Color in this study
- Women Of Color experience more barriers that may impact access to health care and therefore contraception choice

Implications

- Advocating for more reliable methods of birth control may reduce poor birth outcomes, knowing that many post-partum women are using the less-effective methods of birth control, such as abstinence
- Investigation into the factors that impact postpartum birth control choice by women may address the race-related and socioeconomic disparities seen in infant mortality

References

- Bocanegra HTD, et al. *American Journal of Obstetrics and Gynecology*. 2017;217(1). doi:10.1016/j.ajog.2017.02.040.
- McKinney D, et al. *Am J Obstet Gynecol* 2017;216:316.e1-9.
- Sundstrom B, et al. *Health Communication*. 2016;32(7):820-827. doi:10.1080/10410236.2016.1172294.
- Thiel de Bocanegra H, et al. *Am J Obstet Gynecol* 2014;210:311.e1-8.
- Kramer RD., et al. *Contraception* (2018), doi: 10.1016/j.contraception.2018.01.006
- Baldwin K, et al. (2013). *The Journal of adolescent health* : official publication of the Society for Adolescent Medicine.2013;52: S47-53. 10.1016/j.jadohealth.2012.10.278.
- CDC. Effectiveness of Birth control Methods. <https://www.cdc.gov/reproductivehealth/contraception/index.htm>

NAPCRG 2018 Abstract

Postpartum reproductive health choices vary by race

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Objectives:

Explain how the contraception choices vary between women of color and white women in a community where infants of color die at a rate four times higher than white infants.

Define the barriers that exist for women of color compared to white women that may explain differences in birth control choice.

Across the US, mortality rates for black infants are twice as high as white infants, and in Kalamazoo County they are four times higher. Rapid repeat pregnancies (RRP) are associated with higher rates of poor birth outcomes. RRP are more likely in African American women and those of lower socioeconomic status. Contraception is a vital aspect of postpartum care that assists women to avoid RRP. This study investigates the impact of race on birth-control choices for postpartum mothers in Kalamazoo County. A prospective study to assess the health experiences of mothers, enrolled 244 of 471 eligible women, between April and November of 2017. Variables collected included demographic information, social determinants of health, and reproductive health methods. A bivariate analysis with Chi-squared tests was conducted to evaluate the impact of these variables on utilization of postpartum birth-control, stratified by race. Eight-weeks postpartum, 85.6% of women report having a birth-control method. Of the three most commonly reported methods, there were differences in the use between white women and women of color; condoms (23.6% vs. 17.7%), birth-control pills (21.6% vs. 8.3%), or abstinence (14.2% vs. 25%). Both postpartum visit and use of a medically prescribed birth-control method were significantly lower among women of color compared to white women ($p=.003$ and $p=.021$, respectively). Women of color reported more socioeconomic barriers, including: lack of reliable transportation (11.5% vs 0%, $p<.001$), non-private insurance (62.5% vs 25.7%, $p<.001$), lack of medical home (11.6% and 4.1% respectively $p=.032$) or poverty (42.7%, 16.2%, $p<.001$). Our data suggests there are differences in birth-control choice between white women and women of color in Kalamazoo county. In addition, women of color experience more barriers that may impact contraception choice. Abstinence only sexual education, one of the least effective means to prevent intended pregnancies, is an extremely popular birth-control method.