



Obesity and Fertility: A Prospective Cohort Study

Taylor Burger

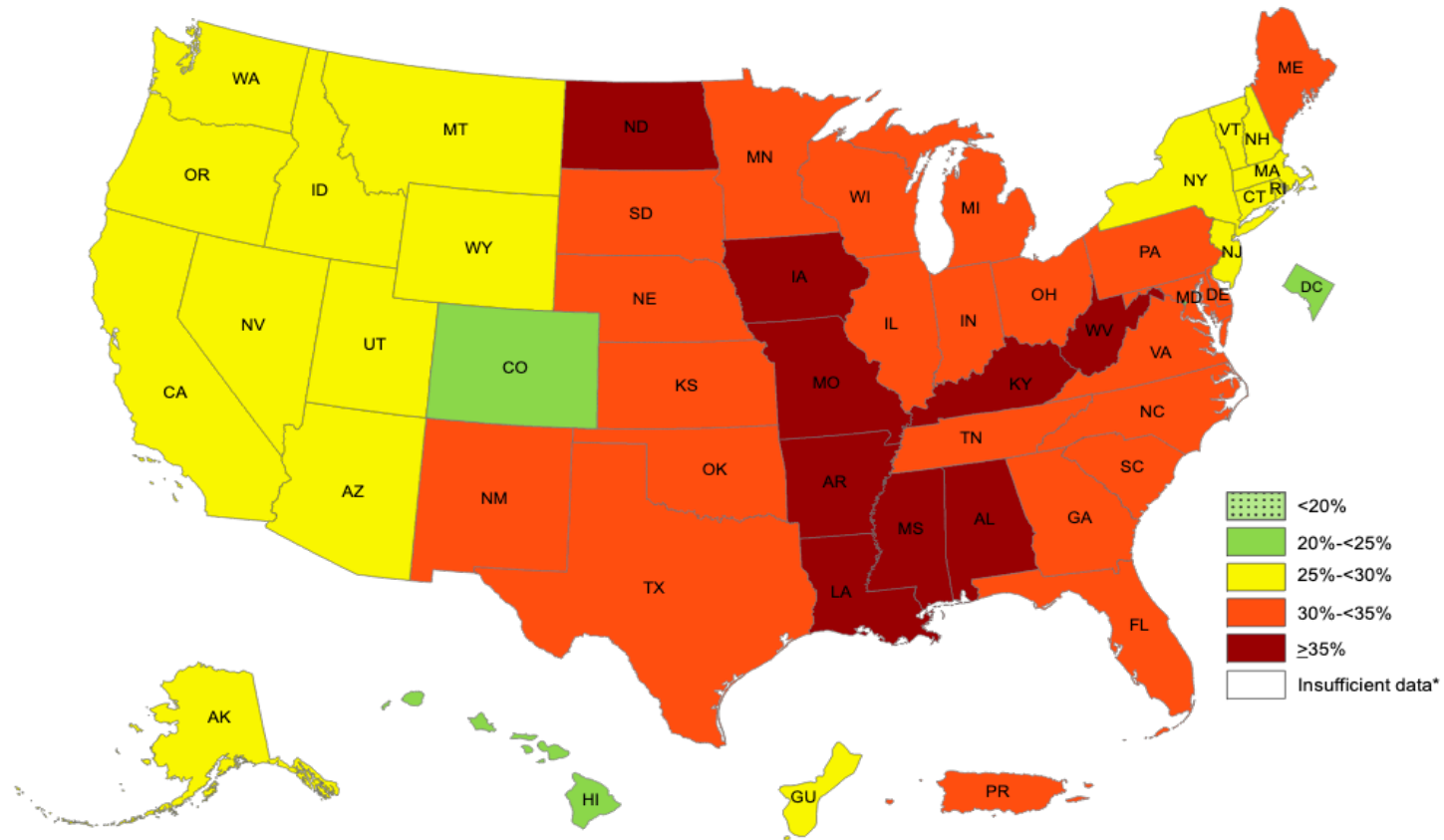
Funding

Title of Grant	Grant Number
Indiana Clinical and Translational Sciences Institute	UL1TR002529
Funding for the FACT Study was provided by Teva/Cooper Surgical and Bayer	



Obesity

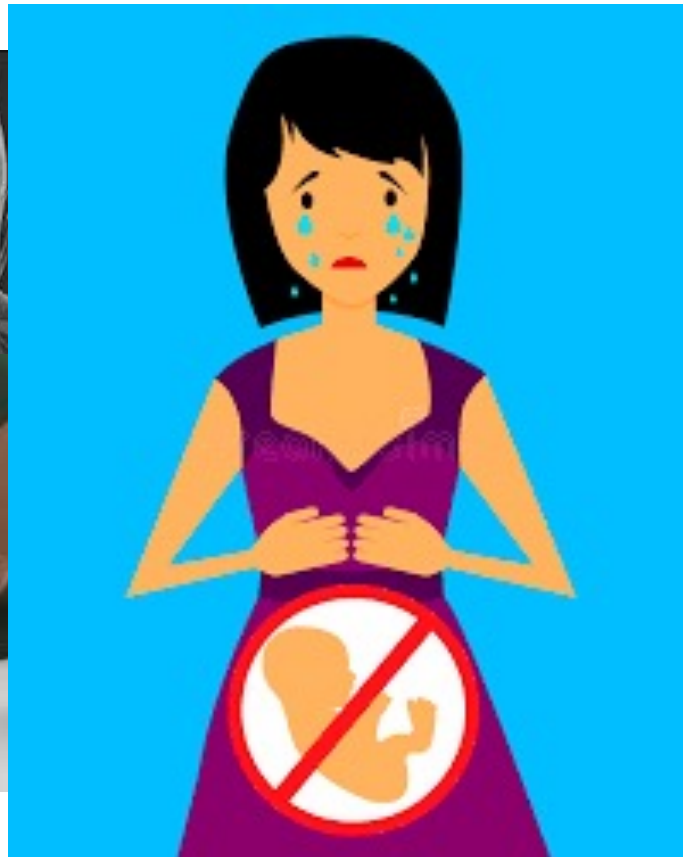
42.4%



Hales CM, Carroll MD, Fryar CD, Ogden CL. Prevalence of Obesity and Severe Obesity Among Adults: United States, 2017-2018. *NCHS Data Brief*. 2020(360):1-8.



Health outcomes of obesity



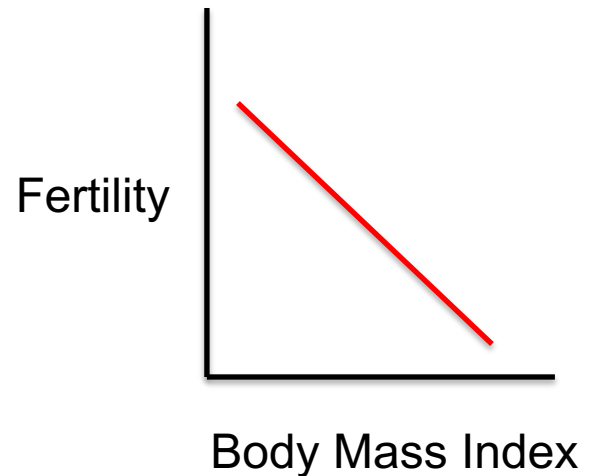
Objective

The objective of this analysis was to evaluate the association of **obesity** and **time to conception** in women stopping their contraceptive method in an effort to conceive.



Hypothesis

Our hypothesis is that body mass index (BMI) is inversely associated with fertility, measured by time to conception, and that this hypothesis will hold true even after controlling for potential confounding variables.



Methods



**432 Women
Aged 18-32**

Follow up



Collected participant data on:



Exclusions

- Already pregnant
- History of Infertility
- Medical Sterility
- DMPA use in previous 5 months



Table 1: Demographic and Reproductive Characteristics of FACT Participants Stratified by BMI Categories

Characteristic		BMI: <25 (N=178)	BMI: 25-30 (N=109)	BMI: >=30 (N=145)	P-value
Age (mean)		28.4 ± 3.6	28.0 ± 4.2	27.7 ± 4.4	0.237
Race		%	%	%	<0.001
	Black	23.0	33.9	59.3	
	White	69.1	55.1	32.7	
	Others	7.9	11.0	8.0	
SES Low	No	77.6	62.2	49.4	<0.001
	Yes	22.4	37.8	50.6	
Menstrual Regularity	No	21.3	13.8	20.3	0.356
	Yes	78.7	86.3	79.7	
Previous Contraceptive Method	IUD	50.0	49.6	54.9	<0.001
	Implant	12.5	14.3	26.2	
	PPR	26.0	26.9	14.0	
	Depo	1.0	2.5	3.0	
	Others	10.4	6.7	1.8	



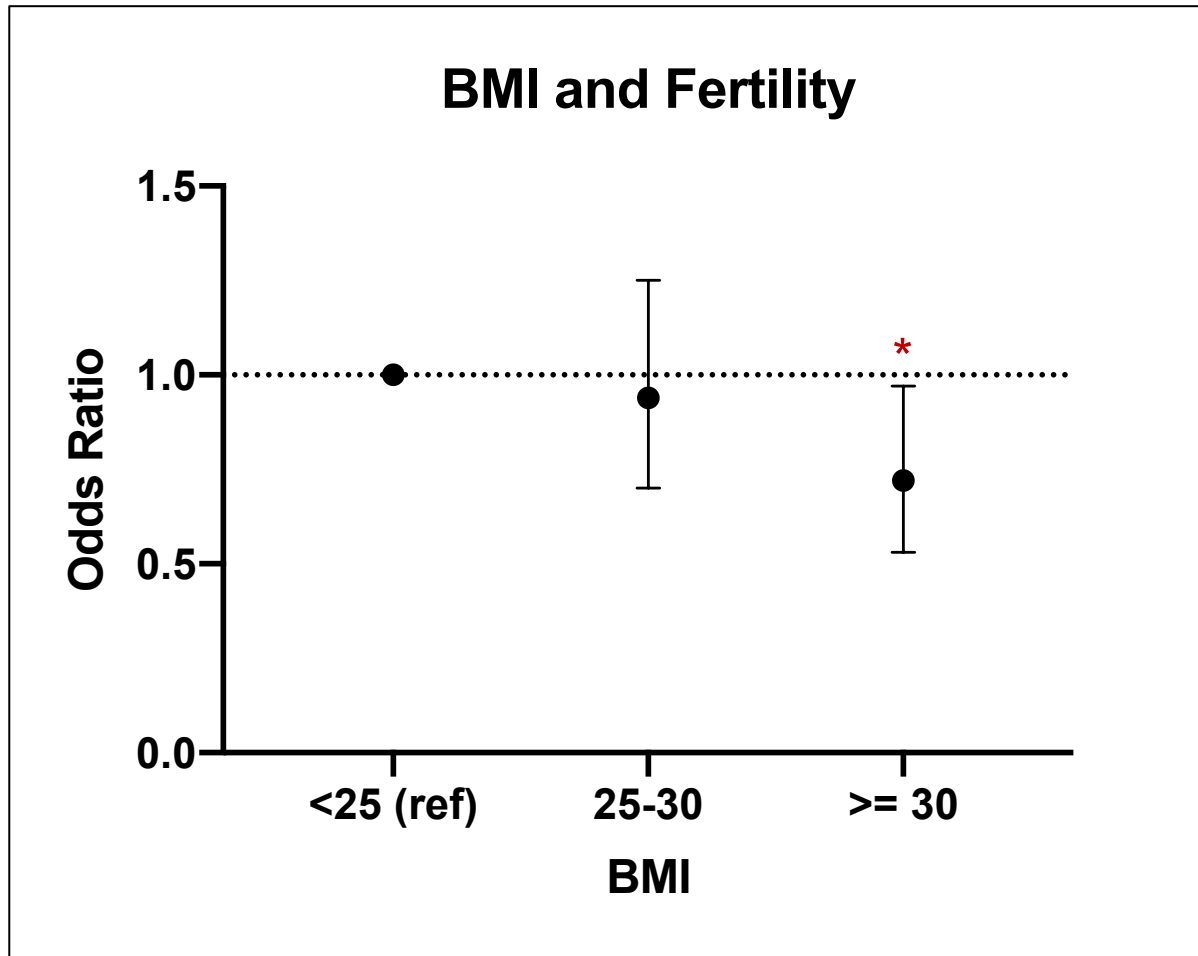


Figure 1: BMI and fertility controlling for low socioeconomic status, race, and prior contraceptive method

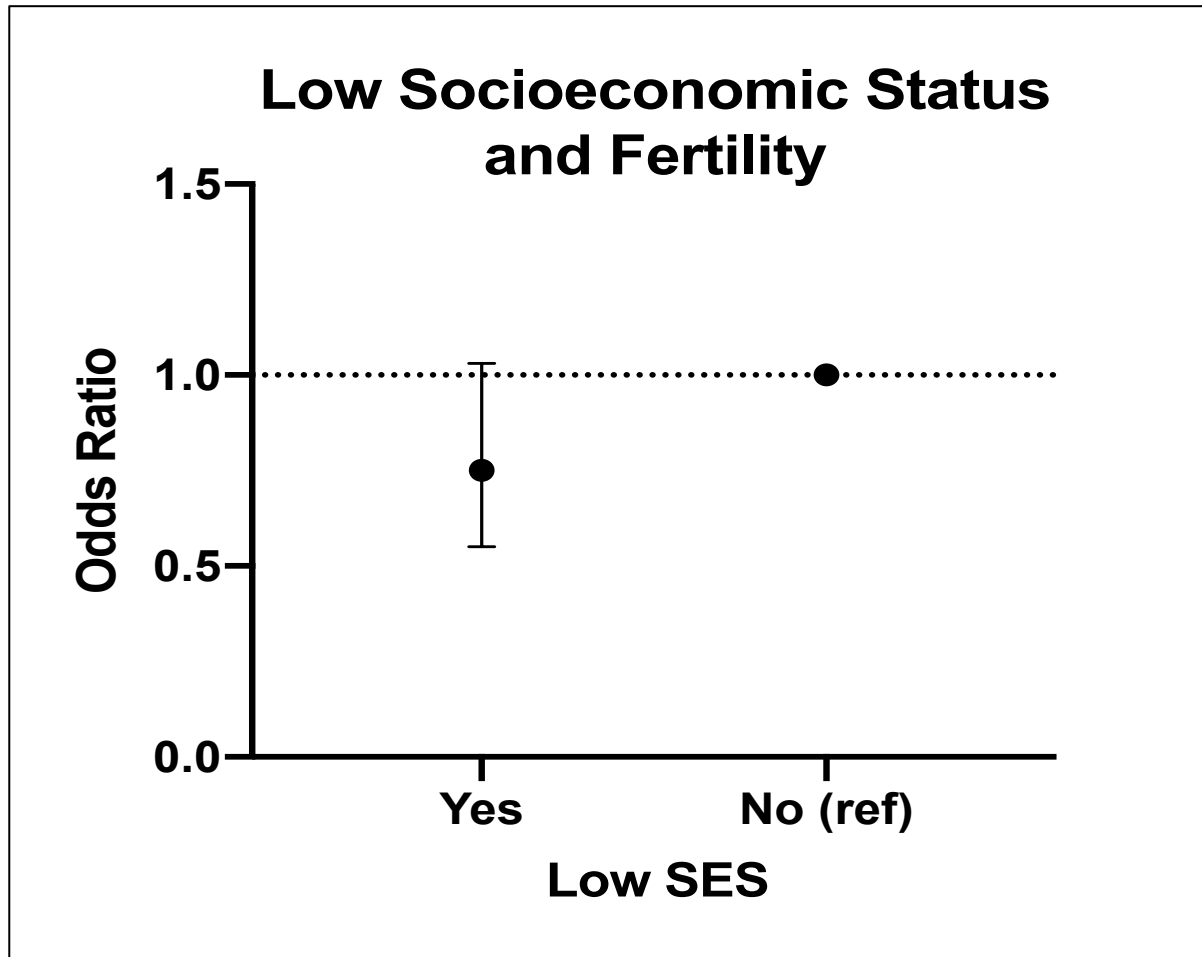


Figure 2: Low socioeconomic status and fertility controlling for BMI, race, and prior contraceptive method

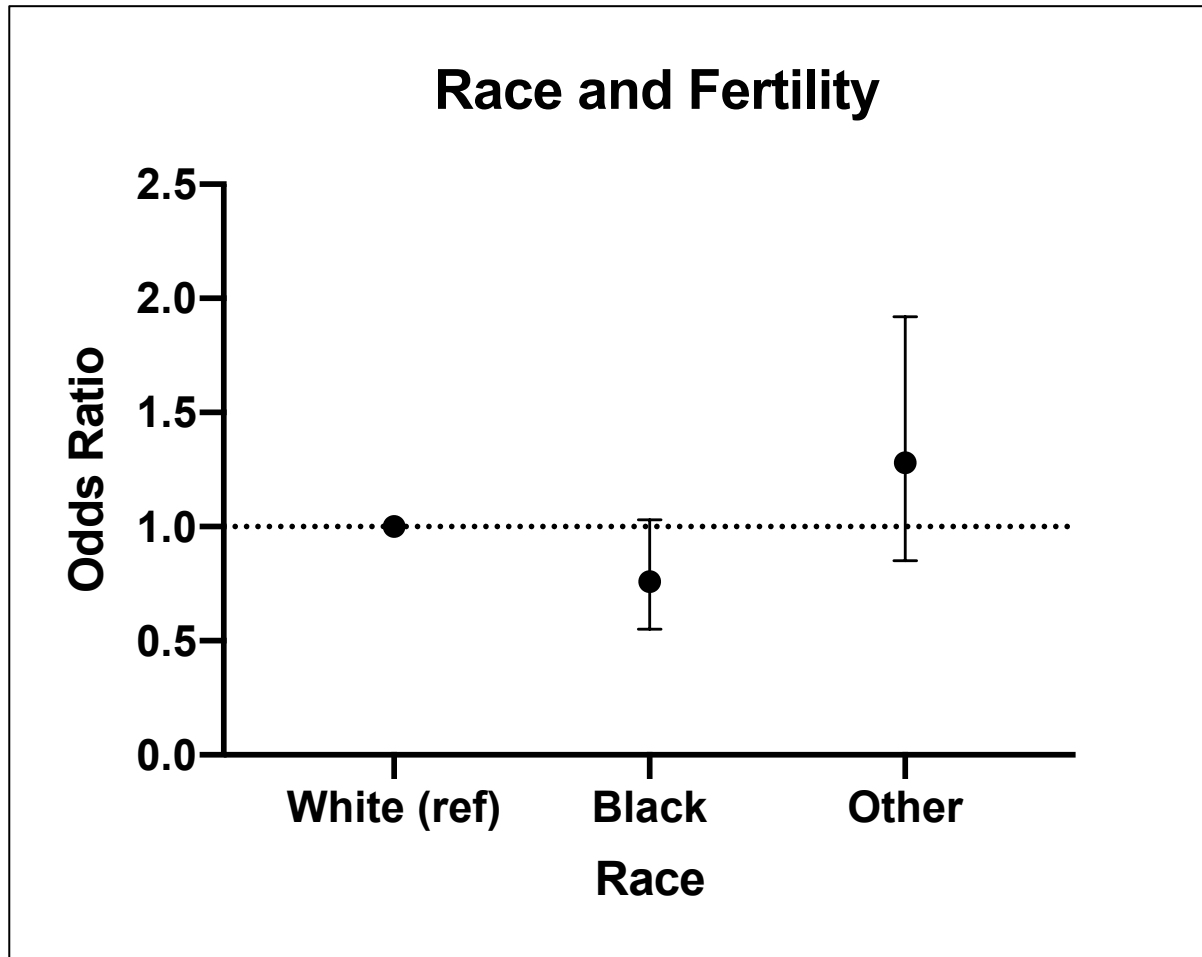


Figure 3: Race and fertility controlling for BMI, low socioeconomic status, and prior contraceptive method

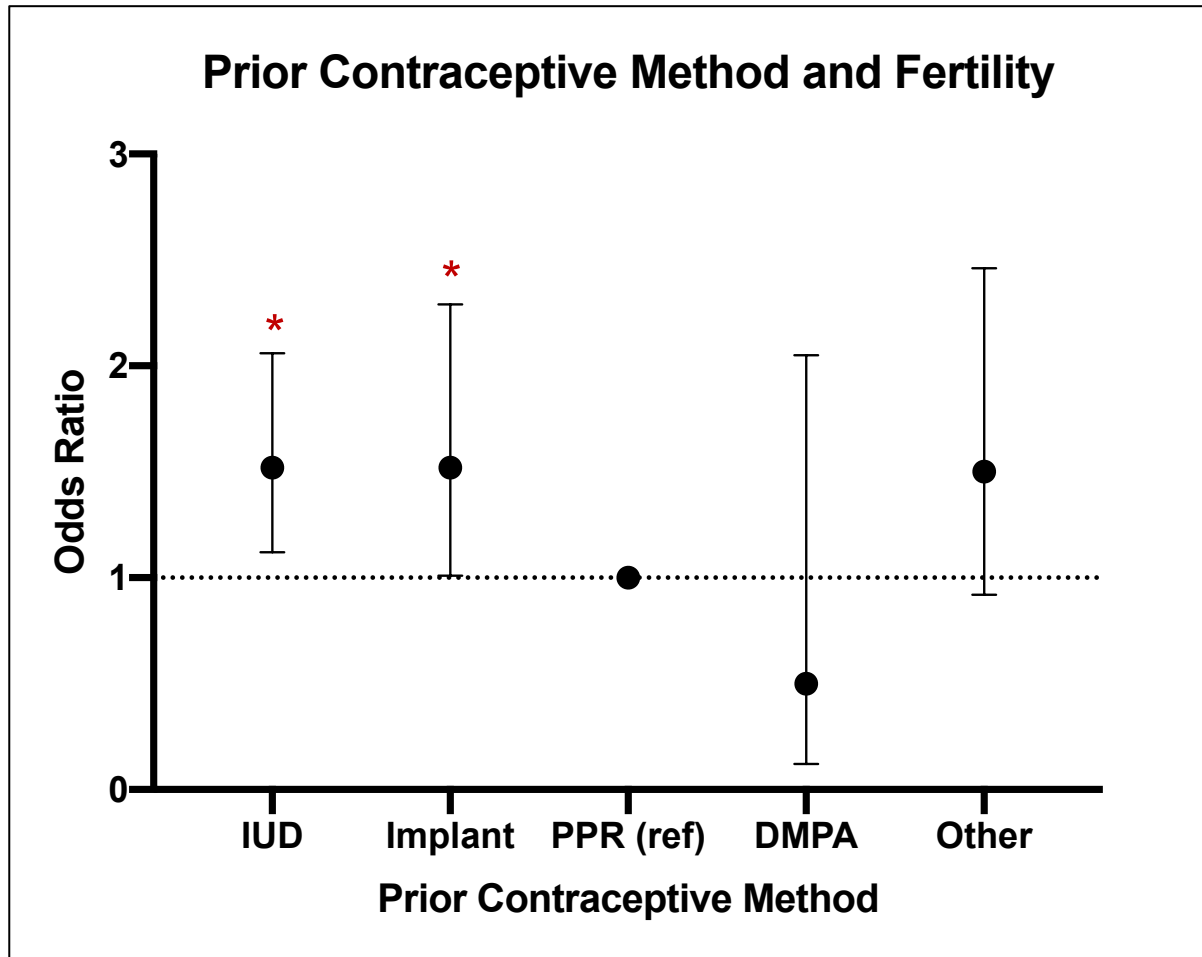


Figure 4: Prior Contraceptive Method and Fertility controlling for BMI, low socioeconomic status, and race

Discussion

- Obese women have longer time to conception
- No association between BMI and menstrual irregularity



Strengths

Limitations

Multicenter

No explanation for fertility

Large Sample Size

May not be generalizable

Prospective Study

Self-report

Follow-up





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