## Introduction

In the United States, nearly 45% of all pregnancies each year are unintended.<sup>1</sup> It is estimated that the cost of unintended pregnancy in the United States is \$4.5 billion dollars per year.<sup>2,3</sup> This economic and social burden is felt most strongly by women of greater age, those who identify as Black or Hispanic, and those who have experienced a previous abortion.<sup>1</sup> Use of contraceptives can decrease

the risk of unintended pregnancy, with widespread use leading to an 18% decline in the rate of unintended pregnancy between 2008 and 2011.<sup>1,4</sup>

## Objectives

This study aims to examine the relationship between demographic factors, such as race, age, socioeconomic status, and health insurance status, and the receipt of contraceptive counseling within a nationally representative population.

## Methods

Using data from the Female Respondents' file of the 2017-2019 National Survey for Family Growth, we analyzed responses from 6,141 cisgender women. We performed a chi-square test with the variables of race, age, income, and insurance status by contraceptive counseling receival status. Logistic regression was also performed to analyze the association between these risk factors and counseling status, with adjustments for the covariates education and marital status.

# **Are There Disparities in the Receipt of Contraceptive Counseling?** Samiha Hussain, MPH Candidate

### **Results: Baseline characteristics of the study populati Received Contraceptive Counseling**

Total N: 6,141 Weighted N: 72.7 Million									
Yes No									
Demographic Characteristics	N	Weighted N	Column Percent (%)	N	Weighted N	Column Percent (%)	P-Value		
Age (years)							P < 0.001		
15-19	192	1,943,839	18.10	778	749,5338	15.33			
20-24	227	2,774,502	21.39	585	7,176,523	11.52			
25-29	227	2,535,371	21.39	789	8,905,253	15.54			
30-34	204	2,307,760	19.23	840	8,563,654	16.55			
35-39	120	1,292,391	11.31	734	9,413,869	14.46			
40-44	63	824,888	5.94	649	8,884,479	12.79			
45-50	28	464,072	2.64	701	10,074,380	13.81			

Amongst the respondents who received counseling, 80.11% were under the age of 35, compared to 58.94% of respondents who did not receive counseling (p < 0.001).

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Women who had private health insurance accounted for 65.87% of the sample who received contraceptive counseling, compared to 63.27% of women who reported they had not received counseling (p < 0.001).

The distributions for the variables of race and total household income (not shown in the table) did not differ between the groups (all p>0.05)

Results: Estimated Adjusted Odds-Ratio of the relationship between Race, Age, Total Household Income, Current Health Insurance Status, and the Receipt of Contraceptive Counseling								
Adjusted Odds-Ratios for Race Adjusted Odds-Ratio			Adjusted Odds-Ratio f		Adjusted Odds-Ratio for Current Health Insurance Status			
	OR (95% CI)	P-value	Total Household	OR (95% CI)	P-value	Status	Adjusted Odds	-Ratio
Race	1.055 (0.014, 1.205)	0.64	Income Under \$5,000/year vs	0.949 (0.576,	0.84		OR (95% CI)	P-value
Non-Hispanic Black, Single Race vs Non-	1.066 (0.814, 1.396)	0.64	\$100,000/year	1.564)	0.04	Current Health Insurance		
Hispanic White, Single Race			\$5,000-\$19,999/year vs \$100,000/year	0.873 (0.597, 1.277)	0.48	Status No health insurance/single service/ Indian Health Service vs	0.808 (0.584, 1.116)	0.20
Hispanic vs Non- Hispanic White,	1.042 (0.782, 1.389)	0.78	\$20,000- \$39,999/year vs \$100,000/year	0.882 (0.636, 1.222)	0.45	Private Health Insurance		
Single Race Non-Hispanic Other or Multiple Race vs	0.876 (0.631, 1.215)	0.43	\$40,000- \$59,999/year vs \$100,000/year	0.981 (0.669, 1.438)	0.92	Medicaid/CHIP/State- sponsored care vs Private Health Insurance	1.125 (0.882, 1.435)	0.34
Non-Hispanic White, Single Race			\$60,000- \$99,999/year vs \$100,000/year	0.818 (0.598, 1.119)	0.21	Medicare/Military Health Care vs Private Health Insurance	0.991 (0.670, 1.467)	0.97

No increased likelihood of receiving contraceptive counseling based on race, total household income, or current health insurance status (all p >0.20).

Adjusted Odds-Ratio for Age					
	Adjusted Odds-Ratio	The a			
	OR (95% CI)	P-value	respc		
Age			and r		
15-19 vs 45-50	9.393 (4.137, 21.329)	<0.001	(p<0. There		
20-24 vs 45-50	9.328 (4.396, 19.795)	<0.001	recei wom		
25-29 vs 45-50	6.416 (3.039, 13,547)	<0.001	and		
30-34 vs 45-50	5.950 (2.925, 12.104)	<0.001			
35-39 vs 45-50	3.048 (1.389, 6.688)	0.005			
40-44 vs 45-50	2.083 (0.966, 4.494)	0.06			

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ion by receipt of contraceptive counseling									
Received Contraceptive Counseling Total N: 6,141									
Weighted N: 72.7 Million									
	Yes								
ic tics	N	Weighted N	Column Percent (%)	Ν	Weighted N	Column Percent (%)	P-Value		
alth Coverage							P < 0.001		
lth	586	8,000,496	65.87	2,875	38,292,811	63.27			
HIP/State care	316	2,460,277	20.26	1,228	11,672,402	19.28			
lilitary e	57	528,298	4.35	236	2,891,903	4.78			
ngle ian ice	102	115,3751	9.50	739	7,664,613	12.66			

adjusted odds-ratio for age showed a dose onse relationship between younger age receipt of contraceptive counseling .005).

e was no observable difference in the ipt of contraceptive counseling between nen 40-44 years old and women 45 years older (p=0.06).

We found no differences in the receipt of contraceptive counseling among women of different races. This may be due to Medicaid expansion under the Affordable Care Act (ACA) which increased insurance rate across all race-ethnicities We also did not observe differences in the receipt of contraceptive counseling and the respondents' current health insurance status or household income. This may also be due to Medicaid expansion which narrowed the gap between women who received contraceptive counseling by insurance type. We found a dose-response relationship for the variable of age and the receipt of contraceptive counseling. Women were less likely to receive contraceptive counseling as they grew older, ranging from the age of 15 to 39, when compared to women 45 and older. However, women of greater age were more likely to experience an unintended pregnancy, demonstrating that age can act as a barrier for some women in receiving contraceptive counseling. References 1. Aztlan-James EA, McLemore M, Taylor D. Multiple Unintended

Pregnancies in U.S. Women: A Systematic Review. Womens Health Issues. 2017;27(4):407-413. doi:10.1016/j.whi.2017.02.002 2. Gipson JD, Koenig MA, Hindin MJ. The effects of unintended pregnancy on infant, child, and parental health: a review of the literature. Stud Fam Plann. 2008;39(1):18-38. doi:10.1111/j.1728-4465.2008.00148. 3. Trussell J, Henry N, Hassan F, Prezioso A, Law A, Filonenko A. Burden of unintended pregnancy in the United States: potential savings with increased use of long-acting reversible contraception. Contraception. 2013;87(2):154-161. doi:10.1016/j.contraception.2012.07.016 4. Finer LB, Zolna MR. Declines in Unintended Pregnancy in the United States, 2008-2011. N Engl J Med. 2016;374(9):843-852. doi:10.1056/NEJMsa1506575 Faculty Advisor Simone A. Reynolds, PhD, MPH, Director of Online Learning & Instructional Innovation, Assistant Professor. Department of Epidemiology &

Biostatistics





## **Discussion/Conclusion**