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# Racial and Ethnic Differences in Young Men's Sex and Contraceptive Education

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# Abstract

**Background**—Racial/ethnic disparities exist in young men's contraceptive knowledge. This study examines whether the likelihood of receiving sexual health education varies by race/ ethnicity.

**Study Design**—We examined racial/ethnic differences in sex and contraceptive education both in school and from parents with multivariable logistic regression models among 4,104 men aged 15–24 years using data from the 2006–2010 National Survey of Family Growth.

**Results**—Nearly all respondents (96.6%) reported formal sex education. Fewer reported formal birth control education (66.6%), parental sex discussions (66.8%), and parental discussions specifically about birth control (49.2%). In multivariable analysis, black men were less likely than white men to report receiving formal contraceptive education (aOR:0.70;95%CI:0.51–0.96). Black and US-born Hispanic men reported more parental sex discussions than white men (aOR: 1.44;95%CI:1.07–1.94, aOR:1.47;95%CI:1.09–1.99, respectively).

**Conclusions**—Nearly all respondents reported having received formal sexual health education. Fewer reported receiving education about birth control either at school or at home. Black men were less likely to report receiving formal contraceptive education.

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Race; disparities; men; sex education; contraceptive education

#### Introduction

Both qualitative and quantitative data demonstrate that there are significant gaps in young men's knowledge about contraception, and that knowledge deficits may be particularly pronounced among men from racial/ethnic minority groups [1–2]. The literature also suggests that both structured sex education and parent-child communication about sexual health increases contraceptive knowledge and use [3–7]. Whether differential exposure to sexual health education or parent-child sexual health communication may help to explain documented racial/ethnic disparities in young men's contraceptive knowledge remains unknown. We used nationally-representative data to examine whether the likelihood of receiving sexual health education varies by race/ethnicity among young men.

#### Methods

#### Data source and sample

This study used data from the 2006–2010 National Survey of Family Grown (NSFG), a cross-sectional survey that provides nationally-representative estimates on male and female reproductive health measures. The methodology of the NSFG is described elsewhere [8]. Our study included only participants aged 15–24 (n=4,104) as questions about sexual health education were limited to this age group.

#### Measures

We examined a series of questions about sexual health education to determine if participants had received any sexual health and/or contraceptive education. Four items asked participants if they had any formal sex education, defined as "education at school, church, community center, or other place" before the age of 18 on: 1) how to say no to sex, 2) methods of birth control, 3) sexually transmitted infections (STIs), and/or 4) HIV. For this study, participants who answered "yes" to any of the four items were considered to have received "any" formal sex education. As we were particularly interested in examining racial/ethnic differences in contraceptive education, we also specifically examined participants' responses to the item querying whether they had received any formal education on methods of birth control.

Another set of questions asked participants which of the following topics, if any, they had discussed with their parents before the age of 18: 1) how to say no to sex, 2) methods of birth control, 3) where to obtain birth control, 4) how to use a condom, 5) STIs, and /or 6) how to prevent HIV/AIDS Participants who reported discussing at least one topic were considered to have had "any" parental discussion. Participants who indicated that they had discussed methods of birth control, where to obtain birth control, and/or how to use a condom were considered to have had parental discussions about birth control. Thus, our 4 main outcomes included: 1) any formal sex education, 2) formal education regarding birth control, 3) any parental sex discussion, and 4) parental discussion regarding birth control.

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The primary independent variable was self-reported race/ethnicity. For this analysis we used five race/ethnicity categories: white non-Hispanic, black non-Hispanic, US-born Hispanic, foreign-born Hispanic, and non-Hispanic other.

#### Analysis

All independent variables were compared by race/ethnicity using chi-squared tests. We then examined the bivariate associations between each independent variable and our outcome variables. Multivariable regression models were used to examine the adjusted relationship between race/ethnicity and each outcome, controlling for all covariates: age, poverty level, metropolitan location, highest education level, sexual activity, parental figures in the home at age 14, mother's highest education level, father's highest education level, religion, and current insurance. Analyses were conducted using STATA SE software adjusting for the NSFG's complex sample design. The University of Pittsburgh IRB approved the study.

## Results

Sample characteristics are shown in Table 1. As shown in Table 2, nearly all respondents (96.6%) reported some form of formal sex education but only two-thirds (66.6%) reported formal education about birth control or parental sex discussions (66.8%) and half reported parental discussions about birth control (49.2%) specifically.

In multivariable analysis (Table 2), young black men were less likely than their white counterparts to report formal education about birth control. Compared to whites, both blacks and US-born Hispanics were more likely while non-Hispanic young men who reported their race as other were less likely to report parental sex discussions. There were no racial/ethnic differences in reports of parental discussions about birth control.

#### Discussion

In this nationally representative study, we found that nearly all young men aged 15 to 24 years reported some form of formal sex education. However, fewer reported birth control education either at school or at home, and black men were less likely to report receiving formal birth control education. Minority men were more likely to report parental sex discussions but no racial differences were noted in parental discussions about birth control. These findings fill an important gap in the literature regarding whether differential exposures to sex education in formal settings and at home may help explain variations in young men's contraceptive knowledge.

We found that both blacks and US-born Hispanics were more likely to report parental discussions about sexual health. This is not surprising given the higher rates of early sexual initiation among racial/ethnic minority males in the U.S. [9]. We also found no racial/ethnic differences in discussions about birth control. This finding is consistent with previous qualitative research, which found that discussions between parents and adolescent males focus on STI prevention and pregnancy avoidance, without specifically discussing contraception [10]. While education alone will likely not solve the issue of suboptimal contraceptive use and high national rates of unintended pregnancy, it is an important first

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Important limitations of this study are the self-report and retrospective nature of the data as well as the limited information about the specific content or quality of sex education that young men received.

In summary, nearly all young US men aged 15–24 report receiving some form of formal sex education, but are less likely to report receiving contraceptive education. Young black men were less likely than white men to report receiving formal education about birth control. Additional research is needed to examine the quality of contraceptive education, identify strategies to increase parental discussions about contraception, and understand the complex social and cultural factors that contribute to observed racial/ethnic differences in contraceptive knowledge and use.

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# List of Abbreviations

NSFG	National Survey of Family Growth
STIs	Sexual transmitted infections

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# **Implications and Contributions**

In this study using nationally representative data from young men aged 15–24, the majority of participants reported having received sex education before age 18. However, fewer young men, particularly black men, reported receiving contraceptive education specifically.

Table 1

Demographic Characteristics of the Study Sample by Race/Ethnicity

	White (%) (n=2,067)	Black (%) (n=801)	US-born Hispanic (%) (n=685)	Foreign-born Hispanic (%) (n=295)	Non-Hispanic Other (%) (n=256)	p-value
Total Population $(n=4,104)$	61.6	14.8	12.2	5.8	5.6	
Age, years						
15–18	40.9	43.0	45.5	32.8	48.4	
19–24	59.1	57.0	54.5	67.2	51.6	P=0.0824
Federal Poverty Level, %						
<100	18.3	32.3	33.3	35.4	27.3	
100–199	22.0	25.7	26.3	34.5	28.0	p<0.0001
>200	59.7	42.1	40.4	30.1	44.7	
Residence						
city	28.7	55.6	42.0	38.9	38.7	
suburban	45.2	34.4	51.1	46.6	40.2	p<0.0001
rural	26.1	10.0	6.9	14.6	21.1	
Education Level						
<hist <br=""></hist> <hist <br=""></hist>                         	42.7	54.8	56.1	67.8	48.0	p<0.0001
GED or high school diploma	19.3	24.2	22.0	21.5	20.8	
some college	31.9	19.2	20.5	10.6	23.4	
bachelor degree or higher	6.1	1.9	1.4	7.7	7.8	
Has ever had sex						
yes	59.8	72.2	64.8	74.9	45.5	p<0.0001
по	40.2	27.9	35.2	25.1	54.5	
Living Situation at Age 14						
biological mother & father	70.4	40.3	63.9	69.69	70.1	
biological mother & step-father	9.5	10.3	9.1	8.8	6.7	p<0.0001
other arrangement	20.2	49.5	26.9	21.6	23.2	

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	White (%) (n=2,067)	Black (%) (n=801)	US-born Hispanic (%) (n=685)	Foreign-born Hispanic (%) (n=295)	Non-Hispanic Other (%) (n=256)	p-value
Mother's Highest Education Level						
<hi>high school</hi>	5.7	10.0	32.8	68.0	11.3	
high school or GED	29.6	39.0	31.9	21.1	31.6	1000 0
at least some college	64.1	50.5	34.5	10.9	56.9	1000.0>d
unknown	0.6	0.5	0.8	0.1	0.3	
Father's Highest Education Level						
<hi>high school</hi>	6.6	11.9	26.8	64.5	15.7	
high school or GED	28.7	35.3	29.3	14.7	26.6	0,000
at least some college	58.9	36.8	32.3	12.5	51.6	1000.0>d
unknown	5.8	16.0	11.7	8.3	6.1	
Religion Raised						
none	14.5	11.5	6.3	5.0	14.5	
Catholic	24.3	9.4	71.4	78.0	22.3	1000 02
Protestant	49.9	74.6	17.8	13.3	33.7	1000.0>d
other	11.2	4.5	4.5	3.7	29.5	
Current Insurance						
private	71.0	41.5	44.4	24.5	50.6	p<0.0001
public	13.8	35.2	28.4	12.9	19.8	
none	15.3	23.3	27.2	62.6	29.5	

#### Table 2

Percentage of Young Men Reporting Sex and Birth Control Education and corresponding Unadjusted and Adjusted Odd Ratios (OR)<sup>1</sup>

	%	Unadjusted OR & 95%CI	Adjusted OR & 95% CI <sup>2</sup>
Any Formal Sex Education	96.6		
White	97.2	reference	reference
Black	96.8	0.86 (0.50-1.49)	1.36 (0.71–2.60)
Hispanic, US born	96.7	0.85 (0.44–1.63)	1.03 (0.49–2.19)
Hispanic, foreign born	91.0	0.29 (0.13-0.62)	0.45 (0.20-1.00)
Non-Hispanic other	94.7	0.51 (0.13–1.99)	0.76 (0.18–3.11)
Any Formal Birth Control Education	66.6		
White	69.3	reference	reference
Black	57.0	0.59 (0.44-0.78)	0.70 (0.51-0.96)
Hispanic, US born	61.9	0.72 (0.53-0.98)	0.83 (0.60–1.16)
Hispanic, foreign born	69.0	0.98 (0.68–1.42)	1.28 (0.82–1.98)
Non-Hispanic other	70.3	1.04 (0.69–1.59)	1.30 (0.87–1.96)
Any Parental Sex Discussion	66.8		
White	67.3	reference	reference
Black	75.1	1.47 (1.13–1.91)	1.44 (1.07–1.94)
Hispanic, US born	68.2	1.04 (0.81–1.35)	1.47 (1.09–1.99)
Hispanic, foreign born	50.2	0.49 (0.36-0.67)	1.01 (0.70–1.44)
Non-Hispanic other	54.4	0.58 (0.37-0.90)	0.63 (0.41-0.98)
Parental Birth Control Discussion	49.2		
White	49.8	reference	reference
Black	57.3	1.35 (1.06–1.72)	1.14 (0.87–1.50)
Hispanic, US born	48.4	0.94 (0.73–1.21)	1.09 (0.82–1.45)
Hispanic, foreign born	40.4	0.68 (0.50-0.92)	1.01 (0.72–1.42)
Non-Hispanic other	32.8	0.49 (0.26-0.95)	0.57 (0.30-1.06)

 $^{I}$ Bolded numbers represent statistically significant findings.

<sup>2</sup>Adjusted for age, poverty level, metropolitan location, highest education level, sexual activity, parental figures in the home at age 14, mother's highest education level, father's highest education level, religion, and current insurance