

## Introduction

Understanding birth control practices and barriers is key to reducing unintended pregnancies, which have an increased risk of adverse outcomes for mom and baby. We investigated if there was a difference in birth control practices and barriers between moms who had recently given birth and childbearing aged (18-44) women in South Carolina (SC).

## Methods

We compared the results of two 2011 surveys: the Pregnancy Risk Assessment Monitoring System (PRAMS), which samples new mothers (n=1,098), and the Behavioral Risk Factor Surveillance System (BRFSS), which samples all adults. BRFSS respondents were restricted to women aged 18-44 who were not currently pregnant (n=2,009). Survey analysis procedures were utilized in SAS 9.2 to obtain prevalence estimates and 95% confidence intervals (CI) to compare the demographic distributions, as well as the prevalence of birth control practices and barriers, between new moms and women of childbearing age. Note that these two groups are not mutually exclusive.

## Results

### Demographic distribution

Childbearing aged women responding to BRFSS were older than new mothers (Table 1). There were no other significant demographic differences between these two groups.

### Are you currently doing anything to keep you from getting pregnant?

Significantly more new mothers (72.0%; CI: 67.3-76.6) had a current birth control practice than women of childbearing age (47.5%; 95% CI: 44.0-50.9; Figure 1).

### What are your reasons for not doing anything to keep from getting pregnant?

Significantly more new mothers reported that they were currently not having sex (25.2%) or reported that their husband or they themselves did not want to use birth control at all (4.0%) compared to women of childbearing age (1.4% and 0.8%, respectively; Table 2).

Significantly more childbearing aged women (14.6%) reported that they did not think they could get pregnant, compared to new mothers (2.6%; Table 2).

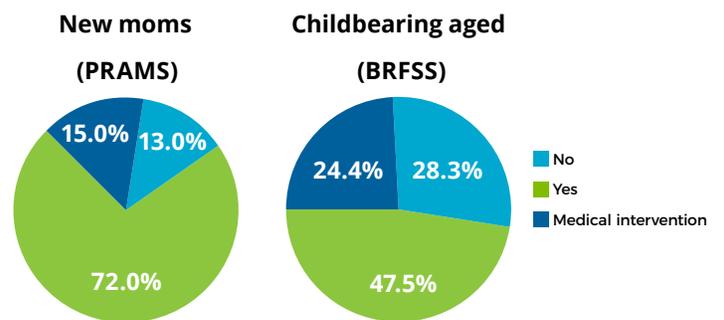
**Table 1.** Demographic for new mothers (PRAMS) and childbearing aged women (BRFSS); % (95% CI), 2011

Demographic	New mothers	Childbearing aged women
<b>AGE GROUP</b>		
<20	8.6 (5.9-11.3)	7.1 (5.6-8.7)
20-29	56.8 (51.8-61.9)	35.4 (32.5-38.4)
30-39	32.1 (27.3-36.8)	35.3 (32.4-38.2)
40-44	2.5 (0.9-4.1)	22.1 (19.6-24.6)
<b>EDUCATION</b>		
<High school	17.6 (13.4-21.7)	14.1 (11.7-16.6)
HS/GED	27.1 (22.3-31.8)	28.3 (25.5-31.1)
Some college	30.1 (25.5-34.6)	33.0 (30.1-35.9)
College graduate	25.3 (21.0-29.5)	24.5 (22.1-27.0)
<b>RACE/ETHNICITY*</b>		
NH White	55.1 (49.9-60.3)	59.0 (56.0-62.0)
NH Black	33.5 (28.4-38.5)	32.1 (29.3-34.9)
Other	11.4 (7.9-14.9)	8.9 (7.0-10.8)
<b>MARRIED</b>		
Yes	54.8 (49.6-59.9)	61.6 (58.7-64.5)

\*NH = Non-Hispanic; Other includes: Hispanic, American Indian, Chinese, Japanese, Filipino, Other Asian, Hawaiian, Alaska Native, Other race, Multi-racial

**Figure 1.**

Do you have a current birth control practice?



### What type of birth control are you currently using?

Compared to childbearing aged women, significantly more new moms received an injection once every 3 months (13.8% vs. 2.5%); had a contraceptive implant (4.6% vs. 0.6%); utilized the rhythm method or natural family planning (3.8% vs. 0.3%); or utilized the withdrawal method (15.5% vs. 0.6%; Table 2).

Compared to new moms, significantly more childbearing aged women reported vasectomy as their current birth control practice (4.3% vs. 1.5%; Table 2).

**Table 2.** Birth control practices and barriers for new mothers (PRAMS) and childbearing aged women (BRFSS); % (95% CI), 2011

Question and Responses	New mothers	Childbearing aged women
<b>REASON FOR NOT DOING ANYTHING TO KEEP FROM GETTING REGNANT</b>		
I am not having sex	<b>25.2 (13.1-37.4)</b>	<b>1.4 (0.3-2.5)</b>
I want to get pregnant	17.9 (7.3-28.4)	20.4 (15.5-25.2)
I/my husband don't want to use anything	<b>4.0 (2.0-6.1)</b>	<b>0.8 (0.0-1.8)</b>
I don't think I can get pregnant (sterile)	<b>2.6 (0.0-6.2)</b>	<b>14.6 (10.6-18.6)</b>
I can't pay for birth control	10.0 (0.9-19.1)	1.3 (0.3-2.3)
I am pregnant now	5.2 (0.0-11.7)	0.1 (0.0-0.3)
Other	23.8 (11.3-36.3)	20.1 (16.3-23.9)
<b>TYPE OF BIRTH CONTROL</b>		
Tubes tied	15.8 (11.7-19.9)	16.5 (13.8-19.2)
Vasectomy	<b>1.5 (0.3-2.6)</b>	<b>4.3 (2.8-5.8)</b>
Pill	29.2 (24.3-34.1)	37.0 (32.5-41.5)
Condoms	32.0 (26.9-37.1)	29.2 (25.4-33.0)
Injection once every 3 months	<b>13.8 (9.9-17.7)</b>	<b>2.5 (1.3-3.7)</b>
Contraceptive implant	<b>4.6 (2.2-7.1)</b>	<b>0.6 (0.1-1.1)</b>
Contraceptive patch	1.2 (0.0-2.5)	0.4 (0.0-0.9)
Diaphragm, cervical cap, or sponge	0.0 (0.0-0.1)	0.4 (0.0-0.8)
Vaginal ring	2.1 (0.5-3.6)	2.4 (0.7-4.1)
IUD	9.2 (6.0-12.3)	9.9 (6.8-13.0)
Rhythm method or natural family planning	<b>3.8 (1.8-5.8)</b>	<b>0.3 (0.0-0.8)</b>
Withdrawal	<b>15.5 (11.7-19.4)</b>	<b>0.6 (0.0-1.4)</b>
Abstinence	13.8 (10.0-17.5)	0.6 (0.0-1.4)
Emergency contraception	0.7 (0.0-1.6)	0.2 (0.0-0.4)
Other	2.1 (0.6-3.5)	2.7 (1.3-4.2)

**Bolded text: significant difference between new moms and women of childbearing age**

#### References

- <sup>1</sup> SAS 9.2. SAS Institute Inc., Cary, NC, USA.
- <sup>2</sup> A Partner's Guide to Pregnancy: Frequently Asked Questions. American College of Obstetricians and Gynecologists. [Accessed 20 Mar 2017]. URL: <https://www.acog.org/-/media/For-Patients/faq032.pdf>
- <sup>3</sup> Birth Control. Planned Parenthood. [Accessed 27 Feb 2017]. URL: <https://www.plannedparenthood.org/learn/birth-control>
- <sup>4</sup> Brown SS, Eisenberg L, editors. The Best Intentions: Unintended Pregnancy and the Well-Being of Children and Families. Institute of Medicine (US) Committee on Unintended Pregnancy. Washington (DC): National Academies Press (US); 1995.
- <sup>5</sup> Division of Biostatistics, Bureau of Public Health Statistics. SC DHEC. [Accessed 29 Jun 2017]. URL: <http://scangis.dhec.sc.gov/scan/>

## Discussion

Significantly less childbearing aged women reported having a current birth control practice than new mothers. It is important for primary care physicians to reiterate the importance of birth control practice to childbearing aged women as they have less access to birth control education than new mothers.

Significantly more new mothers reported that they were not having sex than childbearing aged women. This finding was expected. While there is no set waiting period after delivery for having sex, it is generally recommended to wait 4-6 weeks<sup>2</sup>.

Significantly more new moms utilized natural forms of birth control, i.e. rhythm method or withdrawal, than childbearing aged women. According to Planned Parenthood, these methods are approximately 75% effective<sup>3</sup>. As new moms are generally younger, and are, therefore, at higher risk for an unintended pregnancy<sup>4</sup>, obstetricians and gynecologists may want to pay special attention to this population to suggest more effective forms of birth control. As new moms interact with the health care system more than women of childbearing age due to pediatrician visits for their new baby

Additionally, it is not unexpected that significantly more childbearing aged women than new moms reported utilizing vasectomy as a current birth control method as these women are older and likely have already made decisions regarding children.

There are several limitations to this study. These data are self-reported, so self-report and social desirability biases may have influenced the results. Further, we do not know if the women of childbearing age from BRFSS are new moms; we only know that they are not currently pregnant. In 2011, there were 55,537 births to women aged 18-44 residing in SC, and there were an estimated 835,901 women aged 18-44 residing in the state, which constitutes less than 7% of childbearing aged women being a new mom in 2011<sup>5</sup>.

## Future Direction

Future analyses on birth control practices in SC should include: 2016 and 2017 data from BRFSS and PRAMS to see if the current birth control practices have changed, and to see how health insurance coverage impacts birth control practices.

**SOUTH CAROLINA**  
**PRAMS**