

# Males' Ability to Report Their Partner's Contraceptive Use at Last Sex in a Nationally Representative Sample: Implications for Unintended Pregnancy Prevention Evaluations

American Journal of Men's Health  
2017, Vol. 11(3) 711–718  
© The Author(s) 2016  
Reprints and permissions:  
sagepub.com/journalsPermissions.nav  
DOI: 10.1177/1557988316681667  
journals.sagepub.com/home/JMH



Samantha Garbers, PhD<sup>1</sup>, Roberta Scheinmann, MPH<sup>2</sup>,  
Melanie A. Gold, DO, DABMA, MQT<sup>1,3</sup>, Marina Catalozzi, MD, MSCE<sup>1,3</sup>,  
Lawrence House, PhD<sup>4</sup>, Emilia H. Koumans, MD<sup>4</sup>, and David L. Bell, MD, MPH<sup>1</sup>

## Abstract

Addressing and enabling the role of males in contraceptive choices may facilitate efforts to reduce unintended pregnancy rates and disparities in the United States, but little is known about males' ability to report their partners' contraceptive use. Data from the 2011–2013 National Survey of Family Growth from 2,238 males aged 15 to 44 years who had vaginal sex with a noncohabiting or nonmarital partner and were not seeking pregnancy were examined to tabulate the proportion of males able to report whether their partner used a specific contraceptive method use at last sex (PCM) by sociodemographic and sexual history characteristics. Logistic regression was used to assess odds of being unable to report PCM, adjusting for age and sexual history factors. Most (95.0%) were able to report PCM, with no difference by age group (chi-square = 7.27,  $p = .281$ ) in unadjusted analyses. Males with a new sex partner (14.8% of the sample), compared with those with an established sex partner, had significantly higher odds of being unable to report PCM in bivariate (11.7% vs. 3.7%, chi-square = 39.39,  $p < .001$ ) and multivariable (adjusted odds ratio [AOR]: 3.17, 95% confidence interval [CI: 1.74, 5.65]) analyses. Those whose last sexual encounter was more than 3 months ago also had higher odds of being unable to report in bivariate (OR: 1.74, 95% CI [1.05, 2.87]) and multivariable analyses (AOR: 2.04, 95% CI [1.04, 4.03]). Most men were able report PCM, but reporting was significantly lower among men with new sex partners. To inform future research and evaluation relying on male report, validation studies comparing male report with partner report, specifically among new couples, are needed.

## Keywords

contraception, evaluation, men's health programs, health promotion, pregnancy prevention

Received June 3, 2016; revised October 31, 2016; accepted November 3, 2016

## Background

Generating an evidence base and implementing a programmatic approach for pregnancy prevention has predominantly focused on females (Goesling, Colman, Trenholm, Terzian, & Moore, 2014), specifically, the choice and use of effective contraceptive methods among those who choose to be sexually active. The proportion of pregnancies in the United States that are unintended has only recently begun to decline, and remains high, with 45% of pregnancies unintended. Persistent disparities exist in unintended pregnancy rates by socioeconomic status, race

and ethnicity, and age, with adolescents significantly more likely to have an unintended pregnancy (Finer & Zolna,

<sup>1</sup>Columbia University, New York, NY, USA

<sup>2</sup>Public Health Solutions, New York, NY, USA

<sup>3</sup>New York-Presbyterian Hospital, New York, NY, USA

<sup>4</sup>Centers for Disease Control and Prevention, Atlanta, GA, USA

### Corresponding Author:

Samantha Garbers, Heilbrunn Department of Population & Family Health, Columbia University Mailman School of Public Health, 60 Haven Avenue, Room 2D, New York, NY 10032, USA.

Email: [svg2108@cumc.columbia.edu](mailto:svg2108@cumc.columbia.edu)



2016), contributing to disparities in teen birth rates that differ significantly by state, region, and other social factors (Martin, Hamilton, Osterman, Curtin, & Matthews, 2015; Penman-Aguilar, Carter, Snead, & Kourtis, 2013). Addressing and enabling the role of young men in contraceptive choices, beyond addressing inconsistent or incorrect condom use (Frost & Darroch, 2008), may facilitate efforts to reduce unintended pregnancy rates and disparities in the United States. To address this, unintended pregnancy prevention programs specifically for males are now being designed, implemented, and evaluated. Whereas the ultimate impact of interest for unintended pregnancy prevention interventions is reduced rates of unintended pregnancy, most interventions use more proximal outcomes such as sexual activity, use of any contraceptive method, or the effectiveness of the contraceptive method used, to gauge intervention effectiveness; moreover, the majority rely on female's self-report rather than medical records to measure contraceptive behaviors (Goesling et al., 2014). Report of female contraceptive method use could be assessed from the perspective of male participants, but little is known about the extent to which males' reports can be an informative source of data on contraceptive use.

Evidence from the past 5 years suggests that in some populations, males have low levels of knowledge about specific contraceptive methods other than condoms (Carter, Bergdall, Henry-Moss, Hatfield-Timajchy, & Hock-Long, 2012; Frost, Lindberg, & Finer, 2012; Marshall & Gomez, 2015). Some studies have documented low levels of contraceptive method knowledge, particularly among Black and Latino males (Borrero, Farkas, Dehlendorf, & Rocca, 2013), perhaps reflecting disparities in sex education (Farkas et al., 2015). While the literature includes some small, qualitative studies examining young males' awareness of female partner contraceptive use in the United States (Merkh, Whittaker, Baker, Hock-Long, & Armstrong, 2009), few examinations of males' ability to report partner method use exist that use population-based data (Higgins et al., 2014; Martinez, Copen, & Abma, 2011). Among studies with males that do rely on nationally representative data sets, analyses exclude males who are unable to report their partner's contraceptive method, therefore providing little information on the frequency of males' inability to report their partner's method use or nonuse (Higgins et al., 2014; Martinez et al., 2011).

To inform studies on men's partners' contraceptive use, including evaluations of unintended pregnancy prevention initiatives targeted to males, a nationally representative data set was used to describe the extent to which males whose last sexual encounter was with a nonmarital or noncohabitating partner with whom the male is not seeking pregnancy—a broad population segment encompassing possible target populations for unintended

pregnancy prevention programs or other male-focused family planning efforts—are able to report whether their partner used a specific contraceptive method at last sex.

## Method

### Data Source

Analyses used the main structured survey data from men in the 2011-2013 National Survey of Family Growth (NSFG), a multistage, probability-based nationally representative sample of male and female household members aged 15 to 44 years. Interviews were conducted in person from September 2011 through September 2013. The NSFG uses sample weights to account for unequal probability of selection and survey nonresponse, as previously described in greater detail (Groves, Mosher, Lepkowski, & Kirgis, 2009). From 2011 to 2013, 4,815 interviews were conducted with males, representing a 72.1% male response rate.

### Study Population

Sexually active males who could broadly be considered to be at risk of being involved in an unintended pregnancy were included in the analyses: men who had ever had sexual intercourse with a female partner,<sup>1</sup> who had never had a vasectomy, whose last sexual encounter was with a nonmarital or noncohabitating partner (regardless of marital status), whose last nonmarital or noncohabitating partner was currently pregnant and with whom the respondent was not currently seeking pregnancy. Those who had never had sex ( $n = 769$ ), who were not sure if they had ever had sex ( $n = 4$ ), who were surgically sterile due to vasectomy or other reason ( $n = 180$ ), whose last sexual encounter was with a current marital ( $n = 1,200$ ) or cohabitating partner ( $n = 520$ ), or whose last nonmarital or noncohabitating partner was currently pregnant ( $n = 24$ ) or who reported they were currently seeking pregnancy with that partner ( $n = 17$ ) were excluded (exclusion criteria were not mutually exclusive), for a final sample of 2,238 subjects.

### Definition of Outcomes

The primary outcome for this analysis was respondent's ability to report whether his sexual partner at the last sexual encounter with a nonmarital or noncohabitating female partner used a specific contraceptive method (able to report/unable to report). This variable was coded based on responses to two questions: "That last time that you had sexual intercourse with [most recent partner] did she use any methods to prevent pregnancy or sexually transmitted disease?" and, asked of those who responded yes, "What methods did she use to prevent pregnancy or sexually

**Table 1.** Sociodemographic and Sexual and Reproductive History Characteristics of Males Aged 15 to 44 Years Who Were Able (or Not Able) to Report Their Partner's Contraceptive Method Used at Last Sex, 2011-2013 National Survey of Family Growth (n = 2,238).<sup>a</sup>

	Able to report whether last partner used specific method (n = 2,111)		Not able to report whether last partner used specific method was used (n = 127)		Total	
	n	Weighted %	n	Weighted %	n	Weighted %
Overall		95.0		5.0		100
<i>Sociodemographic variables</i>						
Age group (p = .281) <sup>b</sup>						
15-19 Years	479	20.1	23	15.9	502	20.0
20-24 Years	494	27.2	26	34.9	520	27.6
25-29 Years	384	18.9	31	22.1	415	19.1
30-34 Years	304	13.4	14	6.8	318	13.1
35 Years and older	450	20.4	33	20.3	483	20.4
Race (p = .135)						
Black	545	18.0	39	16.9	584	18.0
White	1,297	68.8	66	59.4	1,363	68.4
Other races	269	13.2	22	23.8	291	13.7
Ethnicity (p = .179)						
Hispanic, of any race	458	18.8	38	26.2	496	19.1
Not Hispanic	1,653	81.2	89	7.3	1,742	80.9
Educational attainment (p = .294)						
Less than high school degree	574	24.9	38	24.9	612	24.9
High school degree (12 years)	594	27.0	42	38.4	636	27.6
Some college (<4 years)	616	30.0	28	20.2	644	29.5
4+ Years of college and/or graduate school	327	18.2	19	16.5	346	18.1
Religious affiliation (p = .820)						
No religious affiliation	626	29.0	45	30.8	671	29.1
Catholic	426	23.2	26	19.2	452	23.0
Protestant	915	40.4	50	44.2	965	40.6
Other religious affiliation	144	7.4	6	5.7	150	7.3
Marital status <sup>c</sup> (p = .946)						
Never been married	1,784	85.3	107	85.0	1,891	85.3
Ever married: currently married, divorced, annulled, separated, widowed	327	14.7	20	15.0	347	14.7
Fatherhood status (p = .659)						
Ever had children (biological or adopted)	1,617	79.0	102	81.3	1,719	79.2
No children	494	21.0	25	18.7	519	20.8
<i>Sexual and reproductive history</i>						
Recent sex (p = .006)						
Last sex within the past 3 months	<b>1,361</b>	<b>63.5</b>	<b>65</b>	<b>42.5</b>	<b>1,426</b>	<b>62.4</b>
Last sex more than 3 months ago	<b>750</b>	<b>36.5</b>	<b>62</b>	<b>57.5</b>	<b>812</b>	<b>37.6</b>
Number of female sex partners in past year <sup>d</sup> (p = .147)						
Fewer than two partners	1,006	57.0	53	47.4	1,059	56.6
Two or more partners	853	43.0	54	52.6	907	43.4
Lifetime female sex partners (p = .241)						
Fewer than four sex partners	630	32.0	42	40.1	672	32.4
Four or more sex partners	1,479	68.0	83	59.9	1,562	67.6

(continued)

Table 1. (continued)

	Able to report whether last partner used specific method (n = 2,111)		Not able to report whether last partner used specific method was used (n = 127)		Total	
	n	Weighted %	n	Weighted %	n	Weighted %
New sex partner ( $p < .001$ ) <sup>b, e</sup>						
Had sex with this partner more than once	<b>1,824</b>	<b>86.2</b>	<b>90</b>	<b>64.2</b>	<b>1,914</b>	<b>85.2</b>
Had sex with this partner only once (new partner)	<b>286</b>	<b>13.8</b>	<b>34</b>	<b>35.8</b>	<b>320</b>	<b>14.8</b>
Respondent condom use at last sex ( $p = .774$ )						
Did not use a condom at last sex	858	39.4	33	37.2	891	39.3
Used a condom at last sex	1,253	60.6	94	62.8	1,347	60.7
Contraceptive method used by partner at last sex						
No method	1,098	49.9	—	—	—	—
Pill	655	34.7	—	—	—	—
Tubal sterilization or other	103	4.9	—	—	—	—
Injection (Depo-Provera or Lunelle)	85	2.5	—	—	—	—
Spermicidal foam/jelly/cream/suppository	5	<1.0	—	—	—	—
Hormonal implant (Norplant or Implanon)	17	<1.0	—	—	—	—
Rhythm or safe period	15	<1.0	—	—	—	—
Contraceptive patch (Ortho-Evra)	10	<1.0	—	—	—	—
Vaginal contraceptive ring (NuvaRing)	32	1.9	—	—	—	—
Intrauterine device, coil, or loop	62	2.7	—	—	—	—
Something else	29	1.2	—	—	—	—

Note. Unweighted *n* and population-weighted percentages presented. Chi-square test *p* values presented by category.

<sup>a</sup>Analysis sample is a subset of male National Survey of Family Growth respondents. <sup>b</sup>Variable entered into logistic regression model. <sup>c</sup>Less than 1% of the analytic sample was currently married. <sup>d</sup>Asked only of respondents who reported having sex more than once in lifetime ( $n = 1,972$  asked; 1,966 responded). <sup>e</sup>Statistically significant after adjusting for multiple comparisons using Benjamini–Hochberg approach and a 10% false discovery rate. Boldface text denotes statistically significant ( $p < 0.05$ ).

transmitted disease?” For both questions, respondents were shown a list of contraceptive methods (contraceptive method response options are listed verbatim in Table 1). Respondents who answered “don’t know” or refused to answer either of these two questions were coded as not being able to report partner method.

### Independent Variables

Covariates previously identified in quantitative and qualitative studies including males were examined, specifically sociodemographic variables associated with knowledge and attitudes around contraceptive use and risk of unintended pregnancy (Frost et al., 2012; Hoga, Rodolpho, Sato, Nunes, & Borges, 2014), and sexual behavior and partnership characteristics that have been identified to be

associated with contraceptive use (Manlove, Ryan, & Franzetta, 2007). *Sociodemographic* variables included age group; race; Hispanic ethnicity; educational attainment; marital status (not currently married and never married; married or cohabiting; divorced, separated, or widowed; collapsed to ever married vs. never married); religious affiliation (no religion, Catholic, Protestant, or other religious affiliation); and fatherhood status (no children; ever had children [biological or adopted]). *Sexual and reproductive history* variables examined included whether the respondent used a condom at last sex (yes/no; asked separately from report of female partner’s contraceptive use); recent sex (had sex in the past 3 months, yes/no); the number of sex partners in the past 12 months (asked only of those who had sex more than once; dichotomized from the original categorical variable at the

**Table 2.** Odds of Inability to Report Whether Partner Used (or Did Not Use) a Specific Contraceptive Method at Last Sex, by Age Group and Sexual History Characteristics ( $n = 2,234$ ).<sup>a</sup>

Characteristic	% Unable to report	Unadjusted OR (95% CI)	Adjusted OR (95% CI)
<b>Age group</b>			
15-19 Years	4.0	0.79 [0.41, 1.53]	0.65 [0.35, 1.21]
20-24 Years	6.3	1.29 [0.56, 2.98]	1.19 [0.52, 2.72]
25-29 Years	5.8	1.17 [0.58, 2.36]	1.10 [0.51, 2.35]
30-34 Years	2.6	0.51 [0.26, 1.01]	<b>0.42 [0.19, 0.93]</b>
35 Years and older	5.0	[Ref.]	[Ref.]
<b>Recent sex</b>			
Last sex encounter >3 months ago	5.6	<b>1.74 [1.05, 2.87]</b>	<b>1.87 [1.01, 3.44]</b>
Last sex encounter within past 3 months	3.3	[Ref.]	[Ref.]
<b>New partner</b>			
Never had sex with this partner before (new partner)	11.7	<b>3.49 [1.81, 6.69]<sup>b</sup></b>	<b>3.17 [1.74, 5.65]<sup>b</sup></b>
Had sex with this partner at least once before	3.7%	[Ref.]	[Ref.]

Note. OR = odds ratio; CI = confidence interval.

<sup>a</sup>Analysis sample is a subset of male National Survey of Family Growth respondents. Four respondents did not report whether their partner was new. <sup>b</sup>Statistically significant after adjusting for multiple comparisons using Benjamini–Hochberg approach and a 10% false discovery rate. Boldface text denotes statistically significant ( $p < 0.05$ ).

median [and to collapse the least-frequent responses, because less than 2% of the sample reported having more than 2 current partners]: fewer than 2 partners/2 or more partners); number of lifetime partners (dichotomized at the midpoint from the original categorical variable ranging from 1 to 7 or more to collapse the least-frequent responses: 0-3 partners/4 or more partners); and whether the last sex partner was new (had ever had sex with that partner before, yes/no).

After analyses revealed significant differences in ability to report by new partner status, to provide greater detail, the partner's contraceptive method used at last sex was cross-tabulated by condom use and partner status (new vs. established). The partner's contraceptive method at last sex, reported in a mutually exclusive category, was collapsed due to small cell sizes to capture only methods used by 5% or more of the sample.

### Analytic Approach

Descriptive statistics were used to describe the outcomes, demographics, and sexual and contraceptive use characteristics of the sample. Bivariate analyses, using chi-square tests, were used to assess differences in these characteristics between men who were and were not able to report whether their partner used a specific contraceptive method (PCM). Associations between age group and sexual history independent variables were also tested using chi-square tests. For all bivariate analyses, alpha was set at .05. To adjust for Type I error due to multiple testing, the Benjamini–Hochberg procedure (Benjamini

& Hochberg, 1995), using a 10% false discovery rate, was used for the bivariate and multivariable analyses.

Finally, multivariable analysis assessed the relationship between age and being unable to report PCM, controlling for potential confounding of the relationship with age by the other independent variables examined. Because age was a specific independent variable of interest given the relevance to teen pregnancy prevention interventions, age was included in the model. Other independent variables were entered into the regression model if the  $p$  value for the chi-square test for bivariate relationships (Table 1) was  $\leq .10$ . Multicollinearity of the independent variables in the regression model (both with and without age) was tested using the collin function in STATA; all variance inflation factor values in all tests were  $< 2$ .

Weighting procedures were used to account for the complex sample design. Guidelines published in the publicly available NSFG *User's Guide* ([http://www.cdc.gov/nchs/data/nsfg/NSFG\\_2011-2013\\_UserGuide\\_MainText.pdf](http://www.cdc.gov/nchs/data/nsfg/NSFG_2011-2013_UserGuide_MainText.pdf)) were used to define sample weighting and variance estimation using the svy function in STATA 13.1 (Stata Corp, College Station, Texas).

### Results

Of the 2,238 men in the sample (men whose last sex partner was a nonmarital or noncohabiting partner with whom the participant was not seeking pregnancy or pregnant), most (85.3%) were never married, less than 1% were currently married, and almost half (47.6%) were young men aged 15 to 24 years (average age 26.9 years; Table 1).

**Table 3.** Contraceptive Method(s) Used at Last Sex by Respondent and Partner, by New Partner Status ( $n = 2,234$ ).<sup>a</sup>

Contraceptive method(s) used	New partner ( $n = 320$ )	Established partner ( $n = 1,914$ )	Total ( $n = 2,234$ )
	Unweighted N (weighted %)	Unweighted N (weighted %)	Unweighted N (weighted %)
Not able to report partner's method, with or without condom	34 (11.7)	90 (3.7)	124 (4.9)
Reported partner used no contraceptive method; no condom used	41 (18.2)	368 (10.8)	409 (17.1)
Reported partner used no contraceptive method; male condom used	141 (41.7)	548 (28.4)	689 (30.4)
Reported partner used pill; no condom used	19 (7.7)	213 (12.1)	232 (11.4)
Reported partner used contraceptive method other than pill; no condom used	5 (1.3)	211 (10.3)	216 (8.9)
Dual method used: Reported partner used any contraceptive method (including pill); male condom used	80 (26.8)	484 (27.4)	564 (27.3)

Note. OR = odds ratio; CI = confidence interval. Chi-square test comparing method distribution by partner status = 93.12,  $p < .001$ .

<sup>a</sup>Analysis sample is a subset of male National Survey of Family Growth respondents. Four respondents did not report whether partner was new.

More than two thirds had four or more lifetime sex partners (14% had only one lifetime partner, and 10% had two lifetime partners, while 44% had seven or more lifetime partners). Overall, 95.0% of the men in the sample ( $n = 2,111$ ) were able to report whether their last sex partner used a specific contraceptive method at last sex. Of the 127 men unable to report, 122 were unable to report whether their partner used any method (102 reported they never knew, 11 did not recall at the time of interview, 1 was not sure, and 8 refused to answer the question), and 5 reported that their partner used a method, but were unable to specify what the method was. While almost all men were able to report their PCM (Table 1), this did not differ by age group or the other sociodemographic variables studied in bivariate analyses.

The status of the relationship between the respondent and his partner was the strongest predictor of being unable to report PCM (Table 2). Having a new partner at the last sex encounter was most strongly associated with being unable to report whether the partner used a specific method in both unadjusted (odds ratio [OR]: 3.49, 95% confidence interval [CI]: 1.81, 6.69) and adjusted (AOR: 3.17, 95% CI [1.74, 5.65]). Men whose sexual encounter was more than 3 months ago also had higher odds of being unable to report in both unadjusted (OR: 1.74, 95% CI [1.05, 2.87]) and adjusted (AOR: 1.87, 95% CI [1.01, 3.44]) models, compared with those whose encounter was more recent. Sexual and reproductive history characteristics overlapped: men whose most recent sex partner was new, compared with those whose last partner was established, were significantly more likely to be in younger age groups (31.4% of those with a new partner were ages 15-19 years, compared with 18.0% of those with an established partner; chi-square 51.78,  $p < .001$ ),

and to have had their last sexual encounter occur more than 3 months ago (62.0% vs. 33.2%, chi-square = 99.99,  $p < .001$ ). Reflecting this overlap, in the adjusted regression model, men aged 30 to 34 years (only 2.6% of whom were unable to report PCM) had lower odds of being unable to report (AOR: 0.42, 95% CI [0.19, 0.93]).

Among all men in the sample, nearly half (49.9%) reported that their partner used no contraceptive method at last sex (17.1% who reported no method used by either partner and 30.3% who reported condom use only), and the reported contraceptive method used at last sex differed significantly between those with and without a new partner at last sex encounter (Table 3). Compared with those with an established partner, a higher proportion of men whose partner was new reported that male condoms were the only method used (no method used by partner; 41.7% vs. 28.4%, chi-square = 93.12,  $p < .001$ ); a higher proportion also reported use of a method other than the pill or condoms only (1.3% compared with 10.3%). Condom use, however, did not emerge as a significant predictor of being able to report the partner's method in unadjusted or adjusted analyses.

## Discussion

These findings suggest that most males (and specifically young men aged 15-24 years who are the focus of most teen pregnancy prevention interventions; Sonenstein, Stewart, Lindberg, Pernas, & Williams, 1997) are able to report the contraceptive method used by their partner at last sex. Fewer than 5% were unable to report a specific method used by their partner, and reporting ability did not differ by any of the sociodemographic characteristics studied, including race and ethnicity, with the exception

of men aged 30 to 34 years in adjusted analyses. Men whose last sexual encounter was more than 3 months ago had significantly higher odds of being unable to report, suggesting that time affects the ability to recall and, in turn, report PCM.

Men with new partners (compared with those who had previously had sex with that partner) had significantly higher odds of being unable to report the method their partner used. Compared with men with established partners, men whose partners were new had more than three times the odds of being unable to report their partner's method, even in adjusted analyses. Differences in ability to report PCM among men with new versus established female sex partners may be related to undeveloped communication skills in the new partnership, consistent with the findings of a qualitative study among 41 men in Philadelphia by Merkh et al. (2009), one of the few studies looking at young unmarried men's reporting patterns of partner's contraceptive use. In that study, males reported that conversations with the partner around the use of contraceptive methods other than condoms occurred more frequently in more established partnerships when considering discontinuing using condoms. In encounters with causal sex partners, Merkh et al. (2009) found, young men intended to use condoms (regardless of whether the female partner was using a method) and therefore did not discuss her method.

The findings presented here should be considered in light of some limitations. This analysis relied on publicly available data, and some variables about partner characteristics such as duration of relationship were not available. A broad definition of being at risk of unintended pregnancy, a subject of recent interest in the public health literature (Marcell et al., 2016), was used to delineate the sample. By including only men whose last sex was with a nonmarital or noncohabiting partner, the study excludes some men at risk of unintended pregnancy, such as those who are married or in a cohabiting relationship but do not wish to become fathers in the near future. Due to the large sample size overall, small differences in ability to report across subgroups that were statistically significant, but not necessarily programmatically meaningful, were detected. This article reports only on the ability of men to report—not the validity of their reports. There are few studies on the validity of male reports related to sexual and reproductive health, but a study cross-referencing NSFG data with vital statistics data suggests that men, and particularly unmarried men, do underreport births they fathered (Joyner et al., 2012).

The specific method used at last sexual encounter as reported by these male respondents may in fact represent underreporting, specifically for males who may have reported their partner used no method when in actuality they did not know whether their partner used a specific

method or which method was used. Males could report that the partner was using a specific method (or no method) based only on assumption, a pattern that has been identified in a relevant qualitative study (Merkh et al., 2009).

Most female-controlled methods of contraception, with the exception of barrier methods, are not visible to the male partner, and may at least partly explain the high proportion of men who reported their partner used no method. Alternatively, new female partners may not disclose their contraceptive method use so as to avoid providing a rationale for the male partner to refrain from using a condom. The proportion of men in this study who reported that their partner did not use a contraceptive method (with or without condom use) was high (49.9%); without linkage to partner data on contraceptive use, this figure may or may not represent overreporting of female partners not using a contraceptive method. Among males with new partners, overreporting of partner nonuse of contraception may be less likely, as it has been identified in other studies that in new or unstable relationships, partners are less likely to use more effective contraceptive methods (Manlove et al., 2007). Without data from the female partners, these patterns could not be explored in this study.

To clarify these issues, validation studies enrolling couples to compare reported contraceptive method use and nonuse are merited. Most studies that have enrolled couples to conduct validation of partners' contraceptive method use are small in size, and generally include only married or stable couples (Mellor, Slaymaker, & Cleland, 2013), limiting generalizability to a subpopulation of interest to unintended pregnancy prevention program developers and evaluators, and to the subgroups of interest identified in this analysis: young males in new, unstable, or casual sexual partnerships who are unlikely to consent (or with sexual partners unlikely to consent) to participate in validation studies.

This article addresses a gap in the literature on the extent to which males can report their female partner's contraceptive method, an essential prerequisite of reliability, and, in turn, validity. The findings suggest that young males in established (i.e., not new) relationships are able to report whether their partner used a specific contraceptive method. Most males engaging in sex with a new partner are also able to report, but at a lower proportion compared with those with established partners, which may have implications for the evaluation of unintended pregnancy prevention interventions. Among those males who were unable to report PCM, the significant differences in reporting ability by the partnership status identified in these analyses, which used nationally representative data, support for the need for a more in-depth examination of possible explanations, including males' communication with partners about contraceptive use, specifically among men in new and casual partnerships (Hoga et al., 2014).

## Authors' Note

The findings and conclusions in this article are those of the authors and do not necessarily represent the official position of OAH or CDC.

## Declaration of Conflicting Interests

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

## Funding

The author(s) disclosed receipt of the following financial support for the research, authorship, and/or publication of this article: This work was supported by RFA-DP-15-007 through a partnership between the Teen Pregnancy Prevention Program at the Office of Adolescent Health (OAH) and the Division of Reproductive Health at the Centers for Disease Control and Prevention (CDC), U.S. Department of Health & Human Services.

## Note

1. In the NSFG survey instrument, the question on sexual intercourse was written as: "Have you ever had sexual intercourse with a female (sometimes this is called making love, having sex, or going all the way)? Do not count oral sex, heavy petting, or other forms of sexual activity that do not involve vaginal penetration. Do not count sex with a male partner." Questions on sexual behavior other than sexual intercourse with a female were asked elsewhere in the survey.

## References

- Benjamini, Y., & Hochberg, Y. (1995). Controlling the false discovery rate: A practical and powerful approach to multiple testing. *Journal of the Royal Statistical Society. Series B (Methodological)*, *57*, 289-300.
- Borrero, S., Farkas, A., Dehlendorf, C., & Rocca, C. H. (2013). Racial and ethnic differences in men's knowledge and attitudes about contraception. *Contraception*, *88*, 532-538.
- Carter, M. W., Bergdall, A. R., Henry-Moss, D., Hatfield-Timajchy, K., & Hock-Long, L. (2012). A qualitative study of contraceptive understanding among young adults. *Contraception*, *86*, 543-550.
- Farkas, A. H., Vanderberg, R., Sucato, G. S., Miller, E., Akers, A. Y., & Borrero, S. (2015). Racial and ethnic differences in young men's sex and contraceptive education. *Journal of Adolescent Health*, *56*, 464-467.
- Finer, L. B., & Zolna, M. R. (2016). Declines in unintended pregnancy in the United States, 2008-2011. *New England Journal of Medicine*, *374*, 843-852.
- Frost, J. J., & Darroch, J. E. (2008). Factors associated with contraceptive choice and inconsistent method use, United States, 2004. *Perspectives on Sexual and Reproductive Health*, *40*, 94-104.
- Frost, J. J., Lindberg, L. D., & Finer, L. B. (2012). Young adults' contraceptive knowledge, norms and attitudes: Associations with risk of unintended pregnancy. *Perspectives on Sexual and Reproductive Health*, *44*, 107-116.
- Goesling, B., Colman, S., Trenholm, C., Terzian, M., & Moore, K. (2014). Programs to reduce teen pregnancy, sexually transmitted infections, and associated sexual risk behaviors: A systematic review. *Journal of Adolescent Health*, *54*, 499-507.
- Groves, R. M., Mosher, W. D., Lepkowski, J. M., & Kirgis, N. G. (2009). *Planning and development of the continuous National Survey of Family Growth* (Vital and Health Statistics, Ser. 1 No. 48). Retrieved from [https://www.cdc.gov/nchs/data/series/sr\\_01/sr01\\_048.PDF](https://www.cdc.gov/nchs/data/series/sr_01/sr01_048.PDF)
- Higgins, J. A., Smith, N. K., Sanders, S. A., Schick, V., Herbenick, D., Reece, M., . . . Fortenberry, J. D. (2014). Dual method use at last sexual encounter: A nationally representative, episode-level analysis of US men and women. *Contraception*, *90*, 399-406.
- Hoga, L. A., Rodolpho, J. R., Sato, P. M., Nunes, M., & Borges, A. L. (2014). Adult men's beliefs, values, attitudes and experiences regarding contraceptives: A systematic review of qualitative studies. *Journal of Clinical Nursing*, *23*, 927-939.
- Joyner, K., Peters, H. E., Hynes, K., Sikora, A., Taber, J. R., & Rendall, M. S. (2012). The quality of male fertility data in major U.S. surveys. *Demography*, *49*, 101-124.
- Manlove, J., Ryan, S., & Franzetta, K. (2007). Contraceptive use patterns across teens' sexual relationships: The role of relationships, partners, and sexual histories. *Demography*, *44*, 603-621.
- Marcell, A. V., Gibbs, S. E., Choiriyah, I., Sonenstein, F. L., Astone, N. M., Pleck, J. H., & Darlotis, J. K. (2016). National needs of family planning among US men aged 15 to 44 years. *American Journal of Public Health*, *106*, 733-739.
- Marshall, C. J., & Gomez, A. M. (2015). Young men's awareness and knowledge of intrauterine devices in the United States. *Contraception*, *92*, 494-500.
- Martin, J. A., Hamilton, B. E., Osterman, M. J., Curtin, S. C., & Matthews, T. J. (2015). *Births: Final data for 2013*. Retrieved from [http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64\\_01.pdf](http://www.cdc.gov/nchs/data/nvsr/nvsr64/nvsr64_01.pdf)
- Martinez, G., Copen, C. E., & Abma, J. C. (2011). *Teenagers in the United States: Sexual activity, contraceptive use, and childbearing, 2006-2010 national survey of family growth* (Vital and Health Statistics, Ser. 23 No. 31). Retrieved from [http://www.cdc.gov/nchs/data/series/sr\\_23/sr23\\_031.pdf](http://www.cdc.gov/nchs/data/series/sr_23/sr23_031.pdf)
- Mellor, R. M., Slaymaker, E., & Cleland, J. (2013). Recognizing and overcoming challenges of couple interview research. *Qualitative Health Research*, *23*, 1399-1407.
- Merkh, R. D., Whittaker, P. G., Baker, K., Hock-Long, L., & Armstrong, K. (2009). Young unmarried men's understanding of female hormonal contraception. *Contraception*, *79*, 228-235.
- Penman-Aguilar, A., Carter, M., Snead, M. C., & Kourtis, A. P. (2013). Socioeconomic disadvantage as a social determinant of teen childbearing in the U.S. *Public Health Reports*, *128*(Suppl. 1), 5-22.
- Sonenstein, F. L., Stewart, K., Lindberg, L. D., Pernas, M., & Williams, S. (1997). *Involving males in preventing teen pregnancy: A guide for program planners*. Retrieved from <http://www.urban.org/research/publication/involving-males-preventing-teen-pregnancy>