



Parent, partner and individual contexts of very early first sex experiences among young men and their links to subsequent reproductive health outcomes

Asari Offiong , Laura Lindberg , Jacky M. Jennings , Patricia J. Dittus & Arik V. Marcell

To cite this article: Asari Offiong , Laura Lindberg , Jacky M. Jennings , Patricia J. Dittus & Arik V. Marcell (2020): Parent, partner and individual contexts of very early first sex experiences among young men and their links to subsequent reproductive health outcomes, Culture, Health & Sexuality, DOI: [10.1080/13691058.2020.1795266](https://doi.org/10.1080/13691058.2020.1795266)

To link to this article: <https://doi.org/10.1080/13691058.2020.1795266>



© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.



Published online: 13 Aug 2020.



Submit your article to this journal [↗](#)



Article views: 591








View related articles [↗](#)



View Crossmark data [↗](#)

Parent, partner and individual contexts of very early first sex experiences among young men and their links to subsequent reproductive health outcomes

Asari Offiong^{a,b} , Laura Lindberg^c , Jacky M. Jennings^{a,b} ,
Patricia J. Dittus^d  and Arik V. Marcell^{a,b} 

^aSchool of Medicine, Johns Hopkins University, Baltimore, MD, USA; ^bBloomberg School of Public Health, Johns Hopkins University, Baltimore, MD, USA; ^cGuttmacher Institute, New York, NY, USA; ^dDivision of STD Prevention, Centers for Disease Control and Prevention, Atlanta, GA, USA

ABSTRACT

Research indicates that upwards to 30% of US urban Black male adolescents report first sex younger than age 13; however, there is limited literature on the sexual and reproductive health outcomes and contexts of these early first sex experiences. This exploratory study described sexual and reproductive health histories and explored personal, partner and parent contextual factors associated with first sex experiences occurring at 13 years or younger among a sample of US urban young men aged 15–24. Participants were assessed on their demographics and sexual health histories and a subset of young men were assessed on the contextual factors related to their first sex experience. Pearson chi-squared tests examined factors associated with early first sex and Fisher's exact tests examined associated contextual factors. First sex at 13 years or younger was reported by 29% of young men. A higher proportion of young men who had first sex at 13 or younger than those who had sex onset at 14 or older reported having got someone pregnant, having a "much older" first partner, and relationship satisfaction with their mother (16%) and father (12%). Study findings highlight the need to better understand urban young men's early first sex experiences, including the support needed to promote their healthy sexual development.

ARTICLE HISTORY

Received 21 February 2020
Accepted 8 July 2020

KEYWORDS

sexual behaviour; men;
first sex; early sex;
adolescents; USA

Introduction

The initiation of sexual activity is a normal part of human development, although the timing varies by individual. By age 18, just over half (55%) of US adolescents report having had sex, a figure which does not vary between boys and girls (Abma and Martinez 2017). But, data from the 2017 Youth Risk Behaviour Surveillance System (YRBSS) indicates that male high school students (4.8%) are twice as likely as female

CONTACT Arik V. Marcell  amarcell@jhu.edu

© 2020 The Author(s). Published by Informa UK Limited, trading as Taylor & Francis Group.
This is an Open Access article distributed under the terms of the Creative Commons Attribution-NonCommercial-NoDerivatives License (<http://creativecommons.org/licenses/by-nc-nd/4.0/>), which permits non-commercial re-use, distribution, and reproduction in any medium, provided the original work is properly cited, and is not altered, transformed, or built upon in any way.

students (2%) to initiate sex before age 13 (Kann et al. 2018). Further, examination of YRBSS metropolitan level data among male high school students finds that the prevalence of reporting first sex before age 13 is highest among non-white students, ranging across metropolitan areas from 12% to 29% among non-Hispanic Black male high school students, 6% to 17% among Hispanic male high school students and 2% to 10% among white male high school students (Lindberg, Maddow-Zimet, and Marcell 2019). This apparent disparity of a higher proportion of urban minority male adolescents reporting that they are engaging in first sex at what might be considered a very young age calls for a better understanding of the sexual and reproductive health outcomes and contextual factors associated with Black young men who report very early first sex experiences, to assist in supporting their healthy sexual development and reducing exposure to associated risks.

Past research has found that regardless of gender, young people whose first sex is at an earlier age (typically defined in these studies as under the age of 16) are more likely to experience negative sexual and reproductive health behaviours (e.g. more recent lifetime and concurrent sexual partners; sex under the influence of substance use) and outcomes (i.e. unintended or unwanted pregnancy, and sexually transmitted infections (STIs)) (Heywood et al. 2015; O'Donnell, O'Donnell, and Stueve 2001); past studies have reported mixed results of the association between early first sex onset and recent contraception use (Manlove and Terry-Humen 2007; Sneed 2009; Santelli et al. 1997). One of the most consistent sexual and reproductive health outcomes of early first sex is greater pregnancy risk; however, findings from prior studies that have examined the association between earlier ages of first sex onset and pregnancy risk have been conducted mainly among adolescent girl samples (Miller and Heaton 1991; Manlove et al. 2000; Zavodny 2001) or samples not stratified by gender (Cavazos-Rehg et al. 2009). Very few studies have examined the association between young men's age of sex onset and being involved in a pregnancy (O'Donnell, O'Donnell, and Stueve 2001; Manlove et al. 2009). Only one study, conducted with a longitudinal school-based cohort, demonstrated that 7th grade boys (approximately aged 12-13 at baseline) who had already initiated sex were three times more likely to report ever having got someone pregnant by 10th grade compared to boys who reported their first sex occurred much later (O'Donnell, O'Donnell, and Stueve 2001). However, the findings from O'Donnell et al were limited in that the context of these very early sex onset experiences was not examined from multiple perspectives nor was there an explicit exploration of potential racial and ethnic differences, given the literature on minority adolescents' sexual behaviours. Overall, limitations in this past literature create challenges for how researchers, clinicians, and public health practitioners make inferences about urban, particularly Black young men's early first sex as an indicator for later negative sexual behavioural outcomes.

There are several factors that might influence why young Black men engage in sex much earlier than their peers. Social factors, including interactions with partners and peers, cultural norms, and individual beliefs may contribute to how Black men perceive sex from an early age. The social-ecological model provides a useful framework to examine how contextual factors at multiple levels may influence the timing of first sex and how this context may inform future behaviours (Bronfenbrenner 1986). One of

the few studies to use a social-ecological framework (Smith 1997) examined neighbourhood, school and family factors associated with sex onset at age 15 or younger among urban male and female adolescents. For adolescent boys, low parent attachment, child maltreatment and low parental monitoring were associated with earlier sex onset; however, Smith did not assess partner or personal level factors. Smith's findings align with other research that has demonstrated adolescent-parental closeness, lack of family conflict, parental communication and greater parental supervision are negatively associated with sexual initiation regardless of age of onset (Parkes et al. 2011; Ryan et al. 2007) or intentions to have sex (Sieverding et al. 2005). One longitudinal study that was conducted specifically among 4th and 5th grade (9 to 10 years old) Black boys at baseline found that those who experienced greater family conflict were more likely to engage in earlier first sex than those who did not (McBride, Paikoff, and Holmbeck 2003). However, these studies do not consistently define early sex nor make a distinction between those adolescents who engage in very early sex experiences (e.g. at age 13 or younger) and those who do so later. Research is therefore needed that captures the multiple levels of influence of early sex onset from families, partners and peers and which explores whether the context of these experiences is different for adolescents who start having sex early as compared to peers who start later.

Prior work has demonstrated that first sex, regardless of age of onset, is not necessarily an unplanned experience for many young people, and decisions to initiate sex are strongly tied to partners and peers (Kinsman et al. 1998; Ott, Pfeiffer, and Fortenberry 2006). Other related work has found the important role of peer norms (Kinsman et al. 1998; Ott, Pfeiffer, and Fortenberry 2006), partner type (Ryan, Manlove, and Franzetta 2003), and partner age (Ompad et al. 2006; Masho et al. 2017). However, little is known about the partners of young Black men who report engaging in sex at age 13 or younger. One retrospective study of adults, in which 13% reported sex onset younger than 13, highlighted differences by partner age and race, indicating that young Black men with older partners were more likely to have first sex earlier than Black and white young men with same aged partners (Ompad et al. 2006). Ompad et al., however, did not examine other relevant contextual factors of these young men's first sex, including how the decision to have sex was made and whether this first sex experience was wanted. Socially constructed cultural beliefs in the USA about what it means to be a man may reinforce double standards that adolescent boys be sexually active with multiple partners. Such a cultural double standard along with perceived peer norms that all peers are already engaging in sex may result in adolescent boys feeling pressured to start having sex early (Kagesten et al. 2016; Wolfe 2003).

Building upon the limitations of past work in this area, the principal objective of this exploratory study was to improve understanding of the context of first sex at age 13 or younger among a sample of predominantly Black young men aged 15-24. This study's main goal was to describe the proportion of participants who reported age of first sex at 13 or younger and examine whether age of first sex varied by participants' demographic and sexual and reproductive health outcomes. This study's secondary goal was to explore contextual factors associated with young men's age of first sex at 13 or younger, including personal-, partner- and parent-level factors.

Materials and methods

Study procedure

Between August 2014 and September 2017, five rounds of cross-sectional surveys were conducted among a nonprobability (convenience) clinic sample of young men aged 15-24 (Marcell et al. 2018). These surveys were conducted as part of a larger study that focused on training non-clinical youth-serving professionals in community-based settings to engage young men in sexual and reproductive health care in Baltimore, Maryland, USA and monitored young men's knowledge about this intervention. Baltimore, Maryland is a predominately Black city where a significant portion of the population is considered low-income; thus the sample is representative of this population. Round 1 (April 4, 2014 to July 9, 2014) was conducted before the training was initiated and Round 2 (October 27, 2014 to December 12, 2014) commenced three months after training initiation. Round 3 (August 3, 2015 to September 16, 2015) took place 9 months later, Round 4 (July 1, 2016 to September 30, 2016) 24 months later, and Round 5 (August 1, 2017 to September 30, 2017) 36 months later. Data were collected using the same set of survey items at three primary care and two public STI health clinics. Eligibility included self-identifying as male, between the age of 15-24, and English or Spanish language fluency. Male adults and minors whose clinic visits were related to sexual and reproductive health, as identified in an eligibility screener, gave consent to participate in research, as allowed by Maryland state law. Minor assent and parent consent were obtained if visits were not related to sexual and reproductive health. Consented participants completed a brief audio-assisted computer survey (ACASI) that took about 10-15 minutes at the end of their clinic visit. Participants were reimbursed \$5USD for their time. Study protocols were approved by the Johns Hopkins University's Institutional Review Board.

Of 1,022 male patients referred to the study team from all of the clinical settings across all five rounds of data collection, 705 (69.0%) were eligible. Among eligible participants, 157 (22.2%) left before completing a survey, 55 refused (7.8%), and 493 enrolled (69.9% participation rate) across all five rounds of data collection.

Measures

Outcome: Age of first sex at 13 or younger

Participants were asked the age of vaginal, oral and/or anal sex for the first time; and age of first sex 13 or younger was coded as yes or no.

Demographics and visit characteristics

Participants self-reported their age at interview (coded as 15-19 or 20-24), race/ethnicity (coded as non-Hispanic Black, non-Hispanic White, or Hispanic), mother having graduated from high school (coded as yes or no), school/work status (coded as not in school or working, not in school but working, in school but not working, or in school and working), reason for clinic visit (coded as routine physical examination, STI-related visit, or other (e.g. cold), established clinic patient (coded as no or yes), and has health insurance.

Sexual and reproductive health history

Participants self-reported their current sexual orientation (coded as heterosexual versus a combined category of gay, bisexual or queer). Respondents who reported being sexually experienced (ever had sex), also reported the sex of their current sex partner(s) (coded as female partners only, male partners only, or both), number of sex partners in the last 3 months (coded as 0, 1, 2, or 3 or more), condom use at last sex (coded as yes/no), consistency of condom use in last 3 months (coded as never, sometimes, most time or always), ever having got someone pregnant, miscarriage or abortion (coded as yes/no), number of children (coded as 0, 1, or 2 or more), and STI history (coded as yes/no).

Context of first sex

Measures concerning the context of first sex included in the study were based on prior work in this area (Heywood et al. 2015; Kagesten et al. 2016; Kinsman et al. 1998; Lindberg, Maddow-Zimet, and Marcell 2019, Masho et al. 2017; McBride, Paikoff, and Holmbeck 2003; O'Donnell, O'Donnell, and Stueve 2001; Ompad et al. 2006; Ott, Pfeiffer, and Fortenberry 2006; Ryan, Manlove, and Franzetta 2003; Smith 1997; Wolfe 2003).

Personal beliefs, attitudes, and norms at first sex. Participants were assessed using single items about their perceived knowledge about sex ("I didn't know what I was doing the first time I had sex"); masculinity belief ("It made me feel like a man"); masculinity trait ("I had sex to tell my friends"); peer norms about sex ("I had sex later than my peers"); and perceived norms about sex ("It is alright for an unmarried person to have sex if they had strong affection for each other at age 12, 16, 18, and 18 or over), respectively. Response options to these items ranged on a 4-point scale from strongly disagree to strongly agree.

Partner-related factors at first sex. Participants were assessed for their first sex experience: partner relationship status (coded as girlfriend or boyfriend versus hookup, casual, just met, or other); partner's relative age (coded as "we were the same age", "I was much older", or "my partner was much older"); whether wanted first sex event to happen at that time (coded as "no", "I had mixed feelings about it", or "yes"); and decision-making to have first sex event (coded as "we made the decision together", "I pressured my partner", or "my partner pressured me").

Parent-related factors at first sex. Participants were assessed using single items at first sex their closeness and satisfaction with their mother/female guardian and father/male guardian, respectively; parent supervision ("I had a lot of freedom to do/be wherever I wanted); and perceived parent beliefs about sex ("My parents/guardians were alright with my having sex at that time"). Response codes for parental closeness ranged on a 5-point scale from not close at all to extremely close. Response codes for the remaining items ranged on 4-point scales from strongly disagree to strongly agree.

Data analysis

The analytic sample of 493 young men, collected across 5 cross-sectional data collection rounds, was used to describe the proportion of young men aged 15-24

reporting age of first sex at 13 or younger and associated demographics and sexual and reproductive health history. Items related to personal-, partner- and parent-level contextual factors at first sex were added into the survey and assessed only during the final data collection round (round 5). Thus, the analytic sample that explored contextual factors associated with male adolescents' age of first sex at 13 or younger consisted of only 57 male patients who were sexually experienced (66 male patients completed the round 5 survey, and 9 male patients reported that they never had sex).

First, we calculated frequencies and crosstabs of participants' characteristics by first sex at 13 or younger versus later. For these analyses, continuous measures were dichotomised since the distribution of responses showed a natural binary in how participants answered the questions. Pearson chi-squared tests were then conducted to examine the association between first sex at 13 or younger with participants' demographics and sexual and reproductive health history based on a significance level of $p < 0.05$. Finally, Fisher's exact tests were conducted to explore the association between first sex at 13 or younger with contextual-level factors, secondary to the small sample size of round 5.

Results

Overall, the sample was majority 20-24-year olds (61.3%), non-Hispanic Black (90.1%), had mothers with a high school education (83.9%), and identified as heterosexual (75.1%) (Table 1). There was an equal distribution in the sample's school/work status. Age of first sex at 13 or younger was reported by 28.8% of the full sample. Table 1 also describes visit characteristics and participants recruited during each data collection round.

Among sexually experienced young men, 32.1% reported age of first sex at 13 or younger, 75.1% reported female-only partners, 32.8% had three or more partners in the past three months, 47.7% had ever got someone pregnant, 10.9% had two or more children, and 38.7% had an STI history (Table 2).

Age of first sex at 13 or younger was not significantly associated with participants' demographic characteristics (not shown) or sexual and reproductive health history (Table 2). The exception was that a significantly higher proportion of young men who had their first sex experience at 13 or younger reported having got someone pregnant than young men who had sex onset at 14 or older (Chi-square = 12.30, $p < 0.001$) (Table 2).

In round 5, partner- and parent-level contextual factors were found to be associated with age of first sex at 13 or younger, including specifically partner age and relationship satisfaction with parents (Table 3). A significantly higher proportion of first sex at 13 or younger was reported among young men with a partner who was "much older" (60%) than with same aged or younger partners (Fisher's exact test; $p = 0.01$) and among young men reporting relationship satisfaction with their mother (16.7%) and father/male guardian (12.5%) than young men reporting relationship satisfaction (Fisher's exact test; $p = 0.028$ and $p = 0.024$, respectively). The other personal-, partner-, and parent-level measures examined were not found to be significantly associated

Table 1. Demographic characteristics for total sample.

Variables	Total sample (N = 493)	
	N	%
Demographic characteristics		
Age at survey		
15-19	191	38.7
20-24	302	61.3
Race/ethnicity		
Non-Hispanic Black	444	90.1
Non-Hispanic White	36	7.3
Hispanic	13	2.6
School/work status		
Not in school or working	116	23.5
Not in school but working	128	26
In school but not working	134	27.2
In school and working	115	23.3
Mother with high school education	412	83.9
Current sexual orientation		
Heterosexual	370	75.1
LGBTQ+ ^a	123	24.9
Age of first sex		
13 or younger	142	28.8
14 or older	300	60.9
Never had sex	51	10.3
Visit characteristics		
Reason for clinic visit		
Routine physical examination	204	41.4
STD-related visit	206	41.8
Other (e.g. cold)	83	16.8
Established clinic patient		
No (new patient)	142	28.8
Yes	351	71.2
Has health insurance	391	79.3
Clinic type		
STD clinic	211	42.8
Primary care	282	57.2
Data collection rounds*		
Round 1	83	16.8
Round 2	117	23.7
Round 3	124	25.2
Round 4	103	20.9
Round 5	66	13.4

^aCollapsed gay, bisexual and not sure into LGBTQ+.

*Round 1 (April 4, 2014 to July 9, 2014) was conducted before the training was initiated and Round 2 (October 27, 2014 to December 12, 2014) 3 months after training initiation, Round 3 (August 3, 2015 to September 16, 2015) 9 months later, Round 4 (July 1, 2016 to September 30, 2016) 24 months later, and Round 5 (August 1, 2017 to September 30, 2017) 36 months later.

with age of first sex at 13 or younger. While the findings did not reach statistical significance, a higher proportion of young men who had first sex at 13 or younger than those who had sex at 14 or older reported lacking knowledge about sex, disagreement that they had sex later than their peers, and it was okay for a 12 year old to have sex, perceived pressure by first sex partner to have sex, traditional masculinity beliefs, and not being close to their mother.

Table 2. Sexual and reproductive health history among sexually experienced men, by age of first sex ($N = 442$).^a

Sexual and reproductive health history	Sexually experienced sample ($N = 442$)		Among sexual and reproductive health history characteristic, % age of first sex ^d		χ^2	p-value
	N	%	≤13yo %	≥14yo %		
Sex of current sexual partners					0.0064	0.936
Female only	332	75.1	32.3	67.8		
Male only or both ^b	110	24.9	31.8	68.2		
Number of partners last 3 months					3.24	0.355
None	38	8.6	42.1	57.9		
1 partner	176	39.8	28.4	71.6		
2 partners	83	18.8	31.3	68.7		
3 or more partners	145	32.8	34.5	65.5		
Condom use at last sex					0.356	0.551
No	215	48.6	33.5	66.5		
Yes	227	51.4	30.8	69.2		
Consistency of condom use last 3 months ^c					1.90	0.594
Never	66	16.3	37.9	62.1		
Sometimes	94	23.3	31.9	68.1		
Most times	138	34.2	29.0	71.0		
Always	106	26.2	29.2	70.8		
Got someone pregnant ^d					12.3	<0.001
No	193	52.3	24.4	75.6		
Yes	176	47.7	41.5	58.5		
Number of children					2.22	0.330
None	347	78.7	31.2	68.9		
1 child	46	10.4	30.4	69.6		
2 or more children	48	10.9	41.7	58.3		
STI history					2.84	0.092
No	271	61.3	29.2	70.9		
Yes	171	38.7	36.8	63.2		

Key: STI = sexually transmitted infections; yo = years old.

^aAmong sexually experienced males, 32.1% reported first sex at age 13 or younger.

^bMen who reported currently having sex with men only ($n = 73$) or both women and men ($n = 37$) were collapsed into one category.

^c38 missing values.

^dResponded that made someone pregnant or partner experienced at least one miscarriage or abortion. Men who reported currently having sex with men only ($n = 73$) did not answer the question.

^ePearson chi-squared tests were performed to compare early sex onset with each sexual and reproductive health history.

Discussion

Study findings reveal that more than one-quarter of young men reported that their first sex was at age 13 or younger and those reporting early age of sex onset were more likely to have got a partner pregnant than young men with later onset. Exploratory analysis also found that partner- and parent-level factors were associated with young men having had sex at age 13 or younger. These exploratory study findings highlight the importance of understanding young men's context of early sex onset, so as to inform future research as well as prevention strategies designed to delay sex onset and support male adolescents' healthy sexual development. Study findings also indicate the importance of assessing early age of first sex as part of

Table 3. Exploring personal, partner, and parent factors by age of first sex among sexually experienced Round 5 participants ($n = 57$).

Context characteristic at first sex	Sexually experienced round 5 sample ($N = 57$) %	Among each context characteristic, % age of first sex		Fisher's exact test p-value
		≤ 13 yo ($N = 14$) %	≥ 14 yo ($N = 43$) %	
Personal beliefs, attitudes, & norms				
I didn't know what I was doing				0.059
Strongly disagree/disagree	64.9	16.2	83.8	
Strongly agree/agree	35.1	40.0	60.0	
It made me feel like a man				0.132
Strongly disagree/disagree	47.4	14.8	85.2	
Strongly agree/agree	52.6	33.3	66.7	
I did it to tell my friends				0.629
Strongly disagree/disagree	89.5	23.5	76.5	
Strongly agree/agree	10.5	33.3	66.7	
Had sex later than my peers				0.067
Strongly disagree/disagree	56.1	34.4	65.6	
Strongly agree/agree	43.9	12.0	88.0	
It is alright for unmarried person to have sex if they have strong affection for each other at ...				0.079
Age 12	14.3	50.0	50.0	
Age 16	32.1	27.8	72.2	
Age 18	30.4	5.9	94.2	
Age older than 18	23.2	30.8	69.2	
Partner-related factors				
Partner relationship status				0.356
Girlfriend or boyfriend	61.4	31.8	68.2	
Hookup, casual, just met, or other	38.6	20.0	80.0	
Partner age				0.010
We were the same age	78.9	17.1	82.9	
I was much older	1.9	–	100.0	
Partner was much older	19.2	60.0	40.0	
I really wanted it to happen				0.280
No	1.8	100.0	–	
I had mixed feelings about it	47.4	25.9	74.1	
Yes	50.9	20.7	79.3	
Decision-making to have sex				0.095
We made the decision together	86.0	20.4	79.6	
I pressured my partner	5.3	33.3	66.7	
My partner pressured me	8.8	60.0	40.0	
Parent-related factors				
Closeness with mother				0.059
Strongly disagree/disagree	35.1	40.0	60.0	
Strongly agree/agree	64.9	16.2	83.8	
Closeness with father				0.124
Strongly disagree/disagree	59.6	32.4	67.6	
Strongly agree/agree	40.4	13.0	87.0	
Relationship satisfaction with mother				0.028
Strongly disagree/disagree	25.0	50.0	50.0	
Strongly agree/agree	75.0	16.7	83.3	
Relationship satisfaction with father				0.024
Strongly disagree/disagree	40.7	40.9	59.1	
Strongly agree/agree	59.3	12.5	87.5	
I had a lot of freedom to do/be wherever I wanted				0.749
Strongly disagree/disagree	35.1	20.0	80.0	
Strongly agree/agree	64.9	27.0	73.0	

(continued)

Table 3. Continued.

Context characteristic at first sex	Sexually experienced round 5 sample (N = 57) %	Among each context characteristic, % age of first sex		Fisher's exact test p-value
		≤13yo (N = 14) %	≥14yo (N = 43) %	
My parents/guardians were alright with my having sex at that time				0.749
Strongly disagree/disagree	64.9	27.0	73.0	
Strongly agree/agree	35.1	20.0	80.0	

^aAmong sexually experienced men in round 5, 24.6% reported first sex at age 13 or younger. No statistically significant difference from the previous data collection rounds.

routine clinical care, particularly among male adolescents living in a similar social environment, as a marker for intervention and counselling services.

The prevalence of first sex at 13 or younger in this clinic-based sample was similar to the recently published rates of early first sex that used metropolitan area student-level data of non-Hispanic Black male students in high school (range: 12% to 29%) and middle school (range: 20% to 40%) (Lindberg, Maddow-Zimet, and Marcell 2019). Findings in the current study that showed higher rates of subsequent involvement in a pregnancy contribute to a very small body of literature examining sexual risk outcomes of very early sex onset (O'Donnell, O'Donnell, and Stueve 2001). Thus, teenage pregnancy prevention strategies may need to consider how to more effectively assess male adolescents for very early age of sex onset.

One of this study's main contributions was its exploration of contextual factors associated with young men's first sex experiences at a very young age and the role that parents and partners play. The current study's exploratory findings of lower relationship satisfaction with parents particularly mothers, align with past research that has demonstrated the central role of parents in delaying adolescents' sex onset (Lammers et al. 2000; Ryan et al. 2007; Sieverding et al. 2005). One longitudinal study that explored family antecedents to predicting age of sex onset among adolescents aged 12 to 15, reported a mean (standard deviation) of 15.81 (2.41) years at first sex and that lack of parental supervision and monitoring were the primary factors related to earlier onset, particularly for Black and male adolescents (Moilanen et al. 2018). Other past work shows that parents, and particularly mothers, are the main source of children's communication about sex (Donaldson et al. 2013). However the communication style of mother-son discussions about sex tends to be of lower quality in comparison to daughters, as measured by comfort, non-judgement, and openness (Lefkowitz 2002), and not only on how frequent the discussions occur (Kirkman, Rosenthal, and Feldman 2002). Mothers also express that they lack confidence when talking about sex with their sons and prefer that these discussions occur with male role models or healthcare providers (Marcell et al. 2010). Other qualitative work has demonstrated how parents believe their daughters face greater risks related to their sexual and reproductive health, but that their sons are strong enough to protect themselves, which perpetuates gender stereotypes related to young people's sexual and reproductive health and can result in subsequent health consequences for young men (Mmari et al. 2018). Thus, future work needs to identify strategies to provide parents or guardians of male adolescents greater scaffolding of knowledge, confidence and skills to talk with sons about sex, especially if these discussions need to start earlier

during late childhood. For adolescents whose parents are absent or non-involved, trusted adults in the community including healthcare providers become even more relevant and necessary in offering these young men open communication and age-appropriate education about sex (Markham et al. 2010). In addition, future work should also identify ways to deliver comprehensive, developmentally appropriate sex education to male adolescents at much younger ages to ensure that this information is received before sex onset occurs (Lindberg, Santelli, and Singh 2006).

Exploratory analysis in the current study also found that a higher proportion of young men reporting first sex at 13 or younger had a first sex partner who was “much older” compared to those reporting same aged or younger partners. While studies often focus on adolescent girls and their partner age gap (Kaestle, Morisky, and Wiley 2002; Manlove, Terry-Humen, and Ikramullah 2006; Senn and Carey 2011; Lindberg et al. 1997), this study provides initial evidence that male adolescents who reported first sex at age 13 or younger may have similar experiences. Although the actual age difference was not defined in the current study, these findings are consistent with one past study that was conducted with 6th graders (mean age = 11.5 years) that found male students with a girlfriend two or more years older were more likely to report unwanted sexual advances and initiate sex early (Vanoss Marin et al. 2000). Past qualitative work has also shown that adult Black men discuss how older partners may be “given” to them during early adolescence by older male relatives (e.g. brothers, cousins) (Hussen et al. 2012) and that these older partners act as “teachers” about sex and influenced how and when sex occurred (Hussen et al. 2012; Senn and Carey 2011). Few past studies have examined how consent for sex among male adolescents is obtained and whether sex at very young ages (13 or younger) for males is coercive (Lindberg, Maddow-Zimet, and Marcell 2019). In this study, nearly half of young men reported having mixed feelings about their first sex experience or did not really want it to happen; and one in ten reported being pressured by their partner to have sex, although no significant differences were observed in the proportion of young men reporting decision-making to have sex and sex wantedness by age of first sex at 13 or younger. Future work will need to gain a better understanding of the consent process from the perspective of both partners when the age of sex onset is 13 or younger, especially when partners are not close in age, since these experiences may be less likely to be consensual or wanted. Finally, future research should also consider the use of longitudinal approaches to examine in greater depth the context of early sex experience among early adolescents and its prospective relationship with longer-term sexual and reproductive health behaviours and health outcomes.

Limitations

This study has several limitations. Recall bias may have contributed to participants not being able to accurately report about their first sex experience. However, the prevalence of age of first sex at 13 or younger among this clinic-based sample was consistent with other metro-level data from a recent national school-based sample (Lindberg, Maddow-Zimet, and Marcell 2019). Measures about the context of first sex experiences were only assessed during the last round of data collection that resulted in limiting

this study's power to examine associations between age of first sex at 13 or younger and its associated contextual factors. Contextual measures also consisted of mainly singular items since these measures were embedded as part of a larger clinic-based study that consisted of a brief survey at the end of the visit.

Future research

Future research should examine in greater depth these first sex experiences as well as quantify the age of sex onset and first partner age, prior discussions with partners and parents about sex, and consider other subsequent health outcomes as a result of early first sex experiences. Study findings may also not be generalisable to other urban settings and other minority young men. Future research should include larger and more diverse samples of young men in other metropolitan areas to further understand the context of these early first sex experiences. Balanced against these limitations is the fact that this is one of the few studies to examine sexual and reproductive health outcomes and explore a variety of contextual factors associated with age of first sex at 13 or younger among a sample of majority Black young men.

Conclusion

Study findings highlight that more than one-quarter of this sample of young men reported their age of first sex was at age 13 or younger and that a higher proportion of these males reported having gotten someone pregnant than young men with an older age of first sex. Exploratory analysis also showed that parent-adolescent relationships and partner age were associated with age of first sex at 13 years or younger. Future research is needed to better understand these very early first sex experiences and to develop strategies that support parents, educators and public health practitioners to better protect young men from sex experiences that are less likely to be consensual or wanted. These efforts may need to start earlier than current practice - during late childhood - that include the receipt of comprehensive sex education and related prevention services.

Disclosure statement

None of the authors have any disclosures to report. The study sponsor did not have any role in study design; the collection, analysis, and interpretation of data; the writing of the report; and the decision to submit the manuscript for publication. Asari Offiong prepared the first draft of the manuscript and no honorarium, grant, or other form of payment was given to anyone else to produce the manuscript.

Funding

This study was supported under a cooperative agreement with the US Centers for Disease Control and Prevention under grant #CDC 1H25PS003796 (PI: Marcell) and the Secretary's Minority AIDS Initiative Fund; and the Guttmacher Center for Population Research Innovation and Dissemination under National Institutes of Health Grant #5, R24HD074034. The findings and

conclusions in this paper are those of the authors and do not necessarily present the views of the US Centers for Disease Control and Prevention or affiliated institutions.

ORCID

Asari Offiong  <http://orcid.org/0000-0003-4947-3696>
 Laura Lindberg  <http://orcid.org/0000-0003-2660-9407>
 Jacky M. Jennings  <http://orcid.org/0000-0002-3789-5122>
 Patricia J. Dittus  <http://orcid.org/0000-0003-4554-3853>
 Arik V. Marcell  <http://orcid.org/0000-0001-9873-478X>

References

- Abma, J. C., and G. M. Martinez. 2017. "Sexual Activity and Contraceptive Use among Teenagers in the United States, 2011-2015." *National Health Statistics Reports* (104): 1–23.
- Bronfenbrenner, U. 1986. "Ecology of the Family as a Context for Human Development: Research Perspectives." *Developmental Psychology* 22 (6): 723–742. doi:10.1037/0012-1649.22.6.723
- Cavazos-Rehg, P. A., M. J. Krauss, E. L. Spitznagel, M. Schootman, K. K. Bucholz, J. F. Peipert, V. Sanders-Thompson, L. B. Cottler, and L. J. Bierut. 2009. "Age of Sexual Debut among US Adolescents." *Contraception* 80 (2): 158–162. doi:10.1016/j.contraception.2009.02.014
- Donaldson, A. A., L. D. Lindberg, J. M. Ellen, and A. V. Marcell. 2013. "Receipt of Sexual Health Information from Parents, Teachers, and Healthcare Providers by Sexually Experienced U.S. Adolescents." *The Journal of Adolescent Health* 53 (2): 235–240. doi:10.1016/j.jadohealth.2013.03.017
- Heywood, W., K. Patrick, A. M. Smith, and M. K. Pitts. 2015. "Associations between Early First Sexual Intercourse and Later Sexual and Reproductive Outcomes: A Systematic Review of Population-Based Data." *Archives of Sexual Behavior* 44 (3): 531–569. doi:10.1007/s10508-014-0374-3
- Hussen, S. A., L. Bowleg, T. Sangaramoorthy, and D. J. Malebranche. 2012. "Parents, Peers and Pornography: The Influence of Formative Sexual Scripts on Adult HIV Sexual Risk Behaviour among Black Men in the USA." *Culture, Health & Sexuality* 14 (8): 863–877. doi:10.1080/13691058.2012.703327
- Kaestle, C. E., D. E. Morisky, and D. J. Wiley. 2002. "Sexual Intercourse and the Age Difference between Adolescent Females and Their Romantic Partners." *Perspectives on Sexual and Reproductive Health* 34 (6): 304–309. doi:10.2307/3097749
- Kagesten, A., S. Gibbs, R. W. Blum, C. Moreau, V. Chandra-Mouli, A. Herbert, and A. Amin. 2016. "Understanding Factors That Shape Gender Attitudes in Early Adolescence Globally: A Mixed-Methods Systematic Review." *PLoS One* 11 (6): e0157805. doi:10.1371/journal.pone.0157805
- Kann, L., T. McManus, W. A. Harris, S. L. Shanklin, K. H. Flint, B. Queen, R. Lowry, et al. 2018. "Youth Risk Behavior Surveillance - United States, 2017." *Morbidity and Mortality Weekly Report. Surveillance Summaries* 67 (8): 1–114. doi:10.15585/mmwr.ss6708a1
- Kinsman, S. B., D. Romer, F. F. Furstenberg, and D. F. Schwarz. 1998. "Early Sexual Initiation: The Role of Peer Norms." *Pediatrics* 102 (5): 1185–1192. doi:10.1542/peds.102.5.1185
- Kirkman, M., D. A. Rosenthal, and S. S. Feldman. 2002. "Talking to a Tiger: Fathers Reveal Their Difficulties in Communicating about Sexuality with Adolescents." *New Directions in Child and Adolescent Development* 2002 (97): 57–74. doi:10.1002/cd.50
- Lammers, C., M. Ireland, M. Resnick, and R. Blum. 2000. "Influences on Adolescents' Decision to Postpone Onset of Sexual Intercourse: A Survival Analysis of Virginity among Youths Aged 13 to 18 Years." *The Journal of Adolescent Health* 26 (1): 42–48. doi:10.1016/S1054-139X(99)00041-5
- Lefkowitz, E. S. 2002. "Beyond the Yes-No Question: Measuring Parent-Adolescent Communication about Sex." *New Directions in Child and Adolescent Development* 2002 (97): 43–56. doi:10.1002/cd.49

- Lindberg, L. D., F. L. Sonenstein, L. Ku, and G. Martinez. 1997. "Age Differences between Minors Who Give Birth and Their Adult Partners." *Family Planning Perspectives* 29 (2): 61–66. doi:10.2307/2953363
- Lindberg, L. D., I. Maddow-Zimet, and A. V. Marcell. 2019. "Prevalence of Sexual Initiation before Age 13 Years among Male Adolescents and Young Adults in the United States." *JAMA Pediatrics* 173 (6): 553–560. doi:10.1001/jamapediatrics.2019.0458
- Lindberg, L. D., J. S. Santelli, and S. Singh. 2006. "Changes in Formal Sex Education: 1995–2002." *Perspectives on Sexual and Reproductive Health* 38 (4): 182–189. doi:10.1363/psrh.38.182.06
- Manlove, J., and E. Terry-Humen. 2007. "Contraceptive Use Patterns within Females' First Sexual Relationships: The Role of Relationships, Partners, and Methods." *Journal of Sex Research* 44 (1): 3–16. doi:10.1080/00224490709336788
- Manlove, J., E. Ikramullah, L. Mincieli, E. Holcombe, and S. Danish. 2009. "Trends in Sexual Experience, Contraceptive Use, and Teenage Childbearing: 1992–2002." *The Journal of Adolescent Health* 44 (5): 413–423. doi:10.1016/j.jadohealth.2008.09.006
- Manlove, J., E. Terry, L. Gitelson, A. R. Papillo, and S. Russell. 2000. "Explaining Demographic Trends in Teenage Fertility, 1980–1995." *Family Planning Perspectives* 32 (4): 166–175. doi:10.2307/2648233
- Manlove, J., E. Terry-Humen, and E. Ikramullah. 2006. "Young Teenagers and Older Sexual Partners: Correlates and Consequences for Males and Females." *Perspectives on Sexual and Reproductive Health* 38 (4): 197–207. doi:10.1363/3819706
- Marcell, A. V., S. E. Gibbs, N. A. Pilgrim, K. Page, R. Arrington-Sanders, J. M. Jennings, P. S. Loosier, and P. J. Dittus. 2018. "Sexual and Reproductive Health Care Receipt among Young Males Aged 15–24." *The Journal of Adolescent Health* 62 (4): 382–389. doi:10.1016/j.jadohealth.2017.08.016
- Marcell, A. V., T. L. Howard, K. Plowden, and C. Watson. 2010. "Exploring Women's Perceptions about Their Role in Supporting Partners' and Sons' Reproductive Health Care." *American Journal of Men's Health* 4 (4): 297–304. doi:10.1177/1557988309335822
- Markham, C. M., D. Lormand, K. M. Gloppen, M. F. Peskin, B. Flores, B. Low, and L. D. House. 2010. "Connectedness as a Predictor of Sexual and Reproductive Health Outcomes for Youth." *The Journal of Adolescent Health: Official Publication of the Society for Adolescent Medicine* 46 (3 Suppl): S23–S41. doi:10.1016/j.jadohealth.2009.11.214
- Masho, S. W., G. J. Chambers, J. T. Wallenborn, and J. L. Ferrance. 2017. "Associations of Partner Age Gap at Sexual Debut with Teenage Parenthood and Lifetime Number of Partners." *Perspectives on Sexual and Reproductive Health* 49 (2): 77–83. doi:10.1363/psrh.12022
- McBride, C. K., R. L. Paikoff, and G. N. Holmbeck. 2003. "Individual and Familial Influences on the Onset of Sexual Intercourse among Urban African American Adolescents." *Journal of Consulting and Clinical Psychology* 71 (1): 159–167. doi:10.1037/0022-006X.71.1.159
- Miller, B. C., and T. B. Heaton. 1991. "Age at 1st Sexual Intercourse and the Timing of Marriage and Childbirth." *Journal of Marriage and the Family* 53 (3): 719–732. doi:10.2307/352746
- Mmari, K., C. Moreau, S.E. Gibbs, S. De Meyer, K. Michielsen, C.W. Kabiru, B. Bello, et al. 2018. "Yeah, I've Grown; I Can't Go out Anymore': Differences in Perceived Risks between Girls and Boys Entering Adolescence." *Culture, Health & Sexuality* 20 (7): 787–798. doi:10.1080/13691058.2017.1382718
- Moilanen, K. L., J. M. Leary, S. M. Watson, and J. Ottley. 2018. "Predicting Age of Sexual Initiation: Family-Level Antecedents in Three Ethnic Groups." *Journal of Early Adolescence* 38 (1): 28–49. doi:10.1177/0272431615586462
- O'Donnell, L., C. R. O'Donnell, and A. Stueve. 2001. "Early Sexual Initiation and Subsequent Sex-Related Risks among Urban Minority Youth: The Reach for Health Study." *Family Planning Perspectives* 33 (6): 268–275. doi:10.2307/3030194
- Ompad, D. C., S. A. Strathdee, D. D. Celentano, C. Latkin, J. M. Poduska, S. G. Kellam, and N. S. Ialongo. 2006. "Predictors of Early Initiation of Vaginal and Oral Sex among Urban Young Adults in Baltimore, Maryland." *Archives of Sexual Behavior* 35 (1): 53–65. doi:10.1007/s10508-006-8994-x

- Ott, M. A., E. J. Pfeiffer, and J. D. Fortenberry. 2006. "Perceptions of Sexual Abstinence among High-Risk Early and Middle Adolescents." *The Journal of Adolescent Health* 39 (2): 192–198. doi:10.1016/j.jadohealth.2005.12.009
- Parkes, A., M. Henderson, D. Wight, and C. Nixon. 2011. "Is Parenting Associated with Teenagers' Early Sexual Risk-Taking, Autonomy and Relationship with Sexual Partners?" *Perspectives on Sexual and Reproductive Health* 43 (1): 30–40. doi:10.1363/4303011
- Ryan, S., J. Manlove, and K. Franzetta. 2003. *The First Time: Characteristics of Teens' First Sexual Relationships*. Washington, DC: Child Trends; <https://www.childtrends.org/wp-content/uploads/2003/08/First-Time.pdf>
- Ryan, S., K. Franzetta, J. Manlove, and E. Holcombe. 2007. "Adolescents' Discussions about Contraception or STDs with Partners before First Sex." *Perspectives on Sexual and Reproductive Health* 39 (3): 149–157. doi:10.1363/3914907
- Santelli, J. S., C. W. Warren, R. Lowry, E. Sogolow, J. Collins, L. Kann, R. B. Kaufmann, and D. D. Celentano. 1997. "The Use of Condoms with Other Contraceptive Methods among Young Men and Women." *Family Planning Perspectives* 29 (6): 261–267. doi:10.2307/2953414
- Senn, T. E., and M. P. Carey. 2011. "Age of Partner at First Adolescent Intercourse and Adult Sexual Risk Behavior among Women." *Journal of Women's Health* (2002) 20 (1): 61–66. doi:10.1089/jwh.2010.2089
- Sieverding, J. A., N. Adler, S. Witt, and J. Ellen. 2005. "The Influence of Parental Monitoring on Adolescent Sexual Initiation." *Archives of Pediatrics & Adolescent Medicine* 159 (8): 724–729. doi:10.1001/archpedi.159.8.724
- Smith, C. A. 1997. "Factors Associated with Early Sexual Activity among Urban Adolescents." *Social Work* 42 (4): 334–346. doi:10.1093/sw/42.4.334
- Sneed, C. D. 2009. "Sexual Risk Behavior among Early Initiators of Sexual Intercourse." *AIDS Care* 21 (11): 1395–1400. doi:10.1080/09540120902893241
- Vanoss Marin, B., K. K. Coyle, C. A. Gomez, S. C. Carvajal, and D. B. Kirby. 2000. "Older Boyfriends and Girlfriends Increase Risk of Sexual Initiation in Young Adolescents." *Journal of Adolescent Health* 27 (6): 409–418. doi:10.1016/S1054-139X(00)00097-5
- Wolfe, W. A. 2003. "Overlooked Role of African-American Males' Hypermasculinity in the Epidemic of Unintended Pregnancies and HIV/AIDS Cases with Young African-American Women." *Journal of the National Medical Association* 95 (9): 846–852.
- Zavodny, M. 2001. "The Effect of Partners' Characteristics on Teenage Pregnancy and Its Resolution." *Family Planning Perspectives* 33 (5): 192–199. doi:10.2307/2673781