

Sexual Behaviors, Condom Use, and Sexual Health of Americans Over 50: Implications for Sexual Health Promotion for Older Adults

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ABSTRACT

Introduction. In the contemporary U.S., men and women are living longer and healthier lives. As such, many people spend greater portions of their lives as sexually active individuals. Yet, little is known about the myriad of ways that older adults experience their sexual lives.

Aim. This study sought to assess the context and frequency of sexual behaviors, condom use, sexual pleasure, and sexual experience of men and women over age 50.

Methods. Information regarding the sexual experiences of a nationally representative sample of men and women over age 50 within the past year was examined.

Main Outcome Measures. Sexual behavior over the past year was assessed in relation to several situational and contextual characteristics (e.g., event location, type of partner, health status, condom use). Participants were also asked about their experience (i.e., pleasure, arousal, pain, lubrication/erectile difficulties, and orgasm) during their most recent partnered sexual event. Bivariate or ordinal logistic regression models were used to investigate the relationship of age, health and partner status to sexual frequency and experience.

Results. Although sizable proportions (20–30%) of both men and women remained sexually active well into their 80s age was related to a lower likelihood of solo and most partnered sexual behaviors. When controlling for age, relationship status, and health remained significant predictors of select sexual behaviors. The participant's evaluation of their most recent sexual experience in terms of arousal, erectile difficulty, and orgasm all declined with age. Health status was related to men's evaluation of the experience. Relationship status was the most consistent predictor of women's evaluation of the experience. Condom use rates remained low for participants across age groups.

Conclusion. Many older adults continue to be sexually active well into advanced age (80+). Thus, providers need to be attentive to the diverse sexual health needs of older adults. **Schick V, Herbenick D, Reece M, Sanders SA, Dodge B, Middlestadt SE, and Fortenberry JD. Sexual behaviors, condom use, and sexual health of Americans over 50: Implications for sexual health promotion for older adults. J Sex Med 2010;7(suppl 5):315–329.**

Key Words. Older Adults; Aging; Condoms; Sexual Health; Sexual Behavior; Sexual Experiences of Men and Women over Age 50 Years

Introduction

In the contemporary U.S., men and women are healthier and more active at older ages than previous generations [1,2]. Thus, people spend

greater portions of their lives as sexually active individuals, engaging in varying amounts of solo and/or partnered sex [1,2]. Although advancing age is marked by hormonal, physical, social, psychological, and physiological changes that may

affect sexual function [1], the ways that people experience sex in older age has changed markedly because of the availability of medical products (such as prescription medications for erectile function) [3,4], an expanded range of sexual enhancement products (such as vibrators and lubricants), and consumer marketing messages that shape expectations for sex and relationships in advanced age [5,6]. Each of these advances expands opportunities for the sexual lives of men and women or, alternatively, may increase pressure to be sexual in ways that older adults were not expected to be in earlier generations [7].

In spite of these evolving realities and expectations, systematic research about the sexual behavior of older adults in the United States is fairly recent, having begun following suggestions in the 1990s that scientists should study sexual behavior of the elderly given the risk of HIV/AIDS [8–11]. Many national studies of sexual behaviors have not surveyed individuals older than their 50s or 60s or, sample sizes of older adults have been too small to be representative of older men and women in the general population. The few large-scale national probability studies of the sexual lives of older adults have often focused on condom use and sexual risk (e.g., HIV/AIDS) [8,12–14] or have been exclusive to one gender [15].

As men and women age they may experience prominent lifestyle changes marked by fluctuations in their employment, health and/or relationship status. Thus, although adults may be sexually active or experience sexual problems at any age, compared with studies of younger adults, these constructs tend to have a greater influence on the sexual behavior of older men and women [16–18]. In particular, relationship status can function in nuanced ways for many older men and women as they find themselves in new partnerships following divorce, illness, or death of their previous partners [1]. Relationship status has been shown to be particularly relevant for women [19] who are less likely to have sexual partners in older age as compared with their male counterparts [2,20].

Although several studies have examined the “risk” of having certain sexual problems, the limited information about the range of sexual behaviors and experiences of older adults has impeded the ability of researchers/practitioners to differentiate between normative progressions in sexual experience and “dysfunctions” as related to orgasm, erections, or vaginal dryness [2,21,22]. Specifically, little is known about the myriad of ways that older people experience their sexual

lives, such as the range of sexual behaviors they may engage in at any one event, the proportion of individuals who engage in same-sex sexual behaviors or the extent to which they find sex to be pleasurable.

Aims

The purpose of this study was to assess, in a subsample of a nationally representative probability sample, the sexual behaviors, condom use, sexual pleasure, and sexual experience as reported by adults aged 50 or older, and examine the situational characteristics of these sexual experiences.

Methods

Data presented are from the National Survey of Sexual Health and Behavior (NSSHB), conducted during early 2009. NSSHB data were collected using a population-based cross-sectional survey of adolescents and adults in the United States via research panels of Knowledge Networks (Menlo Park, CA, USA). Research panels accessed through Knowledge Networks are based on a national probability sample established using both random digit dialing (RDD) and an address-based sampling (ABS) frame. ABS involves the probability sampling of a frame of residential addresses in the United States derived from the U.S. Postal Service’s Delivery Sequence File, which contains detailed information on every mail deliverable address in the United States. Collectively, the sampling frame from which participants are recruited covers approximately 98% of all U.S. households. Randomly selected households are recruited to panels through a series of mailings and subsequently by telephone follow-ups to nonresponders when possible. Once an individual agrees to be in a panel of Knowledge Networks, they are provided with access to the Internet and computer hardware if needed, and data collection by Knowledge Networks occurs via the Internet. Multiple health-related studies have substantiated the validity of such methods for obtaining data from nationally representative samples of the U.S. population [5,6,23–26].

For the NSSHB, to further correct sources of sampling and nonsampling error, study samples were corrected with post-stratification adjustments using demographic distributions from the most recent data available (at the time of the study) from the Current Population Survey (CPS), the monthly population survey conducted by the U.S.

Bureau of the Census considered to be the standard for measuring demographic and other trends in the U.S. These adjustments result in a panel base weight that was employed in a probability-proportional-to-size selection method for establishing the samples for this study. Population specific distributions for this study were based upon data from the December 2008 CPS [27].

Once the sample frame for this study was established, all adult individuals within that frame received a recruitment message from Knowledge Networks that provided a brief description of the NSSHB and invited them to participate. Of 6,182 adults (≥ 18 years), 5,045 (82%) consented to and participated in the study. Adults were defined as “older” and included in the present study if they were over the age of 50 (972 men, 1,001 women). The age criterion was defined as 50+ in order to ease comparisons with similar studies [2,12–13,15–17,20,22] and because it exceeds the criteria set through the AARP [18]. All study protocols were approved by the Institutional Review Board of the primary authors’ academic institution.

Main Outcome Measures

Sociodemographic Characteristics

Table 1 presents summaries of participants’ Sociodemographic characteristics.

Past Year Sexual Behaviors

Sexual behavior was assessed by asking participants if (within the past month, 3 months, year, more than 1 year) they had engaged in sexual behaviors (solo masturbation, frottage, receiving oral sex, giving oral sex, vaginal intercourse, and insertive/receptive anal intercourse). Participants who reported having participated in solo masturbation or penile–vaginal intercourse within the past year were asked to rate the frequency with which they had participated in that behavior on average during the past year: (i) a few times per year; (ii) about once a month; (iii) a few times per month; (iv) about once per week; (v) two to three times per week; (vi) almost every day; or (vii) more than once per day.

Health Status

Participants were asked to report their overall health on a Likert-type item ranging from excellent to poor [29]. The variables were collapsed into groups based on their theoretical similarity in order to allow for meaningful comparisons across

groups when cell sizes were small. For these analyses, this measure was dichotomized into good (excellent, very good, good) and poor (fair, poor) health. Additionally, participants were asked to characterize their current relationship status as: (1) single and not dating; (2) single and dating/hanging out with someone; (3) in a relationship but not living together; (4) living together but not married; (5) married and living together; or (6) married but not living together. These categories were dichotomized by designating all single participants (1 and 2) into the “single” category and all participants in a relationship (3 to 5) into the “relationship” category.

Most Recent Partnered Sexual Event

Characteristics of the Event

Participants who reported engaging in a partnered sexual event within the past year were asked about details of the event. Questions related to the context of the event asked about the location (at home, my sex partner’s home, a friend’s home, car/truck/van, hotel/motel, a public space or car/truck, sex or swinger’s club, other) and the sexual acts that occurred during the event including frottage (e.g., dry sex or humping), giving oral sex, receiving oral sex, penile–vaginal intercourse, and anal sex.

Partner and Event Characteristics

Regarding their most recent sexual event, participants reported the gender of their partner (male or female) and relationship to the partner (spouse/domestic partner, boyfriend/girlfriend or significant other, casual dating partner or someone they are hanging out with, friend, someone they just met, someone who offered payment or something in return for the sexual activity, other). When dichotomized, spouse/domestic partner and boyfriend/girlfriend were designated as one category (relationship sexual partner) whereas the remainder of the categories were collapsed into another category (nonrelationship sexual partner). Participants were also asked about their partner’s sexual history within the past 6 months (known to have had other partners, not known to have had other partners other partners, known to have not had other partners) and their own and their partner’s sexually transmitted infection (STI) status at the time of the event (no known STI, unknown STI, known STI). Lifetime behavior of STI/HIV testing (within the past year, tested over a year ago and never tested) and diagnosis history (never, within their lifetime) were also assessed.

Table 1 Weighed participant characteristics for all adults (N = 1,974) over 50 in the NSSHB

Sample characteristics	Men (N = 972)		Women (N = 1,002)	
	%	N	%	N
Age				
50–59	48.0	466	45.1	452
60–69	33.1	322	34.2	342
≥70	18.9	184	20.7	207
Ethnicity				
White, non-Hispanic	74.3	722	74.3	744
Black, non-Hispanic	10.9	106	11.8	118
Hispanic	9.1	89	8.2	82
Other, non-Hispanic	5.7	55	5.7	58
Education				
Less than high school	16.2	158	15.6	156
High school graduate	32.4	315	34.1	341
Some college	23.3	226	28.9	289
Bachelors degree or higher	28.1	274	21.5	215
Sexual orientation				
Heterosexual	91.2	886	95.1	952
Bisexual	5.3	52	0.9	9
Homosexual	1.8	18	1.1	11
Asexual	1.0	9	1.6	16
Other	0.7	7	1.4	14
Marital status				
Married	51.9	505	41.6	416
Never married	5.1	50	16.9	170
Divorced	18.5	179	21.8	218
Living together—not married	2.5	24	3.2	32
Separated	15.9	154	12.0	120
Widowed	6.1	59	4.6	46
Relationship status				
Single, not dating	26.8	260	41.3	414
Single, dating one or more person	5.6	55	5.1	51
In relationship, not living together	7.3	71	6.3	63
In relationship, living together	8.2	79	5.1	51
Married, living together	50.7	493	39.5	396
Married, not living together	1.3	13	2.7	27
Geographic region of United States				
Northeast	18.3	178	23.2	232
Midwest	23.4	228	21.4	214
South	35.7	347	36.2	363
West	22.6	219	19.2	192
Metropolitan Statistical Area (MSA) status				
Metropolitan area	18.8	182	20.7	207
Nonmetropolitan area	81.2	790	79.3	794
Annual household income				
Less than \$25,000	25.3	246	32.5	326
\$25,000–\$49,999	31.4	306	32.0	320
\$50,000–74,999	19.6	190	17.5	175
Over \$75,000	23.7	231	18.0	180
Children under 18 in household				
No	91.0	885	91.9	920
Yes	9.0	88	8.1	81
Working status				
Working-paid employee	35.9	350	36.3	364
Self-employed	10.7	104	6.2	62
Not currently working	53.4	519	57.5	575
Health status				
Excellent	9.0	88	7.9	79
Very good	33.6	326	37.2	371
Good	36.9	359	36.6	365
Fair	16.7	162	14.7	146
Poor	3.8	36	3.6	36

Participants were asked about any alcohol use by themselves or their partner. Finally, men were asked to report whether they used any medications to help attain or maintain an erection during the sexual event.

Experience of the Event

The participant's perception of the event was evaluated through several items regarding perceptions of pleasure, arousal, orgasm (own and partner's) along with any pain or lubrication/erectile difficulties experienced during the event. Pleasure, arousal, pain, and lubrication difficulties were assessed using a 5-point Likert-type scale from "not at all" to "extremely" (items presented in Table 5). Orgasm was assessed via a trichotomous response option (orgasm, no orgasm, unsure).

Analysis

All analyses were conducted using SPSS version 17.0 (SPSS Inc., Chicago, IL, USA). Post-stratification data weights were utilized throughout the analyses in order to maximize the generalizability of the sample characteristics to the population [30]. Post-stratification adjustments were based upon current U.S. Census data on national distributions for age, race, gender, Hispanic ethnicity, education and location within the United States. The analyses were conducted individually for men and women. Descriptive statistics were used to report frequencies of sexual behavior over the past year. Participants who reported partnered sexual behavior within the past year were asked a series of questions regarding the context and experience of their last sexual event. Descriptive statistics were employed to assess these rates as well as the characteristics of participants who reported penile-vaginal intercourse at last event, segregated by age and condom usage. Approximate 95% percent confidence intervals were calculated around the percentages using adjusted Wald methods [28]. The relationship between age, partner status and health on the less prevalent sexual behaviors (i.e., frottage, oral sex, and anal intercourse) were tested with a bivariate logistic regression model. An ordinal logistic regression model was constructed to assess the relationship of age, partner status and health on frequency rates for masturbation and penile-vaginal intercourse. Analyses were duplicated for the participant's evaluation of their last sexual experience utilizing a bivariate logistic regression model for dichotomous outcomes (participant and partner orgasm)

and an ordinal logistic regression model for pleasure, arousal, erection/lubrication difficulty and pain. All ordinal logistic regression models were run with a complementary log-log link because of the uneven distribution of the responses skewed towards reports of a more positive experience.

Results

Characteristics of the Sample

After utilizing post-stratification weights, the characteristics of the sample closely matched those available through the most recent U.S. Census data [27]. Participants ranged in age from 50 to 107 when the sample was unweighted. However, once weighted, the upper age range was 94, with both men ($M = 61.74$; $SD = 9.00$) and women ($M = 62.16$; $SD = 8.90$) reporting a median age of 60. Reported health status varied with most participants reporting that they were in good health. Additional Sociodemographic characteristics, including relationship status, are presented in Table 1.

Sexual Behaviors in the Past Year

Sexual behavior rates over the past year are presented separately for men and women in Table 2. Most men (63.46%, $N = 601$) and approximately half of the women (46.73%, $N = 443$) reported masturbating within the past year. Masturbation rates for men and women were similar to rates of other behaviors with 65.5% ($N = 627$) of men and 45.1% ($N = 437$) of women reporting frottage, oral sex, penile-vaginal intercourse, or anal intercourse within the past year. Of the men and women who reported engaging in penile-vaginal intercourse, 66.7% ($N = 339$) of men and 67.7% ($N = 271$) reported engaging in penile-vaginal intercourse a few times per month or more frequently.

Logistic regression models of sexual behaviors as a function of age, health status, current relationship status, erectile medication (men only) and work status (frequency items only) are presented in Table 2. For men, after controlling for other variables, the odds ratio for giving oral sex and anal intercourse decreased 8% per year of age. Compared with participants with good health, participants with poor health reported a higher frequency of solo and frottage. Relationship status was related to both solo masturbation and penile-vaginal intercourse, but in opposite directions, with single participants (compared with partnered participants) reporting a higher frequency of solo

Table 2 Weighted sexual activity within the past year, stratified by age and gender

Sexual activity within the past year	All respondents (N = 972)	Men				Age by sexual frequency [†]	Health by sexual frequency [‡]	Relationship by sexual frequency [§]
		50–59	60–69	70–79	80+			
		% Frequency of behavior in past year (N) 95% CI				Adjusted odds ratio ^{††} (95% CI)	Adjusted odds ratio ^{††} (95% CI)	Adjusted odds ratio ^{††} (95% CI)
Masturbation						0.97**** (0.95–0.98)	1.57*** (1.15–2.14)	1.60**** (1.22–2.09)
Not in past year	36.5% (346) (33.5%–39.7%)	28.1% (127) (24.1%–32.4%)	38.8% (123) (33.6%–44.3%)	45.8% (60) (37.5%–54.3%)	76.6% (36) (62.6%–86.6%)			
A few times per year	25.8% (244) (23.1%–28.6%)	24.3% (110) (20.6%–28.5%)	29.3% (93) (24.6%–34.6%)	26.7% (35) (19.9%–34.9%)	12.8% (6) (5.6%–25.5%)			
A few times per month	20.0% (189) (17.5%–22.6%)	23.7% (107) (20.0%–27.8%)	18.0% (57) (14.1%–22.6%)	16.0% (21) (10.7%–23.3%)	8.5% (4) (2.8%–20.5%)			
2 or 3 times per week	13.2% (125) (11.2%–15.5%)	17.5% (79) (14.2%–21.3%)	10.1% (32) (7.2%–13.9%)	9.9% (13) (5.8%–16.4%)	2.1% (1) (–0.7%–12.1%)			
4 or more times per week	4.5% (43) (3.4%–6.1%)	6.4% (29) (5.0%–8.2%)	3.8% (12) (2.7%–5.2%)	1.5% (2) (0.9%–2.5%)	0.0% (0) (–1.5%–9.0%)			
Partnered masturbation						0.95*** (0.92–0.97)	2.15*** (1.28–3.60)	1.20 (0.74–1.93)
None	78.4% (732) (75.6%–80.9%)	72.1% (325) (67.7%–76.0%)	83.0% (258) (78.4%–86.7%)	85.7% (108) (78.5%–90.9%)	89.1% (41) (76.5%–95.7%)			
Within the past year	21.6% (202) (19.1%–24.4%)	27.9% (126) (24.0%–32.3%)	17.0% (53) (13.3%–21.6%)	14.3% (18) (9.1%–21.5%)	10.9% (5) (4.3%–23.5%)			
Gave oral sex^{††}						0.94*** (0.92–0.97)	0.71 (0.42–1.18)	0.94 (0.59–1.51)
None	62.9% (591) (59.7%–65.9%)	55.9% (254) (51.3%–60.4%)	65.7% (203) (60.2%–70.8%)	74.8% (98) (66.7%–81.5%)	78.3% (36) (64.2%–87.9%)			
Within the past year	37.1% (349) (34.1%–40.3%)	44.1% (200) (39.6%–48.7%)	34.3% (106) (29.2%–39.8%)	25.2% (33) (18.5%–33.3%)	21.7% (10) (12.1%–35.8%)			
Received oral sex^{††}						0.92*** (0.90–0.95)	1.37 (0.80–2.35)	0.68 (0.42–1.11)
None	60.7% (572) (57.5%–63.7%)	51.5% (234) (47.0%–56.1%)	62.5% (195) (57.0%–67.7%)	79.4% (104) (71.6%–85.5%)	84.8% (39) (71.5%–92.7%)			
Within the past year	39.3% (371) (36.3%–42.5%)	48.5% (220) (43.9%–53.0%)	37.5% (117) (32.3%–43.0%)	20.6% (27) (14.5%–28.4%)	15.2% (7) (7.3%–28.5%)			
Penile–vaginal intercourse (PVI)						0.99 (0.97–1.00)	0.83 (0.61–1.14)	0.41**** (0.31–0.55)
Not in past year	46.4% (440) (43.3%–49.6%)	42.4% (193) (38.0%–47.0%)	46.3% (146) (40.9%–51.9%)	53.8% (70) (45.3%–62.2%)	64.6% (31) (50.4%–76.6%)			
A few times per year	17.8% (169) (15.5%–20.4%)	18.2% (83) (15.0%–22.1%)	16.5% (52) (12.8%–21.0%)	20.0% (26) (14.0%–27.7%)	16.7% (8) (8.4%–29.8%)			
A few times per month	24.6% (233) (21.9%–27.4%)	25.9% (118) (22.1%–30.2%)	25.4% (80) (20.9%–30.5%)	20.0% (26) (14.0%–27.7%)	18.8% (9) (10.0%–32.2%)			
2 or 3 times per week	10.2% (97) (8.5%–12.3%)	11.9% (54) (9.2%–15.2%)	11.4% (36) (8.3%–15.4%)	5.4% (7) (2.4%–10.9%)	0.0% (0) (–1.4%–8.8%)			
4 or more times per week	0.9% (9) (0.5%–1.8%)	1.5% (7) (0.7%–3.2%)	0.3% (1) (–0.1%–2.0%)	0.8% (1) (–0.3%–4.7%)	0.0% (0) (–1.4%–8.8%)			
Anal intercourse^{§§}						0.92**** (0.87–0.96)	1.07 (0.53–2.17)	1.77 (0.96–3.26)
None	92.3% (864) (90.4%–93.9%)	88.7% (400) (85.4%–91.3%)	94.2% (294) (91.0%–96.4%)	97.6% (123) (92.9%–99.5%)	100.0% (47) (91.0%–101.5%)			
Within the past year	7.7% (72) (6.1%–9.6%)	11.3% (51) (8.7%–14.6%)	5.8% (18) (3.6%–9.0%)	2.4% (3) (0.5%–7.1%)	0.0% (0) (–1.5%–9.0%)			

* $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.005$, **** $P \leq 0.001$.

[†]Age was entered into the model as a continuous variable. Significant odds ratios under 1 indicate a decrease in behavior as a function of age. Significant odds ratios over 1 indicate an increase in behavior as a function of age.

[‡]Good health was entered into the model as the referent category. Significant odds under 1 indicate that poor health is related to a decrease in the frequency of the behavior. Significant odds ratios over 1 indicate that poor health is related to an increase in the frequency of behavior.

[§]A partnered relationship status was coded as the referent. Significant odds under 1 indicate that being single is related to a decrease in the frequency of the behavior. Significant odds over 1 indicate that being single is related to an increase in the frequency of behavior.

^{††}Adjusted odds ratios are based on an ordinal or bivariate logistic regression model including age, health, relationship with their last sexual partner and work status (masturbation and PVI frequency only).

^{‡‡}Adjusted odds ratios are based on an ordinal or bivariate logistic regression model including age, health, relationship with their last sexual partner, erectile medication use, and work status (masturbation and PVI frequency only).

^{§§}Oral sex rates are reported for behavior with a partner of the opposite gender.

^{§§}Anal intercourse indicates receptive intercourse for female participants and insertive intercourse for male participants.

CI = confidence interval.

masturbation and a lower frequency of penile–vaginal intercourse.

For women also, older age was related to a decline in all sexual behaviors: 5% per year of age

for penile–vaginal intercourse; 7% per year for both oral sexual behaviors. Additionally, poor health was related to a lower frequency in received oral sex, given oral sex, and penile–vaginal inter-

Women							
All respondents (N = 1,001)	50–59	60–69	70–79	80+	Age by sexual frequency [†]	Health by sexual frequency [‡]	Relationship by sexual frequency [§]
	% Frequency of behavior in past year (N) 95% CI				Adjusted odds ratio [¶] (95% CI)	Adjusted odds ratio [¶] (95% CI)	Adjusted odds ratio [¶] (95% CI)
					0.97**** (0.95–0.98)	0.88 (0.68–1.14)	1.26* (1.04–1.53)
53.3% (505)	46.2% (199)	54.0% (177)	64.0% (89)	80.0% (40)			
(50.1%–56.4%)	(41.5%–50.9%)	(48.6%–59.3%)	(55.8%–71.5%)	(66.8%–88.9%)			
34.3% (325)	36.7% (158)	35.7% (117)	30.2% (42)	16.0% (8)			
(31.3%–37.4%)	(32.2%–41.3%)	(30.7%–41.0%)	(23.2%–38.3%)	(8.1%–28.8%)			
10.7% (101)	13.9% (60)	9.8% (32)	5.0% (7)	4.0% (2)			
(8.8%–12.8%)	(11.0%–17.5%)	(7.0%–13.5%)	(2.3%–10.2%)	(0.3%–14.2%)			
1.3% (12)	2.6% (11)	0.3% (1)	0.0% (0)	0.0% (0)			
(0.7%–2.2%)	(1.4%–4.6%)	–(0.1%–1.9%)	–(0.5%–3.2)	–(1.4%–8.5%)			
0.5% (5)	0.7% (3)	0.3% (1)	0.7% (1)	0.0% (0)			
(0.2%–1.3%)	(0.3%–1.5%)	–(0.1%–1.95%)	(0.3%–1.5%)	–(1.4%–8.5%)			
					0.95** (0.92–0.97)	0.81 (0.46–1.43)	0.19**** (0.11–0.31)
86.4% (810)	82.3% (353)	86.9% (279)	92.8% (128)	100.0% (50)			
(84.0%–88.4%)	(78.4%–85.6%)	(82.8%–90.2%)	(87.0%–96.2%)	(91.5%–101.4%)			
13.6% (128)	17.7% (76)	13.1% (42)	7.2% (10)	0.0% (0)			
(11.6%–16.0%)	(14.4%–21.6%)	(9.8%–17.2%)	(3.8%–13.0%)	–(1.4%–8.5%)			
					0.93**** (0.90–0.95)	0.33**** (0.19–0.58)	0.13**** (0.09–0.19)
74.2% (697)	63.8% (272)	76.6% (246)	92.2% (130)	96.1% (49)			
(71.3%–76.9%)	(59.2%–68.3%)	(71.7%–80.9%)	(86.4%–95.7%)	(86.0%–99.7%)			
25.8% (242)	36.2% (154)	23.4% (75)	7.8% (11)	3.9% (2)			
(23.1%–28.7%)	(31.7%–40.8%)	(19.1%–28.3%)	(4.3%–13.6%)	(0.3%–14.0%)			
					0.93**** (0.91–0.95)	0.25**** (0.14–0.45)	0.16**** (0.11–0.24)
74.4% (701)	65.8% (281)	75.2% (243)	90.7% (127)	96.2% (50)			
(71.5%–77.1%)	(61.2%–70.2%)	(70.2%–79.6%)	(84.6%–94.6%)	(86.3%–99.7%)			
25.6% (241)	34.2% (146)	24.8% (80)	9.3% (13)	3.8% (2)			
(22.9%–28.5%)	(29.8%–38.8%)	(20.4%–29.8%)	(5.4%–15.4%)	(0.3%–13.7%)			
					0.95**** (0.94–0.96)	0.42**** (0.30–0.61)	0.11**** (0.08–0.15)
58.0% (553)	49.0% (212)	58.1% (190)	73.2% (104)	92.2% (47)			
(54.9%–61.1%)	(44.3%–53.7%)	(52.7%–63.3%)	(65.4%–79.9%)	(81.0%–97.4%)			
13.5% (129)	15.2% (66)	13.1% (43)	13.4% (19)	2.0% (1)			
(11.5%–15.9%)	(12.2%–18.9%)	(9.9%–17.3%)	(8.7%–20.0%)	–(0.6%–11.3%)			
20.3% (193)	23.6% (102)	22.6% (74)	10.6% (15)	3.9% (2)			
(17.8%–22.9%)	(19.8%–27.8%)	(18.4%–27.5%)	(6.4%–16.8%)	(0.3%–14.0%)			
6.8% (65)	10.9% (47)	5.2% (17)	0.0% (0)	2.0% (1)			
(5.4%–8.6%)	(8.2%–14.2%)	(3.2%–8.2%)	–(0.5%–3.2%)	–(0.6%–11.3%)			
1.4% (13)	1.4% (6)	0.9% (3)	2.8% (4)	0.0% (0)			
(0.8%–2.3%)	(0.6%–3.1%)	(0.2%–2.8%)	(0.9%–7.3%)	–(1.4%–8.4%)			
					0.93**** (0.89–0.98)	0.34 (0.10–1.19)	0.43* (0.22–0.96)
95.9% (906)	94.4% (404)	96.0% (312)	98.6% (141)	100.0% (49)			
(94.4%–97.0%)	(91.8%–96.2%)	(93.2%–97.7%)	(94.7%–99.9%)	(91.3%–101.4%)			
4.1% (39)	5.6% (24)	4.0% (13)	1.4% (2)	0.0% (0)			
(3.0%–5.6%)	(3.8%–8.2%)	(2.3%–6.8%)	(0.1%–5.3%)	–(1.4%–8.7%)			

course. As with men, single women reported a higher frequency of masturbation and a lower frequency of all other behaviors than their partnered counterparts.

Sexual Behaviors during the Last Partnered Sexual Event

The majority of men and women reporting any partnered sexual event in the past year reported that penile–vaginal sex occurred during their most recent sexual event (Table 3). Sexual patterns related to the location of the last event were similar for men and women with most participants report-

ing that the sexual act occurred within their own home. Although the highest percentage of men and women reported that their last sexual partner was a relationship partner, a substantial minority of participants reported sex with a friend, new acquaintance or for transactional purposes. Although most participants reported a sex partner of the other sex, 9% of men and 2% of women reported a same-sex partner during their most recent sexual event. Almost a quarter of the men (23.5%, N = 92) and over 13% of women (N = 32) reported alcohol intake by themselves or their partner prior to the last event. Erectile medication

Table 3 Weighted description of the most recent sexual event (within the past year), stratified by age

	Men					Women				
	All respondents (N = 393)	50-59	60-69	70-79	80+	All respondents (N = 236)	50-59	60-69	70-79	80+
Sexual behaviors										
Frottage	23.2% (91) (20.2%–26.4%)	20.6% (43) (16.8%–24.9%)	27.6% (34%) (22.2%–33.8%)	25.0% (11) (15.3%–37.9%)	17.6% (3) (6.1%–39.7%)	18.6% (44) (15.1%–22.8%)	19.4% (25) (14.7%–25.1%)	19.3% (16) (13.5%–26.8%)	14.3% (3) (5.2%–31.7%)	0.0% (0) (–52%–71.0%)
Gave oral sex	35.9% (141) (32.4%–39.5%)	41.6% (87) (36.8%–46.6%)	30.1% (37) (24.5%–36.3%)	27.3% (12) (17.2%–40.3%)	29.4% (5) (13.9%–51.6%)	33.8% (80) (29.2%–38.6%)	35.7% (46) (29.6%–42.2%)	34.5% (29) (27.0%–42.9%)	23.8% (5) (11.7%–42.0%)	0.0% (0) (–5.2%–71.0%)
Received oral sex	39.8% (156) (36.2%–43.5%)	45.0% (94) (40.1%–50.0%)	43.9% (54) (37.6%–50.4%)	13.6% (6) (6.6%–25.4%)	12.5% (2) (2.9%–34.1%)	23.6% (56) (19.7%–28.1%)	24.0% (31) (18.9%–30.1%)	23.8% (20) (17.4%–31.7%)	23.8% (5) (11.7%–42.0%)	0.0% (0) (–5.2%–71.0%)
Penile–vaginal sex	73.0% (286) (69.5%–76.1%)	73.7% (154) (69.1%–77.8%)	78.0% (96) (72.2%–82.9%)	59.1% (26) (45.9%–71.1%)	62.5% (10) (40.9%–80.1%)	86.0% (203) (82.2%–89.1%)	89.1% (115) (84.3%–92.7%)	84.3% (70) (77.2%–89.6%)	76.2% (16) (58.0%–88.3%)	66.7% (2) (15.4%–96.0%)
Anal intercourse	4.6% (18) (3.2%–6.4%)	4.8% (10) (3.0%–7.4%)	6.5% (8) (3.9%–10.5%)	0.0% (0) (–1.3%–7.8%)	0.0% (0) (–2.9%–19.0%)	1.7% (4) (0.7%–3.6%)	3.1% (4) (1.4%–6.4%)	0.0% (0) (–0.6%–3.3%)	0.0% (0) (–2.2%–13.9%)	0.0% (0) (–5.2%–71.0%)
Location										
Own home	74.8% (294) (70.3%–78.9%)	77.6% (163) (71.5%–82.8%)	75.6% (93) (67.3%–82.4%)	59.1% (26) (44.4%–72.3%)	75.0% (12) (50.0%–90.3%)	85.4% (199) (80.3%–89.4%)	82.8% (106) (75.3%–88.4%)	90.4% (75) (81.9%–95.3%)	85.0% (17) (63.1%–95.6%)	50.0% (1) (9.5%–90.5%)
Partner's home	15.8% (62) (12.5%–19.7%)	11.9% (25) (8.1%–17.0%)	18.7% (23) (12.7%–26.6%)	25.0% (11) (14.4%–39.6%)	18.8% (3) (5.8%–43.8%)	9.4% (22) (6.3%–13.9%)	10.9% (14) (6.5%–17.6%)	8.4% (7) (3.9%–16.7%)	0.0% (0) (–2.9%–19.0%)	50.0% (1) (9.5%–90.5%)
Public (outside, car, etc)	2.8% (11) (1.5%–5.0%)	1.9% (4) (0.6%–5.0%)	3.3% (4) (1.0%–8.3%)	6.8% (3) (1.7%–18.9%)	0.0% (0) (–3.3%–22.7%)	3.0% (7) (1.3%–6.2%)	3.1% (4) (1.0%–8.0%)	0.0% (0) (–0.9%–5.3%)	15.0% (3) (4.4%–36.9%)	0.0% (0) (–5.2%–71.0%)
Hotel/motel	2.3% (9) (1.1%–4.4%)	4.3% (9) (2.2%–8.1%)	0.0% (0) (–0.6%–3.6%)	0.0% (0) (–1.5%–9.6%)	0.0% (0) (–3.3%–22.7%)	0.4% (1) (–0.2%–2.6%)	0.0% (0) (–0.6%–3.5%)	1.2% (1) (–0.4%–7.2%)	0.0% (0) (–2.9%–19.0%)	0.0% (0) (–5.2%–71.0%)
Sex club	2.0% (8) (1.0%–4.0%)	2.4% (5) (0.9%–5.6%)	1.6% (2) (0.1%–6.1%)	2.3% (1) (–0.7%–12.9%)	0.0% (0) (–3.3%–22.7%)	0.0% (0) (–0.3%–2.0%)	0.0% (0) (–0.6%–3.5%)	0.0% (0) (–0.9%–5.3%)	0.0% (0) (–2.9%–19.0%)	0.0% (0) (–5.2%–71.0%)
Other	2.3% (9) (1.1%–4.4%)	1.9% (4) (0.6%–5.0%)	0.8% (1) (–0.3%–4.9%)	6.8% (3) (1.7%–18.9%)	6.3% (1) (–0.9%–30.3%)	1.7% (4) (0.5%–4.5%)	3.1% (4) (1.0%–8.0%)	0.0% (0) (–0.9%–5.3%)	0.0% (0) (–2.9%–19.0%)	0.0% (0) (–5.2%–71.0%)
Partner type										
Relationship partner	57.2% (211) (52.1%–62.1%)	51.8% (101) (44.8%–58.7%)	66.1% (76) (57.0%–74.1%)	64.3% (27) (49.1%–77.1%)	41.2% (7) (21.6%–64.0%)	63.6% (147) (57.3%–69.6%)	55.6% (70) (46.8%–63.9%)	71.6% (58) (60.9%–80.3%)	81.0% (17) (59.4%–92.9%)	66.7% (2) (20.2%–94.4%)
Casual/dating partner	16.3% (60) (12.8%–20.4%)	13.8% (27) (9.6%–19.4%)	16.5% (19) (10.8%–24.5%)	16.7% (7) (8.0%–30.9%)	41.2% (7) (21.6%–64.0%)	21.1% (51) (17.2%–27.9%)	26.2% (33) (19.3%–34.5%)	21.0% (17) (13.4%–31.2%)	4.8% (1) (–0.9%–24.4%)	0.0% (0) (–5.6%–61.7%)
Friend	11.7% (43) (8.7%–15.4%)	16.9% (33) (12.3%–22.9%)	6.1% (7) (2.8%–12.2%)	2.4% (1) (–0.7%–13.4%)	11.8% (2) (2.0%–35.6%)	6.1% (14) (3.6%–10.0%)	9.5% (12) (5.4%–16.0%)	0.0% (0) (–0.9%–5.4%)	9.5% (2) (1.4%–30.1%)	0.0% (0) (–5.6%–61.7%)
New acquaintance	10.8% (40) (8.0%–14.5%)	11.3% (22) (7.5%–16.6%)	10.4% (12) (5.9%–17.5%)	11.9% (5) (4.7%–25.5%)	5.9% (1) (–0.9%–28.9%)	7.4% (17) (4.6%–11.5%)	7.1% (9) (3.6%–13.2%)	7.4% (6) (3.1%–15.5%)	4.8% (1) (–0.9%–24.4%)	33.3% (1) (5.6%–79.8%)
Transactional	4.1% (15) (2.4%–6.7%)	6.2% (12) (3.5%–10.5%)	0.9% (1) (–0.3%–5.2%)	4.8% (2) (0.5%–16.6%)	0.0% (0) (–3.2%–21.6%)	0.9% (2) (0.0%–3.3%)	1.6% (2) (0.1%–6.0%)	0.0% (0) (–0.9%–5.4%)	0.0% (0) (–2.8%–18.2)	0.0% (0) (–5.6%–61.7%)
Partner gender										
Other	91.1% (357) (88.4%–93.2%)	87.1% (182) (82.8%–90.5%)	95.9% (118) (91.7%–98.2%)	93.2% (41) (83.3%–97.8%)	100.0% (16) (81.0%–102.9%)	98.3% (232) (95.8%–99.4%)	99.2% (128) (95.8%–100.2%)	97.6% (81) (91.7%–99.7%)	95.2% (20) (75.6%–100.9%)	100.0% (3) (38.3%–105.6%)
Same	8.9% (35) (6.8%–11.6%)	12.9% (27) (9.5%–17.2%)	4.1% (5) (1.8%–8.3%)	6.8% (3) (2.2%–16.7%)	0.0% (0) (–2.9%–19.0%)	1.7% (4) (0.6%–4.2%)	0.8% (1) (–0.2%–4.2%)	2.4% (2) (0.3%–8.3%)	4.6% (1) (–0.9%–24.4)	0.0% (0) (–5.6%–61.7%)
Alcohol use										
Participant or partner use	23.5% (92) (20.1%–27.2%)	34.4% (72) (29.3%–40.0%)	11.4% (14) (7.4%–17.0%)	11.4% (5) (5.2%–22.2%)	6.3% (1) (–0.3%–26.9%)	13.6% (32) (9.9%–18.2%)	16.3% (21) (11.2%–23.1%)	13.3% (11) (7.7%–21.7%)	0.0% (0) (–2.8%–18.2%)	0.0% (0) (–5.6%–61.7%)
Erectile medication use										
Used during event	16.9% (66) (14.0%–20.3%)	7.7% (1.6) (5.2%–11.4%)	30.1% (37) (23.7%–37.3%)	22.7% (10) (13.8%–35.0%)	18.8% (3) (6.7%–40.9%)	— —	— —	— —	— —	— —

was used by 17% of men during their most recent sexual event.

Several sexual health indicators are presented in Table 4 for participants (122 men and 80 women) who engaged in penile–vaginal intercourse within the past year and met at least one of the following criteria: (i) reported more than one sexual partner over the past year; (ii) defined their relationship status as single; (iii) stated that their most recent sexual partner was someone other than a primary relationship partner; or (iv) reported that their current relationship was under 1 year. About 20% of men and 24% of women reported condom use during the last sexual event. Condom use rates fluctuated as a function of partner type with the highest percentage of men reporting condom use with a transactional partner and women with a friend. Although sexually active, the majority of men (64.4%) and women (68.9%) reported that they had not received an STI test within the past year. Despite low testing rates, over 5% of the participants reported their most recent penile–vaginal intercourse partner (within the past year) had an STI at the time of the event.

Evaluation of the Sexual Experience during the Last Partnered Sexual Event

Participants who engaged in partnered sexual behavior within the previous year were asked about several aspects of their sexual experience (Table 5). Overall, the sexual experience for both men and women was relatively positive with the majority of participants indicating high rates of arousal and pleasure and limited erectile/lubrication difficulty or pain. Age, health, sexual partner relationship, and the use of erectile medication (for men) were entered into separate logistic regression models predicting sexual pleasure, sexual arousal, erectile difficulty (men) or lubrication difficulty (women), pain, participant orgasm, and partner orgasm. For men, age was related to a significant decline in arousal and orgasm. Further, men who reported poor health indicated increased pain and erectile difficulties. Although rates of overall pain for men were low, men reported less pain when their last sexual partner was a nonrelationship partner. In contrast, men who reported that their last sexual encounter occurred with a nonrelationship partner were less likely to report an orgasm (80% of men) than men whose last sexual encounter occurred with a relationship partner (90.8% of men). For women, lubrication and orgasm were the only two components that decreased as a function of age. Similarly, after

accounting for the other variables in the model, women's evaluation of their last sexual experience did not vary as a function of health status. However, a woman's relationship with her last sexual partner predicted several components of her sexual experience. Women whose last sexual partner was a nonrelationship partner reported higher arousal and less lubrication difficulty ($P < 0.05$). Similarly, a higher percentage of women reported having an orgasm during their last sexual encounter when their partner was a nonrelationship partner (81% of women) as compared with a relationship partner (58% of women).

Discussion

Findings from this subsample of the NSSHB, including men and women aged 50 and older; provide important insights into the sexual lives of older adults living in the US. Our data demonstrate that sizable proportions of older men and women engage in solo masturbation, though mostly at low frequencies, and that many people engage in partnered sexual activities including frottage, oral sex, and vaginal intercourse. In contrast to other studies which have suggested declines in the frequency of sexual behavior over time for older men and women [2,19], age was unrelated to the frequency of penile–vaginal intercourse for men in the present study.

As many older men and women experience partner loss because of divorce, death, or serious illness (e.g., requiring hospitalization or full time care in a nursing setting), it is not unusual for individuals to have new sexual partners later in life. Even for couples for whom pregnancy risk is not a concern, infection risk may be. Therefore, it is encouraging that rates of condom use were higher in situations that posed an increased potential for risk (e.g., an unknown partner history or STI/HIV status). However, overall, condom usage rates remained low with approximately 2/3 of men and women reporting that they did not use a condom during their last sexual encounter regardless of the situational characteristics. Therefore, although some messages about sexual safety may have reached this population, it suggests a continuing role for health-care providers, public health professionals, and gerontologists to play in educating older adults about condom use and HIV/STI risk reduction [31].

Consistent with other studies, older women were more likely to experience difficulties with

Table 4 Weighted description of the most recent sexual event within the past year and HIV/STI testing and diagnosis history for at risk adults, stratified by age

Sexual health of at risk adults [†]	Men					Condom use at last event		
	All respondents (N = 122)	50–59	60–69	70–79	80+	No condom used	Condom used	
		% Endorsed each item (N) (95% CI)						
Condom use past intercourse								
Used a condom	20.0% (24) (13.6%–28.3%)	24.3% (17) (15.6%–35.8%)	17.1% (6) (7.3%–34.2%)	0.0% (0) (–4.8%–37.2%)	14.3% (1) (0.5%–53.3%)	— —	— —	
Partner type								
Relationship partner	12.3% (14) (7.3%–19.7%)	13.2% (9) (6.9%–23.5%)	9.7% (3) (2.6%–25.7%)	25.0% (2) (6.3%–59.9%)	0.0% (0) (–5.0%–40.4%)	100.0% (14) (96.1%–100.7%)	0.0% (0) (–0.7%–3.9%)	
Casual/dating partner	43.9% (50) (35.1%–53.0%)	33.8% (23) (23.7%–45.7%)	51.6% (16) (34.8%–68.0%)	62.5% (5) (30.4%–86.5%)	85.7% (6) (46.7%–99.5%)	91.5% (43) (84.8%–95.5%)	8.5% (4) (4.5%–15.2%)	
Friend	21.1% (24) (14.5%–29.5%)	26.5% (18) (17.4%–38.1%)	16.1% (5) (6.6%–33.1%)	12.5% (1) (0.1%–49.2%)	0.0% (0) (–5.0%–40.4%)	76.0% (19) (67.4%–83.0%)	24.0% (6) (17.0%–32.6%)	
New acquaintance	20.2% (23) (13.8%–28.5%)	22.1% (15) (13.7%–33.4%)	22.6% (7) (11.1%–40.1%)	0.0% (0) (–4.8%–37.2%)	14.3% (1) (0.5%–53.3%)	69.6% (16) (60.6%–77.3%)	30.4% (7) (22.7%–39.4%)	
Transactional	2.6% (3) (0.6%–7.8%)	4.4% (3) (1.0%–12.7%)	0.0% (0) (–2.1%–13.1%)	0.0% (0) (–4.8%–37.2%)	0.0% (0) (–5.0%–40.4%)	33.3% (1) (25.3%–42.4%)	66.7% (2) (57.6%–74.7%)	
Partner history-6 months								
Known other partners	17.2% (21) (11.3%–25.3%)	19.2% (14) (11.4%–30.2%)	14.7% (5) (5.7%–31.5%)	25.0% (2) (6.3%–59.9%)	0.0% (0) (–5.0%–40.4%)	70.0% (14) (61.0%–77.7%)	30.0% (6) (22.3%–39.0%)	
Known no other partner history	60.7% (74) (51.5%–69.1%)	56.2% (41) (44.4%–67.3%)	64.7% (22) (47.1%–79.1%)	75.0% (6) (40.1%–93.7%)	71.4% (5) (35.2%–92.4%)	90.3% (65) (83.3%–94.6%)	9.7% (7) (5.4%–16.7%)	
Unknown partner history	22.1% (27) (15.4%–30.6%)	24.7% (18) (15.9%–36.2%)	20.6% (7) (9.7%–38.0%)	0.0% (0) (–4.8%–37.2%)	28.6% (2) (7.6%–64.8%)	61.5% (16) (52.4%–70.0%)	38.5% (10) (30.0%–47.6%)	
Participant known STI free								
No known STI	92.6% (113) (86.1%–96.3%)	91.7% (66) (82.3%–96.5%)	91.4% (32) (75.6%–98.1%)	100.0% (8) (62.8%–104.8%)	100.0% (7) (59.6%–105.0%)	82.6% (90) (74.5%–88.5%)	17.4% (19) (11.5%–25.5%)	
Known STI	3.3% (4) (0.9%–8.7%)	2.8% (2) (0.1%–10.5%)	5.7% (2) (0.4%–20.8%)	0.0% (0) (–4.8%–37.2%)	0.0% (0) (–5.0%–40.4%)	50.0% (2) (41.0%–59.0%)	50.0% (2) (41.0%–59.0%)	
Unknown STI status	4.1% (5) (1.4%–9.7%)	5.6% (4) (1.7%–14.2%)	2.9% (1) (–1.0%–17.1%)	0.0% (0) (–4.8%–37.2%)	0.0% (0) (–5.0%–40.4%)	50.0% (3) (41.0%–59.0%)	50.0% (3) (41.0%–59.0%)	
Partner known STI free								
No known STI	74.2% (89) (65.4%–81.4%)	65.3% (47) (53.4%–75.5%)	91.2% (31) (75.3%–97.9%)	71.4% (5) (37.2%–91.7%)	85.7% (6) (46.7%–99.5%)	81.6% (71) (73.4%–87.7%)	18.4% (46) (12.3%–26.6%)	
Known STI	7.5% (9) (3.7%–14.0%)	12.5% (9) (6.4%–22.6%)	0.0% (0) (–2.1%–13.1%)	0.0% (0) (–4.8%–37.2%)	0.0% (0) (–5.0%–40.4%)	77.8% (7) (69.3%–84.5%)	22.2% (2) (15.5%–30.7%)	
Unknown STI status	18.3% (22) (12.2%–26.5%)	22.2% (16) (13.9%–33.5%)	8.8% (3) (2.1%–24.7%)	28.6% (2) (8.3%–62.8%)	14.3% (1) (0.5%–53.3%)	78.3% (18) (69.8%–84.9%)	21.7% (5) (15.1%–30.2%)	
HIV testing								
Within past year	29.8% (34) (22.2%–38.8%)	23.2% (16) (14.7%–34.6%)	21.9% (7) (10.6%–39.3%)	100.0% (6) (62.8%–104.8%)	71.4% (5) (35.2%–92.4%)	93.8% (30) (87%–97.1%)	6.3% (2) (2.9%–12.5%)	
Over a year	31.6% (36) (23.7%–40.6%)	37.7% (26) (27.1%–49.6%)	28.1% (9) (15.2%–45.8%)	0.0% (0) (–4.8%–37.2%)	14.3% (1) (0.5%–53.3%)	68% (24) (59.5%–76.4%)	31.4% (11) (23.6%–40.5%)	
Never	38.6% (44) (30.2%–47.8%)	39.1% (27) (28.4%–51.0%)	50.0% (16) (33.4%–66.6%)	0.0% (0) (–4.8%–37.2%)	14.3% (1) (0.5%–53.3%)	84.4% (38) (76.6%–90.1%)	15.6% (7) (9.9%–23.4%)	
STI testing								
Within past year	35.6% (37) (27.4%–44.7%)	33.9% (21) (23.7%–45.7%)	17.2% (5) (7.4%–34.3%)	100.0% (6) (62.8%–104.8%)	71.4% (5) (35.2%–92.4%)	85.7% (30) (78.0%–91.1%)	14.3% (5) (8.9%–22.0%)	
Over a year	25.0% (26) (17.9%–33.7%)	25.8% (16) (16.8%–37.4%)	31.0% (9) (17.5%–48.8%)	0.0% (0) (–4.8%–37.2%)	14.3% (1) (0.5%–53.3%)	69.2% (18) (60.2%–77.0%)	30.8% (8) (23.0%–39.8%)	
Never	39.4% (41) (30.9%–48.6%)	40.3% (25) (29.5%–52.2%)	51.7% (15) (34.9%–68.1%)	0.0% (0) (–4.8%–37.2%)	14.3% (1) (0.5%–53.3%)	85.0% (34) (77.2%–90.5%)	15.0% (6) (9.5%–22.8%)	
STI diagnosis								
Lifetime	19.2% (23) (12.9%–27.4%)	20.8% (15) (12.8%–32.0%)	23.5% (8) (11.8%–41.1%)	0.0% (0) (–4.8%–37.2%)	0.0% (0) (–5.01%–40.4%)	78.3% (18) (69.8%–84.9%)	21.7% (5) (15.1%–30.2%)	

[†]Participants were included in the analyses if they had engaged in penile–vaginal intercourse within the past year and met at least one of the following criteria: (1) Reported more than one sexual partner over the past year (2) Defined their relationship status as single (3) Stated that their most recent sexual partner was someone other than a primary relationship partner (4) Reported that their current relationship was under 1 year. CI = confidence interval; STI = sexually transmitted infection.

arousal and lubrication, which are often but not always related. Women were also more likely to report orgasm if their most recent sexual event was with someone who was not a relationship partner, a finding that echoes data from 40- to 80-year-old women in the Global Study of Sexual

Attitudes and Behaviors [32]. Although speculative, one reason for this finding may be that many newly divorced or widowed women find the experience of a new partner arousing, heightening lubrication and orgasm. Alternatively, it is possible that the women who seek out new sexual

All respondents (N = 81)	Women				Condom use at last event	
	50–59	60–69	70–79	80+	No condom used	Condom used
	% Endorsed each item (N) (95% CI)					
24.4% (20) (16.1%–35.1%)	23.6% (13) (14.2%–36.6%)	28.0% (7) (13.2%–49.7%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	— —	— —
10.4% (8) (5.1%–19.4%)	9.3% (5) (3.6%–20.3%)	14.3% (3) (4.1%–35.5%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	88.9% (8) (79.7%–94.4%)	11.1% (1) (5.6%–20.3%)
58.4% (45) (47.3%–68.8%)	55.6% (33) (42.4%–68.0%)	66.7% (14) (45.2%–83.0%)	100.0% (1) (16.7%–103.9%)	0.0% (0) (–3.9%–83.3%)	75.6% (64) (64.8%–83.9%)	24.4% (11) (16.1%–35.2%)
11.7% (9) (6.1%–21.0%)	16.7% (9) (8.8%–29.0%)	0.0% (0) (–2.8%–18.2%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	55.6% (5) (44.5%–66.1%)	44.4% (4) (33.9%–55.5%)
16.9% (13) (10.0%–26.9%)	14.8% (8) (7.4%–26.9%)	19.0% (4) (7.1%–40.6%)	0.0% (0) (–3.9%–83.3%)	100.0% (1) (16.7%–103.9%)	69.2% (9) (58.2%–78.5%)	30.8% (4) (21.5%–41.8%)
2.6% (2) (0.2%–9.5%)	3.7% (2) (0.3%–13.3%)	0.0% (0) (–2.8%–18.2%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	100.0% (2) (94.3%–100.9%)	0.0% (0) (–0.9%–5.7%)
25.3% (20) (16.9%–36.1%)	18.9% (10) (10.5%–31.4%)	41.7% (10) (23.5%–62.4%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	76.2% (16) (65.6%–84.4%)	23.8% (5) (15.6%–34.5%)
63.6% (50) (52.2%–73.2%)	66.0% (35) (52.7%–77.3%)	54.2% (13) (33.9%–73.1%)	100.0% (1) (16.7%–103.9%)	100.0% (1) (16.7%–103.9%)	74.0% (37) (63.2%–82.6%)	26.0% (13) (17.4%–36.8%)
11.4% (9) (5.8%–20.6%)	15.1% (8) (7.6%–27.2%)	4.2% (1) (–1.2%–23.7%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	70.0% (7) (59.0%–79.1%)	30.0% (3) (20.9%–41.0%)
92.6% (75) (84.2%–96.9%)	94.5% (52) (84.4%–98.7%)	87.5% (21) (66.5%–96.9%)	100.0% (1) (16.7%–103.9%)	100.0% (1) (16.7%–103.9%)	73.0% (54) (62.1%–81.7%)	27.0% (20) (18.3%–37.9%)
3.7% (3) (0.8%–11.0%)	1.8% (1) (–0.6%–10.6%)	8.3% (2) (0.8%–28.7%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	100.0% (3) (94.3%–100.9%)	0.0% (0) (–0.9%–5.7%)
3.7% (3) (0.8%–11.0%)	3.6% (2) (0.3%–13.2%)	4.2% (1) (–1.2%–23.7%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	100.0% (3) (94.3%–100.9%)	0.0% (0) (–0.9%–5.7%)
90.2% (65) (69.9%–87.7%)	78.2% (43) (65.4%–87.3%)	83.3% (20) (61.9%–94.4%)	100.0% (1) (16.7%–103.9%)	100.0% (1) (16.7%–103.9%)	75.0% (48) (64.2%–83.4%)	25.0% (16) (16.6%–35.8%)
4.9% (4) (1.5%–12.7%)	3.6% (2) (0.3%–13.2%)	8.3% (2) (0.8%–28.7%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	100.0% (4) (94.3%–100.9%)	0.0% (0) (–0.9%–5.7%)
14.8% (12) (8.4%–24.6%)	18.2% (10) (9.9%–30.7%)	8.3% (2) (0.8%–28.7%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	75.0% (9) (64.2%–83.4%)	25.0% (3) (16.6%–35.8%)
27.3% (21) (18.5%–38.2%)	26.0% (13) (16.1%–39.1%)	28.0% (7) (13.2%–49.7%)	0.0% (0) (–3.9%–83.3%)	100.0% (1) (16.7%–103.9%)	75.0% (15) (64.2%–83.4%)	25.0% (5) (16.6%–35.8%)
40.3% (31) (30.0%–51.4%)	44.0% (22) (31.6%–57.2%)	36.0% (9) (19.1%–57.3%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	71.0% (22) (60.0%–80.0%)	29.0% (9) (20.0%–40.0%)
32.5% (25) (23.0%–43.6%)	30.0% (15) (19.4%–43.3%)	36.0% (9) (19.1%–57.3%)	100.0% (1) (16.7%–103.9%)	0.0% (0) (–3.9%–83.3%)	88.0% (22) (78.7%–93.7%)	12.0% (3) (6.3%–21.3%)
31.1% (23) (21.8%–42.1%)	30.6% (15) (19.9%–43.9%)	29.2% (7) (14.0%–50.8%)	0% (0) (–3.9%–83.3%)	100.0% (1) (16.7%–103.9%)	73.9% (17) (63.1%–82.5%)	26.1% (6) (17.5%–36.9%)
40.5% (30) (30.3%–51.7%)	42.9% (21) (30.6%–56.1%)	37.5% (9) (20.2%–58.7%)	0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	80.0% (24) (69.6%–87.5%)	20.0% (6) (12.5%–30.4%)
28.4% (21) (19.5%–39.3%)	26.5% (13) (16.5%–39.7%)	33.3% (8) (17.0%–54.8%)	0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	71.4% (15) (60.5%–80.4%)	28.6% (6) (19.6%–39.5%)
24.1% (19) (15.8%–34.8%)	30.2% (16) (19.5%–43.5%)	12.5% (3) (3.1%–33.5%)	0.0% (0) (–3.9%–83.3%)	0.0% (0) (–3.9%–83.3%)	74.7% (59) (63.9%–83.1%)	25.3% (20) (16.9%–36.1%)

partners are more likely to be aroused by the prospect of partnered sexual behavior than women who may feel compelled to engage in sexual activities with their relationship partner for various other reasons. Compared with men, more women also reported that their most recent experience of sex included genital pain. As studies of women with vulvodynia, dyspareunia, and those who have undergone treatment for cancer have

shown, many women continue to be sexually active—alone or with a partner—in spite of experiencing pain in connection with sex. Although it is unclear from this study why women engage in painful sex it is possible that they are motivated by the sexual intimacy or sexual pleasure that they may experience despite (or because of) the pain. The experiences of these women warrant further study [33,34].

Table 5 Weighted experience of the last sexual event by age, health and last sexual partner, stratified by age and gender

Experience during most recent partnered sexual event	Men					Age by sexual experience [†]	Health by sexual experience [‡]	Relationship by sexual experience [§]
	All respondents (N = 394)	50–59	60–69	70–79	80+			
	% Endorsed Experience Category (N) (95% CI)							
Pleasure						1.01 (0.99–1.22)	1.26 (0.91–1.73)	1.16 (0.89–1.51)
Extremely	43.1% (170) (38.3%–48.1%)	41.0% (86) (34.5%–47.7%)	52.0% (64) (43.4%–60.7%)	29.5% (13) (18.1%–44.3%)	41.2% (7) (21.6%–64.0%)			
Quite a bit	34.5% (136) (30.0%–39.3%)	38.1% (80) (31.8%–44.8%)	28.5% (35) (21.2%–37.0%)	38.4% (16) (23.7%–51.2%)	29.4% (5) (13.0%–53.4%)			
Moderately	17.5% (69) (14.1%–21.6%)	18.1% (38) (13.4%–23.9%)	15.4% (19) (10.0%–23.0%)	18.2% (8) (9.2%–32.2%)	23.5% (4) (9.0%–47.8%)			
A little	4.8% (19) (3.1%–7.5%)	2.9% (6) (1.2%–6.2%)	4.1% (5) (1.5%–9.4%)	15.9% (7) (7.6%–29.7%)	5.9% (1) (–0.9%–28.9%)			
Not at all	—	—	—	—	—			
Arousal						1.02* (1.00–1.03)	1.28 (0.93–1.76)	0.99 (0.76–1.30)
Extremely	41.6% (164) (36.9%–46.6%)	41.0% (86) (34.5%–47.7%)	48.8% (60) (40.1%–57.5%)	25.0% (11) (14.4%–39.6%)	41.2% (7) (21.6%–64.0%)			
Quite a bit	33.5% (132) (29.0%–38.3%)	36.2% (76) (20.0%–42.9%)	25.2% (31) (18.3%–33.6%)	45.5% (20) (31.7%–59.9%)	29.4% (5) (13.0%–53.4%)			
Moderately	21.3% (84) (17.6%–25.3%)	21.9% (46) (16.8%–28.0%)	22.0% (27) (15.5%–30.1%)	18.2% (8) (9.2%–32.2%)	17.6% (3) (5.4%–41.8%)			
A little	3.6% (14) (2.1%–5.9%)	1.0% (2) (0.0%–3.6%)	4.1% (5) (1.5%–9.4%)	11.4% (5) (4.5%–24.4%)	11.8% (2) (2.0%–35.6%)			
Not at all	—	—	—	—	—			
Erection/lubrication difficulty						1.06**** (1.04–1.08)	2.98**** (2.11–4.20)	0.86 (0.63–1.18)
Not difficult	58.7% (230) (53.7%–63.4%)	69.9% (146) (63.3%–75.7%)	52.0% (64) (43.3%–60.7%)	34.1% (15) (21.8%–48.9%)	31.3% (5) (14.3%–55.1%)			
Some difficulty	22.2% (87) (18.4%–26.6%)	18.2% (38) (13.5%–24.0%)	29.3% (36) (21.9%–37.9%)	18.2% (8) (9.2%–32.2%)	31.3% (5) (14.3%–55.1%)			
Moderate	10.5% (41) (7.8%–13.9%)	8.1% (17) (5.1%–12.7%)	10.6% (13) (6.2%–17.4%)	20.5% (9) (10.9%–34.7%)	12.5% (2) (2.4%–36.4%)			
Quite	3.8% (15) (2.3%–6.3%)	1.9% (4) (0.6%–5.0%)	4.1% (5) (1.5%–9.4%)	11.4% (5) (4.5%–24.4%)	6.3% (1) (–0.7%–29.4%)			
Very	4.8% (19) (3.1%–7.5%)	1.9% (4) (0.6%–5.0%)	4.1% (5) (1.5%–9.4%)	15.9% (7) (7.6%–29.7%)	18.8% (3) (6.0%–43.0%)			
Pain						1.04 (0.97–1.12)	5.27** (1.56–17.74)	0.14* (0.02–0.95)
Not painful	95.8% (277) (93.3%–97.5%)	97.5% (154) (94.2%–99.0%)	92.6% (88) (86.4%–96.2%)	96.2% (25) (85.0%–99.9%)	100.0% (10) (78.4%–103.2%)			
Somewhat painful	3.8% (11) (2.3%–6.2%)	1.9% (3) (0.6%–5.0%)	7.4% (7) (3.8%–13.6%)	3.8% (1) (0.1%–15.0%)	0.0% (0) (–3.2%–21.6%)			
Moderately painful	0.3% (1) (–0.1%–1.7%)	0.6% (1) (–0.1%–3.2%)	0.0% (0) (–0.6%–3.6%)	0.0% (0) (–1.5%–9.6%)	0.0% (0) (–3.2%–21.6%)			
Quite painful	—	—	—	—	—			
Very painful	—	—	—	—	—			
Participant orgasm						1.05** (1.01–1.08)	1.32 (0.66–2.64)	2.58**** (1.40–4.75)
Orgasm	86.9% (332) (83.2%–89.9%)	91.0% (179) (86.3%–94.2%)	69.8% (111) (61.1%–77.2%)	75.0% (30) (60.4%–85.6%)	85.8% (12) (61.8%–96.6%)			
No orgasm	13.1% (55) (10.1%–16.8%)	9.0% (27) (5.8%–13.7%)	30.2% (11) (22.8%–38.9%)	25.0% (13) (14.4%–39.6%)	14.2% (4) (3.4%–38.2%)			
Partner orgasm						1.05** (1.00–1.07)	1.37 (0.68–2.75)	0.96 (0.53–1.74)
Orgasm	83.2% (278) (79.2%–86.6%)	87.1% (155) (81.8%–91.0%)	79.1% (87) (71.0%–85.4%)	75.0% (27) (60.4%–85.6%)	90.0% (9) (66.4%–98.9%)			
No orgasm	16.8% (56) (13.4%–20.8%)	12.9% (23) (9.0%–18.2%)	20.9% (23) (14.6%–29.0%)	25.0% (9) (14.4%–39.6%)	10.0% (1) (1.1%–33.6%)			

* $P \leq 0.05$, ** $P \leq 0.01$, *** $P \leq 0.005$, **** $P \leq 0.001$.

[†]Age was entered into the model as a continuous variable. Significant odds ratios under 1 indicate a more positive experience as a function of age. Significant odds ratios over 1 indicate a less positive experience as a function of age.

[‡]“Good” health was entered into the model as the referent category. Significant odds under 1 indicate that poor health is related to a more positive experience. Significant odds over 1 indicate that poor health is related to a less positive experience.

[§]Engaging in a sexual act with a relationship partner was entered into the model as the referent. Significant odds under 1 indicate that engaging in a sexual act with a nonrelationship partner is related to a more positive experience. Significant odds over 1 indicate that engaging in a sexual act with a nonrelationship partner is related to a less positive experience.

[¶]Adjusted odds ratios are based on an ordinal or bivariate logistic regression model including age, health, and relationship with their last sexual partner.

^{††}Adjusted odds ratios are based on an ordinal or bivariate logistic regression model including age, health, relationship with their last sexual partner and erectile medication use. CI = confidence interval.

					Women		
All respondent (N = 236)	50-59	60-69	70-79	80+	Age by sexual experience [†]	Health by sexual experience [‡]	Relationship by sexual experience [§]
% (N) endorsed experience category (95% CI)					Adjusted odds ratio [¶] (95% CI)	Adjusted odds ratio [¶] (95% CI)	Adjusted odds ratio [¶] (95% CI)
					1.01 (0.99-1.04)	1.25 (0.77-2.04)	0.77 (0.55-1.08)
29.1% (67) (23.6%-35.4%)	29.4% (37) (22.0%-38.0%)	29.3% (24) (20.5%-39.9%)	25.0% (5) (10.8%-47.2%)	50.0% (1) (9.5%-90.5%)			
39.1% (90) (33.0%-45.6%)	39.7% (50) (31.5%-48.5%)	36.6% (30) (27.0%-47.4%)	45.0% (9) (25.9%-65.8%)	50.0% (1) (9.5%-90.5%)			
20.0% (46) (15.3%-25.7%)	19.8% (25) (13.7%-27.8%)	18.3% (15) (11.3%-28.1%)	30.0% (6) (14.3%-52.1%)	0.0% (0) (-5.2%-71.0%)			
10.4% (24) (7.0%-15.1%)	8.7% (11) (4.8%-15.2%)	15.9% (13) (9.4%-25.4%)	0.0% (0) (-2.9%-19.0%)	0.0% (0) (-5.2%-71.0%)			
1.3% (3) (0.3%-4.0%)	2.4% (3) (0.5%-7.2%)	0.0% (0) (-0.9%-5.4%)	0.0% (0) (-2.9%-19.0%)	0.0% (0) (-5.2%-71.0%)			
					1.02 (1.00-1.04)	1.49 (0.93-2.40)	0.71* (0.51-1.00)
27.7% (64) (22.3%-33.9%)	28.3% (36) (21.1%-36.9%)	27.7% (23) (19.1%-38.3%)	21.1% (4) (8.2%-43.3%)	50.0% (1) (9.5%-90.5%)			
36.4% (84) (30.4%-42.8%)	37.8% (48) (29.7%-46.6%)	36.1% (30) (26.6%-47.0%)	31.6% (6) (15.5%-53.6%)	0.0% (0) (-5.2%-71.0%)			
20.3% (47) (15.6%-26.1%)	20.5% (26) (14.2%-28.5%)	16.9% (14) (10.2%-26.5%)	31.6% (6) (15.5%-53.6%)	50.0% (1) (9.5%-90.5%)			
13.4% (31) (9.5%-18.5%)	11.0% (14) (6.5%-17.9%)	16.9% (14) (10.2%-26.5%)	15.8% (3) (4.9%-37.7%)	0.0% (0) (-5.2%-71.0%)			
2.2% (5) (-4.8%-50.7%)	2.4% (3) (-4.9%-63.2%)	2.4% (2) (-4.6%-72.0%)	0.0% (0) (0.0%-100.0%)	0.0% (0) (0.0%-100.0%)			
					1.03* (1.01-1.06)	1.61 (0.92-2.81)	0.62* (0.41-0.95)
43.8% (89) (37.5%-50.3%)	51.7% (60) (43.0%-60.4%)	34.8% (24) (25.3%-45.6%)	18.8% (3) (6.7%-40.9%)	100.0% (2) (29.0%-105.2%)			
38.4% (78) (32.3%-44.9%)	28.4% (33) (21.2%-37.0%)	55.1% (38) (44.3%-65.4%)	43.8% (7) (24.8%-64.7%)	0.0% (0) (-5.2%-71.0%)			
8.9% (18) (5.8%-13.3%)	10.3% (12) (6.0%-17.1%)	5.8% (4) (2.1%-13.4%)	12.5% (2) (2.9%-34.1%)	0.0% (0) (-5.2%-71.0%)			
6.9% (14) (4.2%-11.0%)	6.9% (8) (3.4%-13.0%)	2.9% (2) (0.4%-9.6%)	25.0% (4) (10.9%-47.2%)	0.0% (0) (-5.2%-71.0%)			
2.0% (4) (0.7%-4.9%)	2.6% (3) (0.6%-7.4%)	1.4% (1) (-0.3%-7.6%)	0.0% (0) (-2.9%-19.0%)	0.0% (0) (-5.2%-71.0%)			
					0.97 (0.93-1.10)	1.74 (0.89-3.43)	0.77 (0.45-1.32)
70.0% (142) (63.7%-75.6%)	63.8% (74) (55.0%-71.8%)	81.4% (57) (71.6%-88.5%)	60.0% (9) (38.6%-78.2%)	100.0% (2) (29.0%-105.2%)			
22.7% (46) (17.7%-28.6%)	27.6% (32) (20.4%-36.1%)	11.4% (8) (6.0%-20.3%)	40.0% (6) (21.8%-64.4%)	0.0% (0) (-5.2%-71.0%)			
4.9% (10) (2.7%-8.7%)	4.3% (5) (1.7%-9.7%)	7.1% (5) (3.0%-15.1%)	0.0% (0) (-2.9%-19.0%)	0.0% (0) (-5.2%-71.0%)			
1.5% (3) (-5.2%-62.6%)	2.6% (3) (-4.9%-63.3%)	0.0% (0) (-0.91%-5.5%)	0.0% (0) (-2.9%-19.0%)	0.0% (0) (-5.2%-71.0%)			
1.0% (2) (-5.0%-71.4%)	1.7% (2) (-4.8%-71.7%)	0.0% (0) (-0.91%-5.5%)	0.0% (0) (-2.9%-19.0%)	0.0% (0) (-5.2%-71.0%)			
					1.05* (1.00-1.09)	1.38 (0.53-3.56)	0.39*** (0.19-0.69)
70.7% (146) (64.5%-76.3%)	61.3% (87) (52.4%-69.4%)	44.4% (49) (34.2%-55.2%)	100.0% (8) (81.0%-102.9%)	65.5% (2) (15.0-95.6%)			
29.3% (77) (23.7%-35.5%)	38.8% (36) (30.6%-47.6%)	55.6% (31) (44.8%-65.8%)	0.0% (10) (-2.9%-19.0%)	34.5% (0) (4.4%-85.0%)			
					1.05 (0.98-1.13)	2.96 (0.84-10.55)	0.97 (0.25-2.40)
92.8% (205) (88.6%-95.5%)	93.4% (114) (87.4%-96.8%)	94.9% (75) (87.5%-98.3%)	77.8% (14) (55.5%-91.1%)	100.0% (2) (29.0%-105.2%)			
7.2% (18) (4.5%-11.4%)	6.6% (8) (3.2%-12.6%)	5.1% (4) (1.7%-12.5%)	22.2% (4) (8.9%-44.5%)	0.0% (0) (-5.2%-71.0%)			

Reporting on their most recent sexual event, most men indicated high levels of sexual pleasure and they rarely reported pain associated with sex. Pain and orgasm were both related to relationship partner type with men reporting less pain with a

nonrelationship partner and higher rates of orgasm with a relationship partner. If the men are engaging in sexual relationships with women of a similar age, lower rates of pain may be related to the heightened amount of lubrication experienced

by women who engage in sexual behavior with a nonrelationship partner. The correlational data limits conclusions regarding the direction of the relationship between the variables and, thus, it is also possible that men who regularly experience pain during sexual activities are less likely to initiate sexual activities with new partners in contrast to men with relationship partners who may engage in sexual behaviors for other reasons (e.g., to increase intimacy). The heightened intimacy, increased comfort or previous practice/ knowledge of their own and their partner's needs may be accountable for the higher rates of orgasm reported by men whose last sexual act occurred with a relationship partner. Regardless of their relationship status, overall, men were more likely to report difficulties with arousal and erectile function with more advanced age. A sizable percentage of men in each age cohort reported the use of erectile medications (such as Viagra, Levitra, Cialis, etc.). As such, healthcare providers are advised to ask their male patients as part of their sexual history taking about their use of medications for erectile or other sexual concerns [4,31].

Sweeping conclusions about the sexual health of older adults from this study should be tempered as several of the variables that may have influenced the sexual lives of the participants were unaccounted for in this study including a detailed STI and medication history; both of which are important constructs as certain medications may enhance or inhibit sexual behavior [22]. Additionally, the participant's partnered sexual behavior was assessed using preset measures of behavior that did not include some partnered behaviors that may have been endorsed by participants in this age group (e.g., kissing, the use of sexual enhancement products). Practitioners and future researchers who are interested in assessing the sexual health of older adults may benefit from the inclusion of these questions.

Conclusions

Our data demonstrate that many older men and women continue to be sexually active, alone and/or with a partner, well into advanced age. As such, sexual health professionals need to be attentive to the nuanced sexual health needs of older adults in terms of STI education and testing, condom education and/or provision, and the taking of a complete sexual health history that asks about patients' experiences of sexual pleasure, difficulties, and concerns.

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Conflict of Interest: Michael Reece is a member of the sexual health advisory council of Church & Dwight Co., Inc.

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