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Running head: OLDER PEOPLE AND SEXUALLY TRANSMITTED INFECTIONS

Sources of information-seeking on sexually transmitted infections and safer sex by older heterosexual Australian men and women

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Abstract

Sexually transmitted infections (STIs) have risen among older people in Australia and other countries. To guide future initiatives, we examined sources of information that older people use or are willing to use for knowledge about safer sex and STIs, including whether there are any gender differences. A total of 2137 Australian adults aged 60+ years completed a nationwide survey. Analyses focused on participants who were at risk of an STI (n = 686; 220 women and 466 men). Overall, information-seeking on STIs in the last year was low (18% men; 15% women). When sought, common sources included general media outlets (e.g., magazines, TV), healthcare providers (HCPs), and the Internet. HCPs were the most relied upon source among both women and men. Brochures, websites, and HCPs were rated highest as future sources; however, women indicated they were more willing than men to have information provided by brochures and websites. STI information-seeking was generally low, but there was willingness among both men and women to use a range of sources for gaining future information.

Keywords: sexually transmitted diseases; sexual health; prevention; ageing; aging

Introduction

Although the prevalence of sexually transmitted infections (STIs) among people aged 60 years and older is much lower than it is among younger people, rates of diagnoses have been increasing in a number of countries such as Australia, the United Kingdom, and the United States (Bodley-Tickell et al., 2008; Centers for Disease Control and Prevention, 2014; Minichiello, Rahman, Hawkes, & Pitts, 2012; The Kirby Institute, 2014). Despite these recent increases, sexual health policies and educational campaigns in countries like Australia tend to overlook the needs of older people. Studies also suggest that knowledge about STIs and safer sex is generally poorer among older people than it is among their younger counterparts (Grulich et al., 2014). Those at risk of an STI also appear to have relatively low STI testing rates (Heywood et al., 2016) and older men and women are less likely than younger people to use condoms (de Visser et al., 2014; Reece et al., 2010).

A need therefore exists for evidence-based sexual health policies and educational resources tailored towards the over-60s to fill the gaps in their sexual health knowledge and to help curb rising rates of STIs. In order to make strategies more inclusive or to design sexual health policies and programs targeted uniquely at older adults, it is important to determine appropriate platforms for disseminating safer sex and STI educational resources for this group. One potentially efficient and cost-effective way to deliver targeted sexual health information to older people is through Internet-based services (e-health) (Minichiello, Rahman, Dune, Scott, & Dowsett, 2013), as studies have shown that older people are increasingly using the Internet to access health-related information (Flynn, Smith, & Freese, 2006; Wangberg, Andreassen, Kummervold, Wynn, & Sørensen, 2009). However, not all older adults use the Internet and, further, it is not known how likely they are to use a range of other alternatives, such as brochures or speaking to a healthcare professional. Research has shown that young Australians utilise a range of sources of information, with the Internet

being the most common source (Mitchell, Patrick, Heywood, Blackman, & Pitts, 2014). To the best of our knowledge, there are no quantitative data examining STI information-seeking patterns among older adults, or how willing they are to use different sources to learn more about safer sex and sexual health.

Another potential factor in health information-seeking is gender. Women are more likely to seek out information on health generally and to visit healthcare professionals (Parslow, Jorm, Christensen, Jacomb, & Rodgers, 2004). While it is not currently known how willing older adults in general are to use different sources for learning, it is also not known whether gender differences are present when seeking information on sexual health. In a recently published Australian qualitative study, women reported more concerns about stigma and embarrassment when seeking information from healthcare professionals about sex (Fileborn et al., 2017). However, quantitative data involving large samples on gender differences in STI information-seeking patterns are currently lacking. Examining gender differences in STI information-seeking may be useful, especially to help further inform or refine the design and targeting of educational resources.

Using data from a national sample of Australian adults aged 60 years and older, the current study aimed to provide information to help guide the development and implementation of sexual health policies and education initiatives. Specifically, we sought to examine older Australians' sources of knowledge and information-seeking patterns on STIs, as well as their willingness to use a variety of different sources to learn about safer sex and sexual health in the future. In this article, we focus on those who identified as heterosexual, given a particular lack of focus in sexual health education for this group, especially when compared to gay men of all ages. Additionally, we explored gender differences in order to assess whether information-seeking behaviours and willingness to use specific sources varied by gender and should therefore be taken into account in any support and education initiatives.

Method

Study population and design

Data reported in this article formed a component of *Sex, Age and Me*, a national study of sexual health and relationships among older Australians. A structured cross-sectional survey was completed by 2,137 older Australian men and women between July and December 2015. Participants had to be 60 years or older to be eligible to complete the study. Both online and paper-based surveys were available in order to maximise participation and recruit participants from all states and territories. The study was promoted across a range of platforms including radio interviews, advertisements, and publications in mainstream newspapers, social media, online dating websites, community-based ageing organisations, local governments, senior citizens and services clubs, and sexual health clinics. Advertisements directed participants to the online survey and contained contact information through which a reply-paid paper survey could be requested. Paper-based surveys were also handed out to interested organisations and to participants of a senior's festival organised in Melbourne. All participants provided informed consent prior to completing the survey and there were no rewards or incentives for participating. Full details of the study sample and method can be found in a recently published methodology paper (Lyons et al., 2017a). The study received approval from the La Trobe University Human Ethics Committee (approval number S15/25).

Survey measures

Sources of STI knowledge and STI information-seeking

Participants were asked where their knowledge of STIs mostly came from (school sex education, friends, partner, general practitioner (GP)/healthcare provider (HCP), Internet,

general media sources [e.g., magazines, TV], or other), and the last time they sought information on STIs (never, in the last year, between 1 and 2 years ago, between 2 and 5 years ago, more than 5 years ago, don't remember). Additionally, those who had ever sought information on STIs were asked about the sources of information they mostly relied on (GP/healthcare provider, friends, media source or other), how frequently they sought information on STIs (coded as at least once a year or less often than once a year), and the types of STI information they sought.

Willingness to use different sources of information about safer sex and STIs

Participants were presented with a list of common sources of information and were asked how willing they would be to use each source (GP, seminar/class, brochure, video, educational website, book, sexual health counsellor). Participants rated each source on a scale from 0 "not at all" to 3 "extremely" willing.

Demographic variables

Participants reported their age, gender, level of educational attainment (coded as having or not having a university education), employment status (coded as employed or other), income, residential location (coded as inner city, suburban, regional/rural), and country of birth (coded as Australia or overseas). We also assessed how likely participants were to be at potential risk of a current or future STI infection. Following criteria adapted by the National Survey of Sexual Health and Behaviour (NSSHB)(Schick et al., 2010), participants were classed as being at some risk of a current or future infection if they reported either having had sex in the past year or reported having a desire or intention to have sex in the future, and if they reported one or more of the following: (1) had two or more sexual partners in the past year; (2) were single; (3) were currently in a relationship shorter than 5

years; or (4) had engaged with a non-primary partner when they most recently had sex. Participants were therefore asked when they last had sex, the number of different sexual partners they had in the past year, whether they were currently in a relationship and the length of that relationship, and whether they had sex with a casual or occasional sexual partner when they most recently had sex.

Statistical analysis

Descriptive statistics were provided for all variables measured. Gender differences in the demographic variables were assessed using logistic regression analyses conducted separately for each variable. For the main analyses, logistic regressions were used to assess gender differences for categorical variables, including STI knowledge and patterns of STI information-seeking. Gender differences in continuous variables, including willingness to use different sources of information about safer sex and STIs, were examined using linear regressions. Regressions were conducted separately for each variable. For all variables in the main analyses, regressions were first conducted without adjustment. A second set of regressions were conducted that adjusted for the demographic variables that varied significantly by gender. These were done to test whether gender differences in sources of STI knowledge and patterns of STI information-seeking were present after accounting for demographic variations in the sample. Effect estimates for logistic regressions are reported as odds ratios (OR). Effect estimates for linear regressions are reported as unstandardized regression coefficients (B). For both types of estimates, we provide 95% confidence intervals. Analyses were conducted using Stata Version 14.2 (StataCorp, College Station, TX).

Results

To provide targeted guidance for future prevention initiatives, the sample for analysis was firstly confined to participants who met criteria for being at some risk of a current or future infection (n = 821). Of this group, 691 participants identified as heterosexual, with the remaining participants reporting a range of non-heterosexual identities or not disclosing their sexual identity. Given the focus of this article, and due to relatively low numbers of participants in non-heterosexual categories, the sample for analysis was thus confined to participants who identified as heterosexual. Of these 691 participants, a further 5 participants identified as either transgender, a gender other than male or female, or did not report their gender. These participants were also excluded due to low numbers. This left a final sample of 686 men and women who identified as heterosexual and who met the criteria for being at some potential risk of a current or future STI.

Sample profile

Table 1 shows the demographic profile of the analysed sample (n = 686). There were 466 (67.9%) men and 220 (32.1%) women. The majority of participants were in their 60s (76.4%), living in suburban or regional/rural areas (84.0%), and born in Australia (69.0%). Less than half of the sample had a university education (44%, n = 301). Overall, the sample comprised a significantly higher proportion of women (52.3%) than men (40.4%) with a university education [OR 1.62, 95% CI (1.17-2.24)], a significantly lower proportion of women (23.2%) than men (32.0%) with a higher income [OR 0.60 95% CI (0.40-0.90)], and a significantly higher proportion of women (22.5%) than men (12.9%) living in inner city areas compared to regional/rural areas [OR 1.94 95% CI (1.22-3.09)].

Sources of STI knowledge and information-seeking

Table 2 displays results regarding sources of STI knowledge and information-seeking according to gender. Overall, the highest proportion of participants (39.2% men; 36.4% women) indicated that their main source of STI knowledge had been media sources, followed by a GP or other HCP (17.0% men; 22.1% women), and the Internet (19.7% men; 12.0% women). Of those who indicated "other", some sources mentioned included books and journals, work training (among health and education professionals), army training, and their own life experiences. Only a small proportion of participants sought information on STIs in the year prior to the survey (12.4% of men; 14.9% of women). A similar proportion declared that they had never sought such information (19.0% of men; 13.0% of women).

As displayed in Table 2, we also examined sources of STI information that participants relied upon the most. Among those who had ever sought information on STIs (*n* = 554), a GP or other HCP was the most commonly relied upon source among both men (47.7%) and women (51.1%), followed by media sources (27.3% and 29.7%, respectively), and friends (approximately 5% for both genders). Of those who indicated "other", sources included medical books and journals, and the Internet. The types of information on STIs that were most sought were signs and symptoms (54.4% of men; 65.3% of women), STI prevention (32.7% of men; 37.4% of women), and treatment (16.6% of men; 25.1% of women).

A few gender differences were found in the analyses that were adjusted for significant differences in demographics between men and women. Specifically, women reported significantly lower odds of indicating the Internet as a source of STI knowledge [adjusted OR 0.46, 95% CI (0.26-0.83)]. However, this variable did not significantly vary by gender overall ($\chi^2_6 = 12.24$, $p = 0.057$), suggesting the gender difference in Internet as a source was relatively weak. On types of information sought, women reported significantly higher odds of

seeking information on signs and symptoms of STIs [adjusted OR 1.51, 95% CI (1.07-2.13)], and on STI treatment [adjusted OR 1.67, 95% CI (1.12-2.49)]. There were no significant differences between men and women with regard to sources of knowledge they mostly relied on or when participants last sought information on STIs. Although in Table 2 there appears to be a significant difference between men and women for seeking information between 2 and 5 years ago, this was an outcome of rounding (actual 95% CI = 0.9968 – 3.5987). There was also no significant difference between men and women for frequency of seeking information on STIs.

Willingness to use different sources of information about safer-sex and sexual health

Table 2 further displays mean ratings of the willingness to use seven specific sources of information about safer sex and sexual health in the future. Brochures and educational websites were rated highest, followed by a GP. Attending a seminar or class was rated lowest. Compared to men, women were significantly more willing to read a brochure [adjusted B 0.22, 95% CI (0.10-0.35)] and to visit an educational website [adjusted B 0.18, 95% CI (0.03-0.33)]. There were no significant gender differences in ratings of willingness to speak to a GP, read a book, watch a video, talk to a sexual health counsellor, or attend a seminar/class.

Discussion

We investigated sources of STI knowledge and information-seeking among older Australians who were potentially at risk of a current or future STI. Although STI incidence rates in this group are lower than in younger age groups, recent increases in rates both in Australia and in other developed countries indicate that older people may need to be included in future health education and support initiatives, especially if they are at some risk of an STI.

And given the growing population of older people, this issue will remain an important one. Our findings therefore provide useful information to guide possible initiatives in the future.

Participants drew upon a range of different sources of information on STIs. General media sources were listed as the most common, followed by a GP or other HCP and the Internet. In previous research involving young Australians (Mitchell et al., 2014), the most commonly reported source of information was the Internet, followed by a school sex education or STI awareness program, and a friend. Thus, there appear to be some differences between older and younger Australians with regard to sources of knowledge. Clearly, older people do not have access to school programs, but it would seem they are also less likely than younger people to seek information from a friend. The Internet, however, appears to be a relatively common source of information for both younger Australians and the older participants in our study.

Despite this, when asked about sources they relied on the most, a slightly different picture emerged. HCPs were by far the most commonly reported. So, although the Internet appears to be a relatively popular source, it may be that HCPs are positioned to play a particularly important role in informing and supporting older Australians when it comes to issues of STIs and safer sex. HCPs are also well-placed to identify whether their patients are at some risk of becoming infected with an STI. However, we know from other research that HCPs can be uncomfortable asking older people about their sex lives (Gott, Hinchliff, & Galena, 2004). Similarly, older people can be uncomfortable talking to their doctors or other HCPs about sex due to fear of embarrassment or feeling stigmatised (Fileborn et al., 2017; Hinchliff & Gott, 2011). Further efforts may be needed to work with HCPs in sensitively raising the topic of sex with their older patients or encouraging older people to raise the topic if they feel it is relevant to them.

While almost all of the participants in our study who were at potential risk of an STI reported having sought information on STIs at some stage in their lives, information-seeking overall was not frequent. Less than half reported seeking information on STIs in the five years prior to the survey, and less than one in six men and women reported seeking information in the past year. Meanwhile, of those who reported ever seeking information, more than 80% of both groups reported doing so less often than once a year. Knowledge of STIs and safer sex among older Australians has been found to be generally good but there are some key gaps, including knowledge about the effectiveness of condoms (Lyons et al., 2017b). Those who are at risk of an STI have also been found to have low rates of STI testing (Heywood et al., 2016). Taken together, these findings further suggest that education and guidance on the topics of STIs and safer sex may be required, particularly for those who are potentially at risk of an STI. While HCPs can certainly play a role, not all older people will be in regular contact with health services, so it may be worth including older people in existing safer sex campaigns that seek to educate in other ways, such as advertisements or websites. This idea is further supported by other recently published qualitative research, which showed that some older Australians were utilising multiple sources of information, with the Internet one commonly relied upon source (Fileborn et al., 2017).

Of the types of information sought, signs and symptoms of STIs was the most common for both men and women, but more so for women, followed by information on preventing STIs. Information on treatment and where to access testing were less commonly sought, although women were more likely than men to seek information on treatment. There appears to be some demand, therefore, for education and support initiatives where older people can obtain information privately such as via brochures and websites, particularly covering STI symptomatology and prevention, but also for having a GP or other HCP to whom they can talk. However, given the vast majority of sexual health websites are targeted

towards young people, our findings suggest that older people are likely to be navigating websites in which they are not represented or which potentially focus on contexts and concerns that are not necessarily relevant to them. Ensuring resources are relevant to a broad range of age groups may need to be an important focus in future.

To guide future education and support initiatives, including informing HCPs, we asked participants about their willingness to use different sources of information about safer sex and sexual health. Overall, both men and women reported greater willingness to read a brochure or to visit an educational website, although women were more willing than men. Visiting a GP was also rated highly, although, as alluded to earlier, some studies have found that experiences of older people talking with GPs and other HCPs about sex are not always positive, including experiences and concerns around stigma, discrimination, and embarrassment (Fileborn et al., 2017; Hinchliff, Tetley, Lee, & Nazroo, 2018; Tetley, Lee, Nazroo, & Hinchliff, 2016). This therefore is an issue that needs to be addressed in future.

In general, participants were least willing to attend a seminar or class. This is somewhat in contrast with a study conducted in the United States among older people in senior housing where it was found that participants were relatively willing to engage in a group-based education program on safer sex (Gedin & Resnick, 2014). It may be that in some settings, or cultural contexts, group-based initiatives may work well. While our findings suggest that many older Australians were willing to engage in this way, group-based learning was not preferred as much as other modes.

This study had a number of strengths and limitations. A key strength was the large national sample of older men and women. Although the sampling was not population-based, we collected responses from participants with diverse socioeconomic backgrounds, thus giving our findings broader relevance than would be the case with a more specific sample. There was, however, a considerably larger sample of men than women in this study, and we

have speculated elsewhere on why this might have been the case (Lyons et al., 2017a). The sample of women was still sufficiently large (n = 220) for conducting reliable statistical analyses for the purposes of this article, but it is worth noting that participants were self-selecting and their responses may not be fully representative of all older Australians who may be at risk of an STI. It is also worth noting that the findings are confined to an Australian context. Although the study would need to be replicated in other countries to assess broader generalizability, our findings are nevertheless likely to provide some guidance to researchers and practitioners of potential trends in other countries, especially in areas that have similar cultural contexts to Australia.

In addition, given that almost all of our participants were recruited online, results concerning online information-seeking might not be fully transferrable to older Australians who do not use the Internet. However, according to recent reports (Australian Communications and Media Authority, 2015), over three in four Australians aged 65 years and older have accessed the Internet at some point in their lives, and the majority of older Australians use the Internet frequently. These numbers notwithstanding, future research and education initiatives need to be aware that not all older Australians are using the Internet. Additional methods may therefore be needed to reach all older people, such as conducting surveys using paper-based questionnaires.

Due to the relatively low numbers of non-heterosexual and transgender participants in the sample, we only analysed responses of heterosexual cisgender participants so our findings are also not transferrable to non-heterosexual or gender diverse populations. Older Australians who are not heterosexual or are transgender might use different sources of information depending on their level of comfort disclosing their sexual or gender identity. Although the sexual health needs of gay men have previously been the focus of considerable

research, there is a particular lack of research involving non-heterosexual women and gender diverse populations, and further research in these areas are recommended.

Finally, we did not collect data on the reasons why people may have sought information on STIs. For instance, some may have sought information because they were concerned about their sexual health, while others may have sought information on behalf of other people in their lives, such as children or friends. Reasons for seeking information is a topic that should be explored in future research, as data on this may provide a further useful guide for education and support initiatives aimed at older people. It may also be useful for researchers to ask specifically about the use of apps on smartphones or tablets. Apps are now available that assist users in assessing their risk of STIs as well as provide education on signs and symptoms of STIs. We did not specifically ask about apps in this study, but it may be possible that some older people are using such apps or may be willing to do so in the future.

Conclusion

Although rates of STIs continue to be substantially lower among older people compared to their younger counterparts, the recent upward trend in diagnoses in many developed countries suggests that older people should not be ignored in STI prevention and education strategies. Our study shows that many older people who are at some risk of STIs do seek information on STIs and safer sex, although this is not frequent. There are also some minor differences between men and women with regard to types of information sought and their willingness to use different sources of information. Providing easily accessible information targeted to older people, or incorporating relevant information and representation of older people in current strategies is needed. Education and support for HCPs in providing opportunities for older people to talk openly about sex without fear of being judged is also

needed. This will likely enable HCPs to identify those at risk of becoming infected with an STI and thus provide guidance and advice on STIs and practices for preventing STIs.

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Table 1. Sample profile (n = 686) [a]

	Men (n = 466)		Women (n = 220)		
	No.	(%)	No.	(%)	p
Age					0.568
60-69	353	(75.8)	171	(77.7)	
70+	113	(24.3)	49	(22.3)	
Educational attainment					0.004
No university education	276	(59.6)	104	(47.7)	
University education	187	(40.4)	114	(52.3)	
Employment					0.830
Employed	187	(40.1)	86	(39.3)	
Other	279	(59.9)	133	(60.7)	
Income (Australian dollars per year)					0.044
0-49,999	156	(33.5)	89	(40.5)	
50,000+	149	(32.0)	51	(23.2)	
Undisclosed	161	(34.6)	80	(36.4)	
Residential location					0.008
Inner city	60	(12.9)	49	(22.5)	
Suburban	224	(48.2)	93	(42.7)	
Regional/rural	181	(38.9)	76	(34.9)	
Country of birth					0.729
Australia	315	(69.4)	147	(68.1)	
Overseas	139	(30.6)	69	(31.9)	

Note. [a] Sample was confined to participants who identified as heterosexual and who met criteria for being at some risk of a current or future STI.

Table 2. Gender differences in patterns of STI information-seeking [a]

	Men (*n* = 466)		Women (*n* = 220)		Unadjusted		Adjusted [b]	
	No.	(%)	No.	(%)	OR (95% CI)	*p*	OR (95% CI)	*p*
Main source of STI knowledge						0.010		0.057
GP/other healthcare provider	77	(17.0)	48	(22.1)	1.00		1.00	
Media sources (magazines, TV)	177	(39.2)	79	(36.4)	0.72 (0.46-1.12)		0.69 (0.43-1.08)	
Internet	89	(19.7)	26	(12.0)	0.47 (0.27-0.83)		0.46 (0.26-0.83)	
Friends	22	(4.9)	7	(3.2)	0.51 (0.20-1.29)		0.54 (0.21-1.38)	
School sex education	20	(4.4)	7	(3.2)	0.56 (0.22-1.43)		0.64 (0.25-1.67)	
Partner	15	(3.3)	6	(2.8)	0.64 (0.23-1.77)		0.65 (0.23-1.85)	
Other	52	(11.5)	44	(20.3)	1.36 (0.79-2.33)		1.17 (0.66-2.04)	
Sources of STI knowledge mostly relied on [c]								
GP/other healthcare provider	222	(47.7)	112	(51.1)	1.15 (0.83-1.58)	0.407	1.10 (0.79-1.54)	0.566
Media sources (magazines, TV)	127	(27.3)	65	(29.7)	1.12 (0.79-1.60)	0.520	1.11 (0.77-1.60)	0.583
Friends	22	(4.7)	11	(5.0)	1.06 (0.51-2.24)	0.868	1.01 (0.47-2.19)	0.970
Other	81	(17.4)	48	(21.9)	1.33 (0.89-1.99)	0.161	1.28 (0.85-1.95)	0.237
Last sought information on STIs						0.073		0.152
Never	86	(19.0)	28	(13.0)	1.00		1.00	
In the last year	56	(12.4)	32	(14.9)	1.76 (0.96-3.23)		1.72 (0.92-3.22)	
Between 1 and 2 years ago	44	(9.7)	19	(8.8)	1.33 (0.67-2.64)		1.17 (0.57-2.41)	
Between 2 and 5 years ago	47	(10.4)	32	(14.9)	2.09 (1.13-3.88)		1.89 (1.00-3.60)	
More than 5 years ago	117	(25.8)	67	(31.2)	1.76 (1.04-2.96)		1.69 (0.98-2.91)	
Don't remember	103	(22.7)	37	(17.2)	1.10 (0.63-1.95)		1.09 (0.60-1.96)	
Frequency of seeking information on STIs [c]						0.640		0.560
At least once a year	56	(15.7)	26	(14.2)	1.00		1.00	
Less often than once a year	300	(84.3)	157	(85.8)	1.13 (0.68-1.87)		1.17 (0.70-1.95)	
Types of information on STIs being sought [c]								
Signs and symptoms of STIs	253	(54.4)	143	(65.3)	1.58 (1.13-2.20)	0.007	1.51 (1.07-2.13)	0.020
How to prevent STIs	152	(32.7)	82	(37.4)	1.23 (0.88-1.72)	0.222	1.17 (0.83-1.66)	0.362
How to treat STIs	77	(16.6)	55	(25.1)	1.69 (1.14-2.50)	0.009	1.67 (1.12-2.49)	0.012
Where to access STI testing	61	(13.1)	37	(16.9)	1.35 (0.86-2.10)	0.189	1.42 (0.90-2.23)	0.134
Other	15	(3.2)	12	(5.5)	1.74 (0.80-3.78)	0.163	1.56 (0.70-3.47)	0.277
	M	*(SD)*	*M*	*(SD)*	B (95% CI)	*p*	B (95% CI)	*p*
Willingness to use sources of								

safer sex and sexual health information								
Reading a brochure	2.94	(0.74)	3.18	(0.79)	0.24 (0.11-0.36)	<0.001	0.22 (0.10-0.35)	0.001
Visiting an educational website	2.93	(0.87)	3.12	(0.86)	0.19 (0.05-0.33)	0.009	0.18 (0.03-0.33)	0.016
Speaking to a GP	2.84	(0.90)	2.87	(0.99)	0.03 (-0.12-0.18)	0.721	0.05 (-0.11-0.20)	0.562
Reading a book	2.77	(0.85)	2.83	(0.96)	0.07 (-.08-0.21)	0.382	0.07 (-0.08-0.22)	0.388
Watch a video	2.75	(0.84)	2.81	(0.92)	0.06 (-0.09-0.20)	0.435	0.06 (-0.09-0.21)	0.414
Talking to a sex health counsellor	2.49	(0.97)	2.58	(1.08)	0.09 (-.08-0.26)	0.287	0.08 (-0.09-0.25)	0.353
Attending a seminar or class	1.98	(0.90)	2.08	(1.08)	0.10 (-.06-0.26)	0.225	0.10 (-0.06-0.26)	0.231

Note. Results are from linear and logistic regressions conducted separately for each variable. Adjusted regressions included adjustment for that adjusted for the demographic variables that varied significantly by gender. [a] Of participants who identified as heterosexual and who met criteria for being at some risk of a current or future STI. [b] Adjusted for educational attainment, income and residential location. [c] Of those who had ever sought information on STIs.