

ORIGINAL RESEARCH—MEN'S SEXUAL HEALTH

Flexibility in Men's Sexual Practices in Response to Iatrogenic Erectile Dysfunction after Prostate Cancer Treatment

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ABSTRACT

Introduction. Prostate cancer (PCa) treatments are associated with a high incidence of erectile dysfunction (ED). Interventions to help men with iatrogenic ED have largely focused on penile tumescence adequate for vaginal penetration. Less research has been undertaken on sex practices other than penile/vaginal intercourse.

Aim. The aim of this study was to explore forms of sexual practice engaged in by men following treatment for PCa. We focused in particular on anal intercourse (AI) as practiced by both nonheterosexual (i.e., gay-identified men and other men who have sex with men) and heterosexual men. We sought to determine how common AI was subsequent to PCa treatment and how flexible AI practitioners were in their modes (e.g., from insertive to receptive) when faced with iatrogenic ED.

Methods. An international online survey was conducted in 2010–2011 of men treated for PCa, where participants (N = 558) were asked explicitly about their sexual practices before and after PCa treatment.

Main Outcome Measures. The outcome measures were the numbers and percentages of men who practiced AI before and after PCa treatment as well as the percentage who changed AI practice after PCa treatment.

Results. Five hundred twenty-six men (90 nonheterosexual men; 436 heterosexual men) answered questions on AI practices. A proportion of nonheterosexual (47%) and heterosexual men (7%) practiced AI following PCa treatment, and did so in all modes (insertive, receptive, and “versatile”). Many nonheterosexual men continued to be sexually active in the face of iatrogenic ED by shifting from the insertive to receptive modes. A few men, both heterosexual and nonheterosexual, adopted AI for the first time post-PCa treatment.

Conclusions. Flexibility in sexual practice is possible for some men, both nonheterosexual and heterosexual, in the face of iatrogenic ED. Advising PCa patients of the possibilities of sexual strategies that include AI may help them in reestablishing a sex life that is not erection dependent. **Dowsett GW, Lyons A, Duncan D, and Wassersug RJ. Flexibility in men's sexual practices in response to iatrogenic erectile dysfunction after prostate cancer treatment. Sex Med 2014;2:115–120.**

Key Words. Prostate Cancer; Erectile Dysfunction; Anal Intercourse; Treatment; Sexual Practice

Introduction

The sexual consequences of prostate cancer (PCa) treatments are often severe and a major factor in reducing the quality of life of PCa patients [1–5]. The problem of iatrogenic erectile

dysfunction (ED) and its impact on a patient's sex life is increasingly a concern in the posttreatment care of PCa patients [6–9]. Understanding how men, whose sexual function is affected by PCa treatments, adjust to their new sexual lives has been limited largely to assessing and redressing

ED, and seeking ways to achieve penile tumescence adequate for vaginal penetration. Less research has been undertaken on sex practices, such as anal intercourse (AI) and those that are not penis focused [10].

Only recently have researchers begun to explore the impact of PCa treatments on the sexual responses of gay men [11–14]. For gay men and other men who have sex with men but who do not identify as gay (termed “MSM” in the HIV/AIDS research literature), the effects of PCa treatments on anal sexual practice remain poorly investigated. AI is defined here as the penetration of an anus by a penis, but may also include other forms of penetration from a sexual partner such as a finger or sex toy. AI is usually associated with gay and bisexual men; however, it is neither universally [15,16] nor exclusively practiced by gay and bisexual men. For example, in the first Australian Study of Health and Relationships, a national population-based survey of approximately 19,000 adults, 21% of the heterosexual men reported lifetime experience of AI [17–21]. Younger generations were also noted to have more experience with AI, suggesting that the practice may be increasing in popularity over time. This in itself warrants a focus on AI in relation to changes in sexual practice that might occur with illness or resulting from medical treatment. Heterosexual AI can involve the male partner anally penetrating his female partner or anal penetration of the male partner by a female partner using a sex toy, fingers, or a dildo. These sex practices are, in principle, options for men in general to remain sexual even when they cannot themselves achieve sufficient penile rigidity to be the insertive partner.

Aims

In 2010–2011, we conducted an international online survey on AI among men treated for PCa. This article reports some of the findings from the survey. Specifically, we aimed to investigate anal sexual practices for both nonheterosexual (i.e., gay men and other MSM) and heterosexual men diagnosed with PCa, including *mode* of practice (insertive, receptive, or both, i.e., insertive and receptive—hereafter, “versatile”). We focused particularly on whether there were changes in practice from before to after PCa treatment. Given the considerable posttreatment changes in sexual function for many men, we expected that some degree of change in AI practices was

likely such as ceasing AI or changing mode, e.g., moving from insertive to receptive. While research on anal sexual practices is common in health research, particularly as a result of HIV/AIDS, this is the first time it has been explored in the context of PCa treatments’ impact on sexual function and performance.

Methods

We conducted an English-language, anonymous, online survey targeting men diagnosed with PCa. A total of 558 men responded, of whom 96% were from the United States (63%), Australia (18%), Canada (9%), and the United Kingdom (6%).

Data Collection

The survey was approved by the La Trobe University Human Ethics Committee, and the project was funded by the authors’ research center, the Australian Research Centre in Sex, Health and Society at La Trobe University, Melbourne, Australia. Recruitment was conducted with the assistance of more than 40 international PCa support organizations in English-speaking countries.

Advertisements were posted on PCa organizations’ websites, placed in newsletters, and sent to e-mail lists. Advertisements were also placed on Facebook, which targeted men who had been treated for PCa. The survey was online from December 2010 to April 2011 and focused primarily on AI before and after PCa treatment. Specifically, the men were first asked whether they had practiced insertive or receptive AI, or both, before treatment. They then answered the same questions with regard to their practice after treatment. Further detail on the methods can be found in an earlier publication by the authors [22].

Data Analysis

We first computed numbers and percentages of men who reported on AI (including no AI) before and after treatment for PCa. Chi-square analyses (using Stata 11.1, StataCorp LP, College Station, TX, USA) were used to assess any differences between heterosexual and nonheterosexual men in the percentage who changed practice from before to after treatment. We then explored changes to practice in further detail. To do this, we cross-tabulated numbers of heterosexual and nonheterosexual men who changed from one practice to another, to identify specific changes from before to after treatment. This analysis was presented

Table 1 Anal intercourse before and after prostate cancer treatment for nonheterosexual and heterosexual men

	After treatment				Total
	No anal sex	Insertive only	Receptive only	Insertive and receptive	
Nonheterosexual					
No anal sex before treatment	17	0	4	1	22
Insertive only before treatment	9	2	1	2	14
Receptive only before treatment	4	0	6	0	10
Insertive and receptive before treatment	18	1	13	12	44
Total	48	3	24	15	90
Heterosexual					
No anal sex before treatment	360	1	3	0	364
Insertive only before treatment	37	12	0	1	50
Receptive only before treatment	2	0	2	0	4
Insertive and receptive before treatment	7	2	1	8	18
Total	406	15	6	9	436

descriptively, because cell sizes were too small for significance testing.

Results

Of the 558 men in the sample, 96 (17%) were nonheterosexual and 460 (83%) were heterosexual. Two men did not provide information on sexual orientation and were excluded from analyses. Of the 556 remaining, 74% were aged 56 years and older, 79% reported a tertiary level education, and 86% were in a relationship at the time of the survey. Median age for PCa diagnosis was 57 years (interquartile range [IQR]: 52–62). In all, 61% reported first receiving PCa treatment during the past 3 years. Of those who reported the type of PCa treatment they had received ($n = 523$), 80% reported having had a radical or robotic prostatectomy. Further detailed information on the sample, including a breakdown by sexual orientation, can be found in an earlier publication by the authors [22].

Of the 556 respondents, 526 (90 nonheterosexual men; 436 heterosexual men) answered questions on AI practices. Before PCa treatment, 386 men (73%) had no experience of AI at all. Of the 140 (27%) who had engaged in AI, 68 were nonheterosexual and 72 were heterosexual. These represent 75% of the nonheterosexual and 16% of heterosexual men, respectively, who answered these questions, indicating a proportionally higher practice of AI among nonheterosexual men.

With regard to change in AI practice from before to after PCa treatment, a significantly greater percentage of nonheterosexual men (59%) than heterosexual men (12%) reported some form of change ($\chi^2_1 = 99.56$, $P < 0.001$), such as a change

in AI mode, no longer practicing AI, or practicing AI for the first time. Table 1 displays numbers of men who reported each AI practice (including not practicing AI) before and after PCa treatment. Among the 68 nonheterosexual men who reported practicing AI before PCa treatment, 31 (46%) of these men were no longer practicing AI after treatment. However, of the 42 (47%) nonheterosexual men who reported AI after treatment, five had not practiced AI before PCa treatment and only started the practice after treatment. As shown in Table 1, before treatment, 58 nonheterosexual men had practiced AI in the insertive or versatile mode. After treatment, 14 (24%) of these men had changed to an exclusively receptive mode. Of the 42 nonheterosexual men who were practicing AI after treatment, 3 (7%) were exclusively insertive, 24 (57%) were exclusively receptive, and 15 (36%) were versatile. None of the nonheterosexual men who were exclusively receptive before treatment had adopted an insertive mode after treatment.

Among the 72 heterosexual men who reported practicing AI before PCa treatment, 46 (64%) of these men were no longer practicing AI after treatment. However, a total of 30 (7%) heterosexual men reported practicing AI after treatment, including 4 men who had not practiced AI before treatment but started the practice after treatment. As shown in Table 1, before treatment, 68 heterosexual men had practiced AI in either an insertive or versatile mode. After treatment, only one (2%) of these men had changed to an exclusively receptive mode. Of the 30 heterosexual men who were practicing AI after treatment, 15 (50%) were exclusively insertive, 6 (20%) were exclusively receptive, and 9 (30%) were versatile. As with the nonheterosexual men, none of the heterosexual

men who were exclusively receptive before treatment had adopted an insertive mode after treatment.

We examined characteristics of the 12 men who adopted receptive AI for the first time. All of these men reported being in a relationship at the time of the survey. They were spread relatively evenly through age groups, including four who were younger than 56 years and three older than 65 years. Eleven of the 12 (92%) reported having a university level education compared with 79% of the other men. They were somewhat younger when diagnosed with PCa, with a median age of diagnosis of 52 years (IQR: 49–59) compared with 57 years (IQR: 52–62) for the other men. Again, 11 of the 12 (92%) men reported having had either a radical or robotic prostatectomy compared with 80% of the other men. None of these differences were significant (although the numbers are too small for reliable significance testing).

Discussion

Despite a greater percentage of nonheterosexual than heterosexual men reporting posttreatment changes in AI practices, our findings confirm that not just nonheterosexual but also some heterosexual men practice AI, and do so in all modes: insertive, receptive, and versatile. However, in our study after PCa treatment, there was a reduction in the practice of AI for men in both groups. As one might expect, the number of males practicing being the insertive partner, regardless of whether heterosexual or nonheterosexual, declined with PCa treatment, consistent with the high incidence of ED from those treatments. Similarly, of the men who had not been the insertive partner before PCa treatment, none took up that mode after treatment.

Nevertheless, we found various examples of adaptation in AI practice following PCa treatment. Many of the nonheterosexual men continued to be sexually active by shifting from insertive to receptive modes. Even among heterosexual men, there were examples of men who changed mode after treatment. Of particular note are the few men, both heterosexual and nonheterosexual, who adopted AI for the first time post-PCa treatment. These findings raise the question of what might be psychosocial predictors of such flexibility in the face of iatrogenic ED and certainly warrant further research.

There is strong evidence in the PCa literature that the loss of penile/vaginal intercourse for het-

erosexual men subsequent to ED from PCa treatment reduces both their and their partners' quality of life. There has been little research, however, on any such loss for men who practice AI. Loss of AI may be equally detrimental for these men's sexual lives, both nonheterosexual and heterosexual, and this loss may not be so different for both groups. In this study, in addition to stopping the practice, there was also a reduction in versatile sexual practice among the nonheterosexual men (from 18 to 12), but a small increase among the heterosexual men (from 7 to 8).

Implications and Limitations

As an exploratory online survey, we had to make strategic decisions about what questions to ask those invited to participate that would not make the questionnaire so long that it would discourage completion of the survey. As such, detailed questions about the nature of the AI that the men practiced both before and after PCa treatment were excluded simply to keep the survey of a manageable length. Thus, we do not know about the precise objects used for penetration, e.g., toys, dildos, and/or male partners' penises for those with male partners.

That said, the changes we did find in sexual practices suggest that both researchers and health care providers should not assume that the adverse effects of PCa treatments on sexual function all work in a single direction, i.e., toward ED that invariably terminates all penetrative sex. Clearly, not all men suffer ED after PCa treatment, and that may contribute to our finding that some men retain both insertive and versatile sexual practices after PCa treatments. Further research is needed, though, to explore our particular finding that some men (one heterosexual and one nonheterosexual in our study) began AI after PCa treatment when they had not practiced it at all beforehand. More research is warranted to characterize the men who are comfortable exploring new sexual practices, such as AI, in the face of iatrogenic ED. In general, we know little about what contributes to sexual flexibility in the face of ED.

Overall, the sample size for each subgroup in our study was too small for further statistical testing. That said, 558 men did participate in a study that announced upfront that AI was a focus (a requirement from the university's human ethics committee). Of those, 526 men answered the questions on AI rather than skipped them. This suggests that discussing this practice is not out of the

question for many PCa patients. Further research, however, is needed into this practice (and a broader range of sexual practices) to understand what can help men explore new sexual practices in the face of iatrogenic ED.

Clearly, a singular focus on recovery of erections for the purpose of vaginal penetration is not helpful for nonheterosexual men who are trying to regain a sex life after PCa treatment. Our results suggest that such a narrow focus may also be unnecessarily restrictive for some heterosexual men. Our findings confirm that flexibility in sexual practice, which goes beyond erection-dependent activities, is possible for some men with iatrogenic ED. Knowing of this possibility may be reassuring for individuals facing the risk of ED from cancer treatments. Knowing in particular of the flexibility that we have documented in AI practices may be helpful for men who already engage in AI, as well as for others who have not previously included that as part of their sexual repertoire [19].

Some health practitioners are reticent in discussing sex practices other than penile/vaginal intercourse [23] or for that matter sexuality in general with PCa patients [24]. If patient outcomes in relation to sexuality are to be improved, this reticence needs to be addressed. Doing so by training health care providers in counselling men dealing with iatrogenic ED and in support programs for those patients and their partners may be appropriate.

Conclusions

There is an increasing interest in the consequences of PCa diagnosis and treatment on the sexual lives of men and their partners. However, nonheterosexual men living with PCa receive little attention, and health promotion resources for that population are scarce [23]. That said, a single focus on restoring erectile function for vaginal intercourse is not necessarily adequate for men with iatrogenic ED whether they are nonheterosexual or heterosexual. Our study of AI among nonheterosexual and heterosexual men before and after PCa treatments suggests that a broader focus on a wider range of sex practices and interests may have therapeutic value. We have documented that at least some men, nonheterosexual and heterosexual alike, with ED from PCa treatments are capable of experimentation and adaptation in their sexual lives. This finding points to a need for wider ranging research on the sex lives of men living with

PCa that goes beyond just treating ED and considers a more fluid concept of sexuality.

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