

ORIGINAL RESEARCH

Impact of Prostate Cancer Treatment on the Sexual Quality of Life for Men-Who-Have-Sex-with-Men

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ABSTRACT

Introduction. With earlier prostate cancer (PCa) diagnosis and an increased focus on survivorship, post-treatment sexual quality of life (QoL) has become increasingly important. Research and validated instruments for sexual QoL assessment based on heterosexual samples have limited applicability for men-who-have-sex-with-men (MSM).

Aim. We aimed to create a validated instrument for assessing sexual needs and concerns of MSM post-PCa treatment. Here we explore post-PCa treatment sexual concerns for a sample of MSM, as the first part of this multi-phase project.

Methods. Individual semi-structured interviews were conducted with 16 MSM face-to-face or via Internet-based video conferencing. Participants were asked open-ended questions about their experiences of sexual QoL following PCa. Interviews were recorded, transcribed verbatim, uploaded to NVivo 8TM, and analyzed using qualitative methodology.

Main Outcome Measure. We have conducted semi-structure qualitative interviews on 16 MSM who were treated for PCa. Focus was on post-treatment sexual concerns.

Results. The following themes were inductively derived: (i) erectile, urinary, ejaculation, and orgasmic dysfunctions; (ii) challenges to intimate relationships; and (iii) lack of MSM-specific oncological and psychosocial support for PCa survivorship. Sexual practices pre-treatment ranked in order of frequency were masturbation, oral sex, and anal sex, an ordering that prevailed post-treatment. Sexual QoL decreased with erectile, urinary, and ejaculation dysfunctions. Post-treatment orgasms were compromised. Some single men and men in non-monogamous relationships reported a loss of confidence or difficulty meeting other men post-treatment. Limited access to targeted oncological and psychosocial supports posed difficulties in coping with PCa for MSM.

Conclusions. The negative impact on sexual QoL can be severe for MSM and requires targeted attention. Penile-vaginal intercourse and erectile function have been the primary focus of sexual research and rehabilitation for men with PCa, and do not adequately reflect the sexual practices of MSM. Our findings suggest that future research dedicated to MSM with PCa is needed to incorporate their sexual practices and preferences specifically into treatment decisions, and that targeted oncological and psychosocial support services are also warranted. **Lee TK, Handy AB, Kwan W, Oliffe JL, Brotto LA, Wassersug RJ, and Dowsett GW. The impact of prostate cancer treatment on the sexual quality of life for men-who-have-sex-with-men. J Sex Med **;***:**_**.**

Key Words. Prostate Cancer; Quality of Life; Sexual Dysfunction; Survivorship; Qualitative Study; Gay Men; Men-Who-Have-Ssex-with-Men; Homosexual

Introduction

According to the Surveillance, Epidemiology, and End Results (SEER) program of the National Cancer Institute (NCI), the estimated incidence of new prostate cancer (PCa) cases in the United States will be over 220,000 in 2015, with a prevalence of approximately 2,800,000 in 2012 [1]. Assuming 5% of the male population are men-who-have-sex-with-men (MSM), this translates to a possible incidence of over 11,000 and prevalence of 140,000. However, there are barriers in accessing healthcare for MSM including the fear of discrimination upon disclosure on the part of patients and perceived discomfort on the part of healthcare professionals [2]. Increasing awareness of this population in both society at large and medical community has resulted in growing research on the health of MSM. However, compared with heterosexual PCa populations [3,4], few studies have addressed sexual quality of life (QoL) among MSM PCa patients post-treatment. Only recently has evidence emerged showing that the impact on sexual QoL from PCa treatment can be more severe for MSM than for heterosexual PCa patients [5,6]. For example, many MSM may not be able to perform their usual sexual role after PCa treatment, such as being the insertive partner in anal intercourse. Inability to ejaculate may also represent a more severe distress for MSM than for heterosexual men [6].

A challenge to QoL research in MSM who experience PCa is the lack of tailored and validated questionnaires. Two of the more commonly used and comprehensive questionnaires for PCa and male sexual function are the Expanded Prostate Cancer Index Composite and Male Sexual Health Questionnaire [7,8]. The majority of the participants during the development phases of those questionnaires were heterosexual, thus limiting their validity in the MSM population [9–11]. The International Index of Erectile Function (IIEF) has recently been modified to IIEF-MSM for the HIV-positive MSM subpopulation [12]. It contains questions on erectile function during insertive and receptive anal intercourse. However, it has not been validated for use with PCa patients, who might suffer from post-PCa treatment sexual side effects. Furthermore, it focuses solely on penile function without including other pertinent sexual practices such as oral sex and mutual masturbation.

In light of these limitations, we planned a four-phase project to inductively derive, pilot test, and

validate a sexual QoL assessment tool for MSM following PCa treatment. Reported here are the findings from phase 1, which involved semi-structured qualitative interviews with a sample of MSM. Future phases will focus on questionnaire prototype generation, pilot testing, and validation of the tool.

Methods

Procedures

Ethics approval was obtained from the Research Ethics Boards of British Columbia Cancer Agency and University of British Columbia. Local family physicians, nurses, health center representatives, and oncologists were included in the initial planning to help raise awareness of the study and facilitate recruitment. Professionally designed posters, study brochures, and business cards were displayed in public locations, including clinics tailored to the MSM population and major socio-political events for MSM, such as Pride Event. Online advertisements were posted on Facebook™ and Craigslist™. Potential participants were invited to contact the research coordinator via telephone or email, during which respondents were provided additional details about the study and evaluated for eligibility.

Eligibility criteria included being 75 years of age or under, a history of having sex with men, and a history of non-metastatic PCa treated with curative intent, which included radical prostatectomy, external beam radiation, and brachytherapy, with or without hormone therapy. The median age of PCa at diagnosis is 66 [1]. Therefore, in selecting a cutoff of 75 years old, we hoped to include about 50% of the sample within 10 years of their PCa treatment. We included participants regardless of whether or not they were currently sexually active as we were interested in exploring the impact of PCa and PCa treatments on sexual activity and experiences.

Eligible MSM were invited to participate. After informed consent was obtained, at a mutually agreed time one-on-one semi-structured qualitative interviews of 45–60 minutes were conducted and digitally recorded during either face-to-face ($n = 14$) or via internet-based video conferencing ($n = 2$) by the second author, a woman with previous expertise in sex research. Field notes were taken by the interviewer to document facial expressions and the body language of participants. Each participant received a nominal honorarium to acknowledge their time and contribution to the

study. Participants had no further involvement with the study after the interview.

Open-ended interview questions were generated through discussion among the multidisciplinary research team, which comprised two radiation oncologists who specialized in PCa, one academic sex therapist, one sex research sociologist, one PCa psycho-oncology research scientist, one professor of nursing, and one BSc level research assistant. The goal was to describe post-PCa treatment sexual QoL issues for a sample of MSM. Questions were designed to explore changes in sexual function, libido, relationships, and emotional well-being as a result of PCa treatment. Specific questions solicited details about insertive and receptive roles during anal intercourse, ability to perform the respective roles (penetrating partner or being penetrated), erectile function, satisfaction, ejaculation, and orgasm. Some sample questions included: “Can you describe your sexual activities before prostate cancer treatment?”, “How was your libido after prostate cancer treatment?”, and “How did you feel when you initiated sex?”.

Sample

Forty-three individuals who responded to our recruitment materials were screened, yielding 16 eligible participants (age range = 58–71, mean = 65). Their age at PCa diagnosis ranged from 55–67 (mean = 59), which is younger than the median age found in the SEER database [1]. The time from PCa treatment to interview ranged from 2 to 18 years (mean = 7). Treatment modalities included radical prostatectomy (n = 8), brachytherapy (n = 3), external beam radiation (n = 3), and combined surgery and radiation (n = 2). Hormone therapy was used by three participants; for two concurrent with external beam radiation, and for one after surgery, also concurrent with external beam radiation. Four participants were single, four were in a monogamous relationship, and eight were in non-monogamous relationships.

Data Analysis

Interviews were digitally recorded, transcribed verbatim, and verified for accuracy against the recording. One selected transcription was independently reviewed by all the authors, examining the content line-by-line, noting similarities and differences to facilitate comparison. A tentative coding schedule for content categorization was discussed until consensus was reached among the

research team. The transcripts were uploaded and coded to the finalized coding schedule using NVivo 8™ (© QSR International Pty Ltd., Melbourne, Victoria, Australia), a qualitative data analysis software program. To aid the trustworthiness of the findings, the interviews were each independently coded by at least two investigators. The coded data were subsequently read to derive themes describing prevailing perspectives and practices within and across the interviews. Themes were developed and refined through discussions among the authors. Pseudonyms are used for all quotes within this report in order to protect participants’ identities.

Results

Current Sexual Practices

Prior to PCa treatment, all participants were sexually active. Masturbation and oral sex were the most common sexual practices, and some men (n = 5) practiced insertive anal intercourse. Even fewer (n = 4) reported practicing receptive anal intercourse, mainly because of pain or lack of physical pleasure. A few participants had experienced early signs of erectile dysfunction and difficulty in achieving orgasm prior to being diagnosed with PCa. Once achieved, orgasm was almost always pleasant before treatment. After treatment, there was an overall decrease in sexual activity. Adam, a 62-year-old man, described, “It [PCa treatment] has greatly affected my sexual activity. I basically have no sex.” Similarly, 68-year-old George conceded: “I’d pretty much given up sex [after treatment], more or less voluntarily.” It is within the context of such changes that we focused on post-PCa treatment sexual QoL for the current MSM sample.

Erectile, Urinary, Ejaculation, and Orgasmic Dysfunctions

Consistent with literature reporting a high incidence of, and bother from, erectile dysfunction after PCa treatment [3,4], participants suggested that their loss of erectile function rendered them vulnerable to failing to perform sexually. As 63-year-old David suggested, “Now that I don’t have an erection . . . that door is basically closed.” Within this context, the inability to get an erection could also lead some men to give up on the possibility that they might recover from such changes, as 64-year-old Henry conceded: “I have no confidence to try it [to have sex] with anyone. I’ve lost all confidence, so I don’t even try.”

Many MSM studies report widespread acceptance of sex with multiple casual male partners, even among MSM with regular partners [13–15]. During sexual encounters with casual partners, the lack of an erection can be difficult to explain, and overall there was reticence among participants to disclose details of their PCa and treatments during such sexual encounters. Charles, a 71-year-old man, explained, “I’m always a little embarrassed that I can’t achieve an erection, because partners wonder what’s going on . . . I just say, ‘Oh, I probably need to take a Cialis or Viagra’. I never tell them the truth that I had surgery.” Similarly, 62-year-old Nathan pondered the potential for partners to misinterpret the lack of an erection: “‘Why is this guy not getting an erection?’ When we’re playing around with each other, you know, they thought ‘Maybe he’s not that interested in me or something.’”

It was evident in these and many other participant interviews how MSM valued operating outside their primary relationship to engage other sexual partners. Yet, within the context of casual sex, additional challenges emerged in the absence of an erection, and whether it remained feasible for participants to continue those practices.

When the participants were asked about their use of sexual aids, some mentioned intracavernous injection, which could be effective in producing an erection even after a non nerve-sparing radical prostatectomy. However, the lack of spontaneity and invasive nature of the injections were significant barriers to their use:

The one issue with me is the spontaneity . . . We’re big on [really like] the beach, so on the beach, if somebody seems interested and we’re interested, you can’t just sort of pop up an erection. (62-year-old Nathan)

So, think about this: You’re beginning to get horny, and the next thing you do is stick a needle into your penis? Men have very strange relationships to their penises. (67-year-old Peter)

Erectile dysfunction also impacted on the potential for anal intercourse. Isaac, a 65-year-old man conceded, “I can’t really be a top [insertive] in anal sex unless I take the extra erectile enhancement or dysfunction medication.” Furthermore, versatile 58-year-old Brad explained:

I still have the option of doing that [being receptive] and I don’t even really need an erection for that, although it’s not all that pleasurable if I don’t because, if I’m masturbating—yes, I can masturbate with a flaccid penis—but when you’re having sex with somebody you need a bit more stimulation and having an erect penis is probably helpful.

As reported in a recent SEER analysis, about 6% of post-prostatectomy patients required at least one incontinence procedures within the 20 months [16]. Urinary incontinence also impacted on participants’ sexual practices. Sixty-five year-old Isaac said, “I don’t really want to engage anybody with oral sex who, you know, is gonna be swallowing this stuff [urine] without knowing it,” while 58-year-old Brad detailed additional barriers:

Being incontinent is very disruptive because it’s very hard to feel sexual when you’re squirting urine all over the place. And being aroused does increase the incontinence and it’s just not very sexual.

Even though erectile dysfunction is a common side effect of PCa treatment, the willingness and ability to adapt did allow some participants to continue to engage in sexual activity, albeit modified and changed activity. However, incontinence, while less common than erectile dysfunction after PCa treatment, can be more difficult to manage and can limit sexual activity for some participants. It is clear, however, that these common side effects have specific ramifications for MSM in continuing their sexual lives with male partners.

Post-PCa treatment orgasmic function assessment typically focuses on the ability to achieve an orgasm [17]. All participants reported being able to reach satisfactory orgasm prior to treatment, and many were still able to achieve orgasm after treatment, even with a flaccid penis, provided that they had prolonged sexual stimulation. Charles, a 71-year-old man pointed out, “It [was] taking longer to achieve an orgasm,” and 66-year-old Peter described: “I am capable of having orgasms occasionally, and I have to masturbate myself for some time.” However, achieving an orgasm and having a satisfactory orgasm can be different. Participants described compromised post-treatment orgasms as “interesting,” “superficial,” or “incomplete.”

While advancing age is always a confounding factor in subjects’ ability to achieve an orgasm, our study confirms the findings of previous ones [6,18] that a reduction in the ejaculate contributes to dissatisfaction in the orgasmic experience. Among participants, the volume of ejaculate (or absence thereof) and the shorter duration of the orgasm was, indeed, troublesome. David, a 63-year-old participant explained, “The orgasm certainly is less intense than before the surgery, and the lack of ejaculate makes them a lot shorter,” and 59-year-old James contrasted his before and after treatment experience:

I find, when you've ejaculated, it's just more complete than when you have dry ejaculation. Okay, it's just longer and it's more relaxed than with the dry ejaculation.

In addition, there was a sense of loss expressed at the absence of ejaculation. With the advent of the HIV epidemic, some MSM have practiced withdrawal prior to ejaculation during anal intercourse, with higher frequency of oral sex and mutual masturbation as risk reduction strategies [19]. The visual impact of ejaculation may therefore play an important role in MSM's sexual activity, as 65-year-old Isaac suggested, "In terms of homosexual sex, ejaculate seems to be an important aspect of the culmination of the whole activity". Leo, a 62-year-old man, asserted:

For a man, ejaculate is really essentially about . . . It's instinctive and it's behavioral response to stimulation and then you ejaculate and it's shoot, shoot, shoot. And with each of those is a body experience, and somewhat of a macho . . . I am a man, I'm in charge, I'm here, watch me . . . and that's gone.

In summary, the erectile, urinary, orgasmic, and ejaculate changes were interconnected with significant potential to impede a range of sexual practices and performance among the participants. Evident also was the potential for MSM to internalize these changes and conceal their PCa to partners, forgoing some sexual activities while privately experiencing a real sense of loss.

Challenges to Intimate Relationships

For MSM with PCa, sex remains a central feature of personal, social, and cultural connectedness. Some participants had lived through the pre- and ongoing AIDS eras and had changed their sexual activities based on risk reduction strategies related to HIV infection prevention. As 62-year-old Adam reflected:

From our age group, eighty-five percent of our friends are dead already [from AIDS]. But like I said, we used our sexual activity to make friends. That's the old way. I've had to learn a new way of making friends.

Building on this, PCa brought its own set of challenges in intimate relationships for such men. Participants who were single often encountered difficulty pursuing new sexual partners or long-term relationships. Ethan, a 69-year-old explained that, "I have distanced myself, or withdrawn to some degree from a number of relationships—a number of acquaintances. I've isolated myself, a

little bit," while 64-year-old Henry's self-esteem had reduced for an array of reasons:

I've lost all confidence that I could try it [to be in a relationship] with anyone. I've gotten older. I've gotten uglier. I've gotten fatter. I've gotten flabbier. It's just in my head; that's the way it is.

In contrast, having a stable relationship, even a non-monogamous one, either a long term or newly formed one, might lessen the impact of sexual side effects. Often, participants were initially uncertain when their partners approached them for sex. Over time, they were able to adapt sexually, find common ground with their partners, and remained optimistic about the future:

I've got a constant partner, whereas before it was just random situations. So for me, right now, I'm enjoying life a whole bunch better than I did before. I'm very happy with the way things are, because I'm with the man that I want to be with. (68-year-old Kirk)

I found my calling or reinvented myself as a bottom. There's been a lot more anal sex with me receiving since treatment, and my partner is happy with that. (62-year-old Nathan)

[With intra-cavernous injection], we could re-enter the bathhouse multiple-partner play time . . . I felt [my partner] needed to have the choice to do that more than ever because he's a bottom and I was not performing the same. So we adapted. It's a different sexual behavior or sexual practices, patterns, activities. (62-year-old Leo)

Therefore, having supportive partners and flexible sexual practices helped these participants overcome some PCa treatment-induced side effects.

Lack of MSM Specific Oncological and Psychosocial Support for PCa Survivorship

Gay community activism and health promotion activities have saved lives, raised awareness and provided a platform for those affected by HIV/AIDS to discuss their feelings openly and seek emotional support. PCa can also be stressful and life-changing, and for many MSM, having PCa requires targeted supports. As 58-year-old Brad confirmed, "It helped to know that I'm not the only gay person with prostate cancer." However, a majority of participants did not know other MSM with PCa.

Physicians, especially oncologists, may not feel comfortable or lack the knowledge to discuss male-to-male sex after PCa diagnosis or treatment [2]. Some participants relied on self-education, often extrapolating findings based on heterosexual samples to their sexual practices. The information

and services they found were sometimes irrelevant, inaccurate, inconsistent, or outdated [20]. Nathan, a 62-year-old, explained:

My GP knew that I was gay. I'm not sure if that information filtered through to the urologist. I don't remember specifically telling him, but I may have. But there was never any discussion about homosexual sex, that's for sure.

Similarly, 63-year-old David said, "The urologist himself wasn't too forthcoming with those things. I'm fairly quiet. He was fairly quiet, and he was straight." These health system and service issues left many MSM without psychosocial support. While there are many information pamphlets and support groups for PCa patients, these are not necessarily targeted to or inclusively for MSM. As 62-year-old Adam pointed out, much of the information he found was general, "I got all this information that would cover everybody that ever had prostate cancer, but it was not specific to me."

Some men were also uncomfortable disclosing their sexual orientation in PCa support group settings, as 71-year-old Charles confided, "I feel that I have to hide my homosexuality there [in the support group], because there are a lot of straight people there, and they may not approve."

In addition, the sense of difference and isolation was compounded when it came to discussing sex and partnerships. As 58-year-old Brad suggested:

They all had wives of course, and women are much less likely to approve of some sexual relations outside of the marriage. Maybe their wives really couldn't care less if there was no more sex. So they all seemed pretty satisfied, and when I brought up the issues of sex, I was getting just the feeling from them like, 'what are you worried about that for,' like 'just be concerned that you're cancer free,' and I just could not relate to that.

In summary, it was evident that mainstream professional oncological and psychosocial health services and support did not adequately serve MSM with PCa. Instead, there was neglect and ignorance of the needs of MSM and such men often had to find other means and mechanisms to find relevant information and support, especially in regards to sexual changes and relationships.

Discussion

While PCa treatment side effects have been studied extensively in heterosexual men [3–6], their impact on MSM is poorly understood. The current study offers new insights into the chal-

lenges in sexual practices and relationships, and the specific oncological and psychosocial needs for MSM with PCa. Our ultimate goal is to develop and validate an instrument to assess sexual QoL for this group of men by studying treatment-induced side effects within the context of MSM sexual practices. This report on phase 1 of our project offers insights into the challenges in sexual practices, relationships and the specific oncological and psychosocial needs for MSM with PCa. Findings in the current study will help guide future research on sexual health for this underserved group.

Erectile and orgasmic dysfunction has been a strong focus in heterosexual PCa research with the default position of penetrative vaginal intercourse being the psychological and physiological norm [17,21–23]. However, consistent with the results from Méthy et al., our findings confirm MSM's preference for oral sex and mutual masturbation over penetrative intercourse [24]—something that requires rethinking about how such men are provided with advice about the sexual consequences of PCa. Further, in this context, urinary incontinence among MSM also has implications of anxiety about leaking urine in oral sex and/or mutual masturbation.

Furthermore, orgasm in the absence of ejaculate (anejaculation) is also an issue for MSM in terms of how it alters the look and feel of a sexual experience, particularly when it occurs outside of penetrative sex, when MSM practice safer sex. Anejaculation for MSM can be demoralizing as it diminishes a long established and much valued part of the different sexual activities. Combining erectile dysfunction and urinary incontinence in mutual masturbation and oral sex with anejaculation adds to a sense of failure and emasculation for MSM. Future research on sexuality and PCa needs to explore MSM's strategies for dealing with these difficulties if we hope to address the explicit needs of MSM who experience PCa.

Bokhour et al. published one of the earliest studies on how sexual dysfunction can erode men's confidence and self-esteem, and subsequently threaten both their existing relationships and ability to establish new ones [25]. That study only included heterosexual men. MSM are less likely than heterosexual men to be living with a partner [26,27]. Therefore, PCa treatment-induced sexual dysfunction particularly burdens single and non-monogamous MSM, who rely on sex as an important way to form new relationships.

Even for MSM in long-term relationships, sexual dysfunction may force patients to change their roles; e.g., abandoning the insertive role in anal intercourse. While some participants and their partners were able to adapt to PCa treatment-induced changes, as previously described [28], couples with strong preferences for insertive or receptive roles may be challenged in sustaining their preferred sexual practice in relationships. The flexibility revealed by some of our participants, however, confirms the need to include explicit survey questions that explore possible changes in these components of MSM sexuality. Just being surveyed on these topics has the potential to bolster the men's sense of self-esteem and self-worth in regards to sexual activity and relationships.

Lastly, while a PCa diagnosis and treatment decision-making are daunting for all men, many MSM face this ordeal alone or without adequate levels of social support. Typically, MSM with PCa are older and have grown up with varied but pervasive levels of discrimination. For the most part, they have learned to conceal their sexual orientation, especially when interacting with healthcare providers. This has forced MSM to self-educate and to make healthcare decisions, including those related to PCa treatments, without necessarily having their sexual needs taken into account. The scarcity of MSM-specific information on PCa treatment effects, and the lack of MSM-focused PCa support group further disadvantage MSM [29]. Our study points to the need for targeted oncological and psychosocial services and support for MSM with PCa [30], simply because no patient, including those in the MSM community, should face the most commonly diagnosed male cancer without adequate and appropriate services and support.

In summary, our findings reveal several ways that PCa treatments affect sexuality for MSM that distinguish them from heterosexual men. Knowledge of these differences can aid health professionals in identifying specific ways to help MSM patients make PCa treatment decisions cognizant of the implications to their sexual QoL.

Conclusion

According to the 2015 SEER database, the median age for PCa diagnosis is 66-years-old with close to 100% 5-year overall survival [1]. With increased life expectancy and overall improved health, many MSM men will be sexually active at the time of diagnosis [31]. Treatments of curative intent, such

as radical prostatectomy, external beam radiation, or brachytherapy, with or without anti-androgen therapy, can all lead to sexual dysfunction, which has been shown to underlie survivors' decisional regret [32]. Healthy MSM can be concerned that erectile and anal dysfunction from PCa treatments may affect their ability to find new partners and/or maintain current relationships [33]. At the same time, patients' expectations on post PCa treatment sexual function can be unrealistic for many reasons [34]. A mismatch in expectations can be potentially more severe for MSM than for heterosexual men because of a failure of health professionals to acknowledge and address all the factors potentially contributing to MSM's sexual QoL before PCa treatments.

PCa treatment sexual side effects vary with specific treatment modalities. For example, rectal injury is more common from radiation than surgery, and therefore may have greater impact on receptive versus insertive anal intercourse. Although post-prostatectomy erectile dysfunction is immediately more severe than with radiotherapy, patients need to know that erectile dysfunction emerges at varying rates with all effective forms of localized PCa therapy. The impact of, and tolerance for, active surveillance by MSM is uninvestigated. As such, currently health professionals do not have enough information to advise individual MSM diagnosed with PCa about treatment options that will most effectively help them maintain their sexual QoL.

As demonstrated in this study, MSM sexual activity can be diverse and the consequences of PCa treatments are different for MSM. The same side effects in heterosexual men may have different and/or additional effects for MSM. Therefore, usage of QoL instruments focused on heterosexual sexual practices maybe insufficient and inappropriate when conducting scientific research on and clinical assessments of MSM with PCa [9–11].

In the modern era of PSA testing, patients with PCa are commonly diagnosed early, when they are still young and sexually active, and have many treatment options. Many heterosexual patients in that situation have the opportunity to discuss treatments with other patients prior to committing to a specific PCa treatment, and receiving ongoing emotional support and encouragement afterwards. This is quite different from the experience of our participants, who often found themselves alone in facing treatment decisions, recovery, and side effects. There is a clear need for MSM-dedicated support groups or platforms where MSM patients

can obtain information and share their concerns openly. In the present digital age of connectivity, online MSM-centered support group(s) may be a viable interim solution to providing such oncological and psychosocial support to this population [35].

We intend to incorporate the findings of the current study into the next phases of our research, which involves creating and testing a QoL instrument that will identify specific MSM issues and address sexual QoL among MSM with PCa. Once validated, such an instrument can be used along with long term, sexual side effect data to help patients decide on treatments based on the sexual practices that are most important to them.

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