

Research Article

Improving Sexual Well-Being Support for Men With Prostate Cancer: The Health Professional Perspective

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Purpose: The provision of evidenced-based sexual well-being support is considered a key metric of quality prostate cancer care. However, patients continually report high rates of unmet sexual health needs. To provide insight into the challenges healthcare professionals (HCPs) face in delivering sexual well-being support, we conducted a qualitative study.

Methods: HCPs were recruited via professional organisations/networks and snowballing. Interviews were semistructured, conducted via telephone/video and transcribed verbatim. Interviews explored work experience, sexual support provided, challenges faced and areas of prioritisation to improve care delivery. Data were analysed using reflexive thematic analysis. The lack of representation from urologists and radiation oncologists was a limitation.

Results: Twenty-one HCPs were interviewed, including nurses, pharmacists, sexologists, a physiotherapist and an oncologist. Eight key themes were identified. Themes 1–5 describe the challenges faced by HCPs in providing sexual well-being support, such as logistical issues and reliance on other HCPs. The remaining three themes describe areas of change recommended by HCPs to improve delivery of support, including standardisation of penile rehabilitation guidelines, training for specialists and GPs and prioritisation of multidisciplinary sexual well-being support as part of routine care.

Conclusions: HCPs face several challenges in providing sexual well-being support to prostate cancer patients, which could be ameliorated through greater awareness and education about the importance of sexual well-being support and through standardising pathways and guidelines. Addressing challenges faced by HCPs in the delivery of sexual well-being support may ultimately improve patient experiences and reduce unmet sexual health needs following prostate cancer treatment.

Keywords: male; prostatic neoplasms; qualitative; sexual health; survivorship

1. Introduction

Prostate cancer is the most commonly diagnosed cancer in Australian men, affecting one in five men in their lifetime [1]. Although prostate cancer is a highly treatable disease and the 5-year survival rate exceeds 95% [1], patients will experience a plethora of short- and long-term side effects from treatment, particularly regarding their urinary, bowel and sexual

function [2]. Quality survivorship care should involve the regular assessment and management of common treatment-related side effects, such as psychological distress, urinary, sexual and bowel dysfunctions and cancer recurrence monitoring. Ideally, it is recommended that prostate cancer survivorship care be managed by a multidisciplinary team of healthcare professionals (HCPs), encompassing the urologist, other specialists including radiation and/or medical

oncologists, prostate cancer specialist nurses, general practitioners (GPs) and allied health professionals [3].

Sexual well-being concerns are one of the most frequently reported unmet needs identified by prostate cancer survivors across all treatment modalities [4, 5], and research has demonstrated that sexual dysfunction significantly impacts men's quality of life, self-esteem, mental health, relationships and masculinity [2, 6]. An international panel recently published their recommended guidelines on sexual healthcare for prostate cancer patients [7]. They considered the provision of evidence-based clinical care on sexual well-being to be a key metric of quality prostate cancer care. They strongly recommended that clinicians initiate discussions about sexual well-being prior to treatment, provide information on the likely outcomes of treatments on sexual function, discuss treatment for erectile dysfunction, counsel patients on lifestyle modifications and offer to provide/facilitate psychosexual support for patients not coping well [7].

Despite these expectations, research routinely identifies shortfalls in the care provided as a common cause for patient's unmet sexuality needs posttreatment, such as the lack of clinician-initiated discussion or sense of responsibility for managing sexual well-being [8–12], and a perceived lack of education and comfort discussing and managing sexual issues (particularly for nonheterosexual patients) [13–16]. Given patients continue to report unmet sexual needs [17, 18] and do so up to 15 years postdiagnosis [5], barriers to the delivery of sexual well-being support should be further explored. Previous research in general healthcare settings suggests HCPs may avoid discussing sexual issues with patients due to a lack of knowledge/skills, poor confidence and concerns of offending patients [19]. It is highly likely that HCPs face additional challenges in providing support, particularly in the prostate cancer setting, as they are expected to provide information and support to patients in relation to sexual health issues within very short appointment times. By exploring and identifying the challenges in healthcare delivery from the HCP perspective, recommendations for change can be made to improve patient outcomes and experiences. Therefore, we conducted a qualitative study with HCPs involved in the provision of sexual well-being information and support to men with prostate cancer, with the aim of providing an in-depth insight into the challenges faced by HCPs in providing sexual well-being survivorship care.

2. Methods

This study was part of a broader research project investigating sexual well-being and support for prostate cancer patients and received ethics approval by the Southern Adelaide Clinical Human Research Ethics Committee in November 2023 (LNR/23/SAC/146).

2.1. Participants and Recruitment. Eligible participants included any HCP working in Australia with experience caring for, or providing information and/or support, to prostate cancer patients, who were aged 18 years or older and proficient in English. Study advertisements were distributed via

professional networks and organisations (such as the Prostate Cancer Foundation of Australia), and those who registered their interest in the study were provided an information sheet and consent form to complete prior to the scheduling of an interview. Snowball recruitment methods were also utilised to recruit HCPs from those already participating in the study. We aimed to recruit a variety of HCPs, including clinical specialists, nurses, pharmacists and allied health professionals. As per Braun and Clarke's reflexive thematic analysis approach [20], the intention of recruitment was to include a broad range of HCPs involved in prostate cancer patient care and conduct rigorous interviews to ensure deep, meaningful data were collected.

2.2. Data Collection. All participants were recruited and interviewed by a female researcher (M.C.) with qualifications (PhD) in psycho-oncology and prostate cancer, and previous experience interviewing and conducting qualitative research methods. Participants were individually interviewed in March–April 2024, via telephone/video, and all interviews were recorded and transcribed verbatim. On the commencement of the interviews, the interviewer introduced themselves and detailed their role in the study, previous research experience and the study background/aims. Formal field notes were not taken, and transcripts were not returned to participants for review. Interviews were on average 62 min in length (ranging 44–87 min). A semistructured interview guide was used (see supporting information), which incorporated open-ended questions and prompts created by the authors. The guide was based on a review of previous research, clinical experience and through consultation with a prostate cancer patient advisory group. The interviews explored the HCPs work experience/background, the sexual well-being support they typically provide to prostate cancer patients and challenges in providing support.

2.3. Data Analysis. Transcripts were analysed using Braun and Clarke's reflexive thematic analysis approach due to its flexibility and adaptability as the analyses were exploratory [21]. This included six key stages: (1) immersion and checking of the transcribed interviews to ensure accuracy and familiarisation to the content; (2) initial coding of transcripts which involved both inductive coding and deductive coding of all raw data based on a simple framework adapted from the interview guide; (3) categorisation of codes; (4) refinement of categories into meaningful themes; (5) formalisation of defined themes; and (6) summarisation of themes with extracts from the data [21]. Some codes and themes were discarded during the analysis process as they either were not related to the research aims or were not backed up by enough data to draw meaningful conclusions. Analysis was primarily conducted by author M.C., though regular discussion of emerging codes and themes during the interview and early analysis process occurred with author K.B. The proposed themes, supported with extracts, were discussed with author K.B. prior to the final analysis. A summary of the results was provided to participants for

comment prior to study publication. Illustrative quotes presented are notated with the participant's number and occupation.

3. Results

3.1. Sample. Twenty-one HCPs were interviewed (out of 26 whom expressed interest). Those who were not interviewed were either unable to participate due to scheduling conflicts, nonresponse to interview scheduling follow-up or site-specific issues relating to the participation in research. The 21 participants comprised 13 nurses (including prostate cancer specialist nurses, urology nurse consultants and nurse practitioners), four pharmacists specialising in men's health, two sexologists, one men's health physiotherapist and one medical oncologist. Just over half of the participants (13/21) were women. A detailed overview of participant characteristics (gender, profession and speciality) is available in the supporting information. Participants worked in settings across Australia (varying in geographic remoteness) and in both private and public healthcare settings.

3.2. Overview of Themes. Based on our research aims and the perspectives of HCPs in the interviews, we identified eight key themes (Figure 1). The first five themes relate to the challenges faced by HCPs in providing sexual well-being support to prostate cancer patients (and their partners/families). Challenges included (1) reliance on other HCPs, (2) logistical issues in providing support, (3) the involvement of family in patient care, (4) specific regional/rural challenges and (5) navigating and overcoming patient barriers. The remaining three themes describe the areas of change identified by HCPs that were recommended to improve the provision of high-quality support to prostate cancer patients. These included wanting (6) increased awareness for the importance of sexual well-being in survivorship care, (7) increased awareness, accessibility (and provision) of support services and (8) standardised guidelines for penile rehabilitation after prostate cancer diagnosis. These themes are discussed in turn below, with accompanying illustrative quotes.

3.3. Challenges Faced by HCPs in Providing Support. HCPs involved in the study viewed sexual well-being as an essential part of survivorship care and, in general, described themselves as having sufficient knowledge and understanding of the issues patients face regarding the impact of prostate cancer treatment on sexual well-being. However, they described experiencing several challenges and issues related to the provision of sexual well-being support, which are discussed in turn below.

3.3.1. Reliance on Other HCPs. Most of the participants in the study reported that they were reliant on other HCPs (such as treating specialists, GPs or nurse practitioners) to prescribe erectile dysfunction medications for their patients,

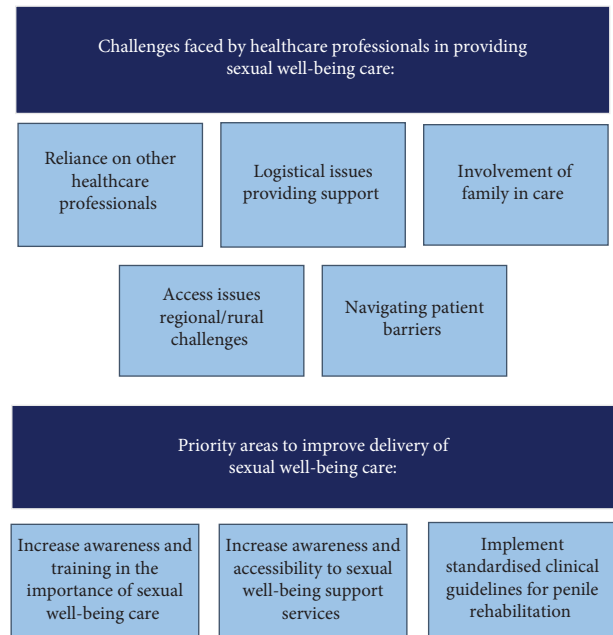


FIGURE 1: Themes identified from interviews with healthcare professionals.

despite the fact they were often the one responsible for providing education and demonstrating the treatment (particularly for intercavernosal injection [ICI] treatments). While for some nurses and pharmacists this process had been streamlined, others faced challenges due to poor understanding of the medications among GPs/treating specialists and the wait times associated with appointments for patients to obtain prescriptions. Several participants stated they were largely unable to assist patients in accessing these prescriptions due to the inaccessibility or limited support from other HCPs.

Urologists will be like, I don't know how to write up for that drug, get your GP to do it. And the GP goes oh, I don't write these scripts, the urologist needs to deal with it. And then there's the patient going well, who's doing this? So that's yeah, quite tricky. (Participant #2, Pharmacist)

Regardless of whether the HCP worked in the public or private sector, referral pathways and processes varied considerably, and referral for survivorship support after seeing a treating specialist for diagnosis/treatment was rarely an automatic process. It was very common for participants, especially those working in the private sector, to have to rely on treating specialists to refer patients to their service for support. Often this required the HCP to proactively identify treating specialists and build relationships with them over time, occasionally needing to justify the benefits of referring patients to them for support. Many HCPs commented that this was a challenging aspect of their work, given the considerable time and effort required on their behalf to network and build reliable relationships with treating specialists, particularly those outside of urology.

It's been hard, you know, getting people to trust you. You know. Other people like the urologists were fine but getting the radiation oncologists and the medical oncologist to trust me to do this sort of stuff, because they didn't know me [was hard]. (Participant #7, Nurse).

Often HCPs had to rely on others to provide sexual support to their patients due to limitations within their scope of practice or due to their high workloads. For instance, several nurses noted that, within their specified roles, they were unable to personally provide education and support to patients for ICI therapy and had to refer their patients to a colleague or other support service (such as a pharmacist). Other reasons for referral to a colleague for patient management included geographic location (i.e., metropolitan HCPs referring patients to a local HCP) and treatment speciality (i.e., the HCP can only see patients whilst they receive radiation treatment). While such collaboration and shared care was beneficial for many HCPs and patients, some participants indicated that this could lead to patients being lost within the system of care.

Our service doesn't allow us to do that education. It's quite time consuming. We just don't have the resources. So we refer a lot of our patients. (Participant #4, Nurse).

Another challenge for many HCPs in the study was the lack of accessibility and existence of psychological services which specialised in men's health and intimacy/relationships. Participants acknowledged many patients would benefit from psychological services, but referral was difficult either because these services were not available in the area or were too financially costly for patients, or due to the stigma surrounding psychological support. Some HCPs were comfortable discussing intimacy and relationship issues with patients and their partner (and had sought out additional education from international/tertiary providers). Others expressed feeling unprepared or being required to work outside of their scope when patients required this additional support from them.

It's hard to convince men to pay to go and see a sexologist, or someone who will talk about intimacy, I don't do those conversations very well... I don't think I'm well equipped with the skill set to really to counsel them appropriately around, you know, maybe different intimacy strategies or things to try. I mean, I'm just, I'm not a psychologist, and I don't have that skill set as part of what I do. So that's a challenge and definitely a gap in the service ... I'd love to be able to do a referral service where we could get them seen by, you know, a psychologist who has a special interest in sexual health or a sexologist and manage them that way, because I think a lot of relationships would benefit from that. (Participant #3, Nurse).

3.3.2. Logistical Challenges in Providing Support. It was routinely acknowledged that HCPs required access to a private space to have detailed conversations with patients

about their sexual well-being, and unfortunately for some this was unavailable in their workplace, either completely or partially. Inaccessibility to private spaces prevented HCPs from enquiring about patient's sexual well-being and demonstrating the use of sexual function aids (such as vacuum erection devices and ICI therapy). One nurse explained trying to address this issue by referring men to information online.

I normally refer them to a website... mainly because of time constraints and also we don't have much physical space in our clinic, and nowhere we can have an intimate conversation for sure. You'll get walked in on. (Participant #4, Nurse).

Several HCPs also discussed the challenge of providing support and care for patients' sexual well-being over the phone. This topic is considered intimate and deeply personal for patients and requires a comfortable setting to facilitate open discussion. When providing care via phone, which was a common process for patient follow-up, HCPs found this could be difficult if the patient was in a public place (e.g., sporting clubs or work) or in the company of others. Therefore, finding the appropriate time to discuss sexual well-being with patients, whilst providing them with accessible care, often presented a challenge to HCPs.

If you phone them, you don't know where they are. And I usually have to seek permission like, like one gentleman was in a golf course. So we're not gonna talk about sexual function today... That to me is a challenge. (Participant #15).

In general, HCPs in the study acknowledged the importance of and need for access to resources for demonstration and education purposes, such as anatomical models of the penis/pelvis, vacuum erection devices and trial medication for ICI therapy. The benefits of having demonstration resources on hand included that they helped to facilitate discussions, enabled patients to better visualise the use of sexual dysfunction treatments and could serve to destigmatise the process for the patient. Some participants did not have such resources available, and others described having to pay out-of-pocket for demonstration medications and devices as their workplace were unable to facilitate the purchase.

I ended up just buying [the injection medicine] myself, because I'm like this is what I need in my clinic to give the best care. So not ideal... And the same with the vacuum pumps... There's just no budget, I guess, for miscellaneous needs. But you know, I just went and bought them as well. So I have some pumps to show patient. (Participant #16, Nurse).

3.3.3. Involvement of Family in Care. Partner involvement in care, particularly when discussing sexual function and activity, was highly supported and encouraged by HCPs; however, this depended on the nature of the relationship between the patient and family member. It was common for

participants to state that ‘*two’s better than one*’, as partner involvement was believed to increase participation, engagement and understanding of the education and information being provided. It also assisted in facilitating discussions with (and between) the couple, to identify needs and goals regarding sexual activity, as well as discuss erectile dysfunction treatments and practicing intimacy outside of penetrative sex. However, it was also commonly acknowledged that the presence of others at appointments—be it intimate partners or family members—occasionally could hinder the provision of support and information. For instance, one participant shared

“my hardest one is the old man that turns up with his daughter. You can’t ask [about sexual function]” (Participant #15, Nurse).

Partners who appeared to be unsupportive or uncomfortable discussing sexual well-being and penile rehabilitation, or who were uninterested in participating in sexual activity, prompted issues for HCPs when providing patients with information and care, and were seen as a barrier for patients to access support. Overcoming this challenge often required the HCP to spend more time explaining the importance of penile rehabilitation (as more than a means to restore erectile function) or seek out additional time with patients to have the discussion privately.

I find the difficult ones are when the partner’s not that supportive. I actually had to ask a partner to leave the clinic for the first time in 9 years. Because she was just so derogatory, so negative. Just did not understand that this was not about him getting his erections back for intimacy. It was he just didn’t feel like a man anymore. And he was very depressed. (Participant #18, Nurse).

3.3.4. Regional/Rural Challenges. Specific challenges when supporting patients living in regional or remote areas were often discussed, particularly regarding the accessibility of other supportive care services. For instance, HCPs described issues with prolonged wait times to see GPs or allied health services (which affected the provision of erectile dysfunction treatment and penile rehabilitation) and the lack of services available in the area (especially psychological support). One nurse working in a regional area did not have a urologist currently working in the hospital and felt the local GPs were reluctant to prescribe medication for erectile dysfunction. This in turn resulted in patients needing to travel hours to the nearest town for appointments and prescriptions.

Because some GPs don’t want to do it, won’t write them. They don’t know enough about it. So I used to have to get them to the urologist to write the script, but I can’t now. It’s very limited here. (Participant #5, Nurse)

The provision of ICI therapy for erectile dysfunction was particularly challenging for HCPs working with regional/rural patients, as it requires frequent in-person consultations

to titrate the medication and monitor patient outcomes. As many HCPs relied on telehealth consultations to support rural patients in their prostate cancer survivorship issues, ICI therapy was generally less accessible to them. HCPs working with very remote patients also commented on occasionally having to work out of hours to accommodate patient schedules and access to telephone/internet services.

So one of our barriers would be remote, rural and remote, and no phone or internet. So we’ve got a whole massive part of our catchment area for men that we look after... [that] has no phone or internet unless they have landline at home. (Participant #1, Nurse)

3.3.5. Navigating and Overcoming Patient Barriers. One of the most challenging patient barriers to providing comprehensive support to patients was the financial inaccessibility of sexual aids and support services. HCPs described feeling disheartened when they were unable to facilitate support/treatment for their patients due to their financial circumstances, noting that for many patients, the cost of medications and private appointments with allied health services was too expensive.

The financial restraints are difficult. So I’ll talk to people about trying different things. And they’ll, they’ll say to me, I can’t afford it. Yeah, I’ll say, Oh, what about we try this, I can’t afford it. And so there’s this really pushed back that they want me to fix the problem, but they’re not sort of able to commit to, to what that might require. (Participant #3, Nurse).

This was particularly the case for vacuum erection devices and penile prostheses; HCPs often commented these were completely inaccessible for many patients, especially those without private health insurance.

Cost comes up quite a bit, especially with vacuum pumps, too, and certainly the prosthesis surgeries. Well, yeah, you know, if you’ve got private health, we do them publicly here at the hospital, but they’re on a waiting list, and they could wait 5 to 10 years to get it done. (Participant #7, Nurse).

Navigating this challenge was difficult for HCPs, requiring them to investigate cheaper or alternative treatment options (which may not be medically approved or evidence-based). Some HCPs working privately occasionally provided their support pro bono, so patients could prioritise spending money on treatments instead.

Unfortunately, there’s no Medicare rebate for a patient to see us [pharmacists]. . . But a public patient I waive that fee personally, so I’ve essentially seen them for free out of my own time. One to try and strengthen the relationships of referral. And two, because I really want these guys to spend their money on getting a product that they need. So if it’s a difference between paying to see me or paying to

get a product, I'd prefer for them to walk out with something that they can use to actually better themselves. (Participant #2, Pharmacist).

Navigating patient's lack of interest in or readiness to engage with penile rehabilitation during the first few months after diagnosis also presented a challenge to HCPs. Participants were of the view that some patients (and their partners) failed to realise the importance of restoring erectile function for more than their sexual function, requiring HCPs to spend considerable additional time educating them on the purpose of penile rehabilitation and penile health in general.

Often with the guys that have had surgery, their focus is predominantly on their incontinence. And so they will say to me, I just want to get this incontinence sorted first, and then I'll worry about my sexual function. And I say to those guys, if that's a priority for you down the track... we need to do them simultaneously, we need to manage both now. Because the longer you delay penile rehab, the more difficult it is to basically rehabilitate that organ. And we talk about vascular blood flow and the fact that if that's not happening, you will get shrinkage in the penis, you'll get this decompression of the veins, and it will make it harder to work on erections after. So that group are challenging to convince to start penile rehab. (Participant #3, Nurse).

This apparent disinterest extended far into some patient's survivorship, according to many HCPs. Although acknowledging that many patients are genuinely uninterested in engaging in sexual activity and therefore did not require further support in this area, HCPs often described that after time and through considerable rapport building, some would eventually disclose their 'true' feelings. Ensuring patient's unmet needs were met therefore required considerable time and energy from HCP to destigmatise and normalise the importance of sexual wellbeing, in addition to building a strong and trusting relationship with the patient. The time and effort required from HCPs was sometimes challenging, given their patient workload and availability.

And so many patients will come in and they'll really downplay how much it bothers them like, you know, one guy last week was saying to me, you know it's not the end of the world. There are so many other people who are more unlucky than me. But I want, I want this. And you know, explaining to the patients that you know prostate cancer treatments are awful, and the importance of survivorship care, and the importance of quality of life. You know, when they finally get it, and that they see that you take this seriously. They're like, Oh, okay, cool. Like. I don't need to be embarrassed about wanting this to be fixed. (Participant #6, Nurse).

3.4. Areas of Change Needed to Improve Provision of Support to Patients. HCPs identified several priority areas that they felt required improvement or change, for them to better provide

patients with comprehensive, high-quality sexual well-being support. These areas generally centred around the notion that sexual well-being and penile rehabilitation must be given more attention and considered more seriously by the healthcare system at large, beginning with the HCPs and extending to peak bodies such as government, professional organisations and non-for-profits. The following themes summarise the ways in which awareness could be raised and the changes to the existing system that could improve care provision, and ultimately, patient outcomes.

3.4.1. Increase Awareness of the Importance of Sexual Well-Being in Survivorship Care. Overwhelmingly, HCPs described the need for the healthcare system to place greater importance and priority in addressing patient's sexual well-being during their survivorship care. They indicated that, without this cultural shift and recognition, patients' needs would continue to go unmet.

[We need] a better culture around this service, the sexual health more broadly, and erectile function, penile rehabilitation. That conversation needs to be coming from every avenue and needs to have multiple checkpoints in the health system. (Participant #2, Pharmacist).

HCPs in the study often expressed feeling disappointed and frustrated at the lack of recognition and importance that some treating specialists and GPs placed on sexual well-being in patient survivorship. They recommended more education on the treatment options for erectile dysfunction, supportive care services and pathways (i.e., prostate cancer nurses, men's health pharmacists or other allied health professionals specialising in sexual well-being) and the importance of penile rehabilitation after treatment. It was the view of several participants that increased understanding and awareness among clinicians and GPs about sexual well-being support after prostate cancer would improve referral into support services and increase the prescribing of erectile dysfunction medications by these professions. While HCPs acknowledged time restraints and knowledge gaps were a barrier for treating specialists and GPs, they indicated that sexual well-being care needed to be prioritised and these barriers should not prevent patients receiving that care.

I'd love our doctors to actually realize the importance of sexual health for people... I really think our doctors need education. I think our GP's need education. GP's dismiss and just go here's a script for Viagra good luck, catch you later. I know they're busy. But like, we're all busy, right? (Participant #1, Nurse).

HCPs (primarily nurses) providing patients with in-depth sexual well-being support often had to challenge treating specialists on their beliefs and practices regarding the provision of sexual well-being support. Some felt that treating specialists failed to acknowledge the greater impacts on general well-being and quality of life that sexual dysfunction or poor penile health could have on a patient.

A couple of our consultants tend to say we don't need to address anything with sexual health or sexual wellbeing till 12 to 18 months. . . I actually have asked why do you not address penile rehabilitation and the psychosocial impacts of sexual wellbeing earlier? They don't have an answer, other than 'we're about curing the cancer'. I'm like, yeah, that's nice. But now these people actually have to live a whole life. Their marriage may break down, their family relationships, their friendship circle. (Participant #1, Nurse).

The medical oncologist who participated in the study indicated that without the pressure and guidance of the prostate cancer nurse working in his hospital, sexual well-being support would often not be discussed due to his lack of education and knowledge on how to address the problems which commonly arise:

"[The nurse] absolutely drummed it into me that's it's bloody important. And it is incredibly important. So I actually raise it now." (Participant #17, Medical Oncologist).

3.4.2. Increased Awareness, Accessibility and Existence of Support Services. The second major priority area discussed by HCPs was to increase the awareness, accessibility and existence of support services available to prostate cancer patients. Pharmacists in the study expressed the feeling that there was a lack of awareness for their service and the value they could bring to the survivorship care team, given their expertise in medication management. It was acknowledged by these pharmacists that this may be due to a lack of official accreditation or government support (i.e., through the public healthcare system) for their specialisation in men's health.

The other part is just not having any real official training. Where we can go and say, Yep, I'm now accredited as a men's health pharmacist. That doesn't exist. So if it did, it might make those initial conversations a bit easier. (Participant #9, Pharmacist).

HCPs across all streams routinely identified the significant role physiotherapists had in penile rehabilitation, though typically this service was usually only referred to when patients received radical prostatectomies. Several HCPs, including the physiotherapist interviewed, stressed the value of receiving support from a physiotherapist both pre-and posttreatment, regardless of treatment modality, to improve patient outcomes for both urinary and sexual function. Improving the accessibility of this service in the public healthcare system was considered a priority, as currently most physiotherapist services are private and therefore require the patient to pay out of pocket.

That'd be one thing, getting to see physio preoperatively, and perhaps in the public space, making specialized physiotherapy accessible to public patients. (Participant #21, Physiotherapist).

Similarly, participants often discussed the general inaccessibility of counsellors, psychologists, and sexologists who specialised in men's health, intimacy or relationships. Often these services were difficult to access for patients for a range of reasons, including their long wait times, financial cost or because they simply did not have this type of specialist in their town or city.

We have one sexologist here in [Town]. But her books are closed. They've been close for 3 years. So I do not refer anyone there. But we have a public sexual health clinic that we can refer to. I don't refer there too often. Probably because there's quite a long wait list. (Participant #1, Nurse).

HCPs in this study indicated that the ability to routinely involve such services in patient survivorship care would improve patient outcomes and allow them to provide more robust, comprehensive support to patients, in addition to reducing their already high workload. Participants called for additional funding and awareness for such services/experts, to ultimately improve accessibility for patients.

3.4.3. Standardised Guidelines for Penile Rehabilitation. The final priority area identified by the HCPs was for the creation of national standardised guidelines for penile rehabilitation post-prostate cancer treatment, with specific recommendations for each treatment modality. This standardisation would serve two purposes. Firstly, it would promote education to both patients and the larger healthcare system that penile rehabilitation aims to restore overall penile health after prostate cancer treatment; it is not just a means to restore erectile function for penetrative sex. For instance, HCPs often talked about having to clarify to patients and their partners that taking phosphodiesterase-5 (PDE-5) inhibitors (e.g., Viagra or Cialis) and engaging in manual stimulation (with or without a vacuum erection device) was an essential part of rehabilitation for overall penis health and should be conducted posttreatment regardless of interest in resuming sexual activity.

I think that some men are like, yeah, I don't have sex. I don't really have any libido. . . But you might experience penile shrinking. That means you can't actually urinate standing up, like this is actually, this is about your function, your physical quality of life outside of sex. (Participant #20, Sexologist).

Secondly, HCP suggested that the standardisation of rehabilitation guidelines could improve patients' awareness of and access to support services, in that penile rehabilitation guidelines should include a recommendation that patients be referred to a suite of services as part of their routine care postdiagnosis. These services should include at minimum: physiotherapy (for pelvic exercises as part of rehabilitation), sexual well-being specialists (e.g., a prostate cancer specialist nurse who has training in sexual well-being, a sexologist or men's health pharmacist) to facilitate rehabilitation and

erectile dysfunction treatment and psychologists or marriage counsellors (to better provide patients with intimacy counselling and mental health support).

I would love to see patients referred for sexual health counselling as a routine part of that preoperative treatment, like as part of their pretreatments, like not just teaching them about the surgery, but a comprehensive sexual health assessment, you know. You see the pre-op nurse, you see a physiotherapist, you see a sexual health nurse. Just to cover the bases. (Participant #6, Nurse)

It was also suggested that the guidelines should outline common treatment pathways/options for erectile dysfunction treatment. Furthermore, some HCPs recommended that vacuum erection devices should be provided to patients for free as part of standard care, as they were often considered an essential medical device for rehabilitation purposes.

I have this pipe dream that I'd love for every patient to be given a free vacuum pump after surgery, for example, and I have heard of other prostate nurses who, through charity and grants, have managed something like that. So it's something on my agenda for this year. (Participant #13, Nurse).

4. Discussion

The aim of this study was to provide an in-depth insight into some of the challenges HCPs face in the delivery of sexual well-being support to prostate cancer patients and identify areas for change to improve care delivery and patient outcomes. We interviewed HCPs, including nurses, pharmacists, sexologists and a physiotherapist and a medical oncologist, who were all involved in providing information and/or support to prostate cancer patients (and their families) relevant to their sexual function and well-being. We identified a number of challenges and issues experienced by HCPs which complicated care delivery, including the necessary reliance on other HCPs to facilitate/support care, logistical issues (e.g., having private space available for appointments), the involvement of partners/family, regional/rural issues and patient-specific barriers (e.g., patients' financial circumstances). HCPs also recommended several priority areas in which change to the current system: (1) increased education for treating specialists and GPs on sexual well-being in survivorship, (2) greater prioritisation and resourcing for multidisciplinary care teams in survivorship and (3) the creation of standardised penile rehabilitation guidelines.

As similarly reported in other Australian-led research with HCPs on the provision of sexual well-being support in cancer [22], participants in the present study described sexual impacts of cancer as more than a change in sexual function and fertility; rather they encompassed a range of biopsychosocial elements, including mental health, masculinity, body image and relationships with others. HCPs in this study considered sexual well-being as an important

aspect of prostate cancer survivorship, which should be routinely discussed with patients throughout their journey. This increased awareness for the importance of addressing sexual well-being in survivorship care likely reflects the ongoing research that identifies sexual issues as one of the biggest unmet needs among men with prostate cancer [4, 5, 17, 18, 23]. The recently published Guidelines for Sexual Healthcare for Prostate Cancer Patients [7] stress the importance for all clinicians to consider the biopsychosocial impacts of prostate cancer on sexuality and counsel patients accordingly. In line with this, HCPs in the present study (particularly nurses and pharmacists) felt strongly that further awareness and education, particularly for clinical specialists (i.e., urologists, radiation oncologists, medical oncologists) and GPs, was required to improve patient outcomes, as well as mitigate some of the challenges they experienced when providing support.

One of the most difficult challenges HCPs faced in delivering sexual well-being support was the necessary reliance on other HCPs for providing and facilitating care. The success of this shared care approach was largely impacted by the level of importance that HCPs placed on sexual well-being in care, as well as their knowledge of treatment/support options. Nurses in this study often described having to educate treating specialists themselves to ensure that patients were referred to their service and provided access to erectile dysfunction treatments—an account which was triangulated by the medical oncologist who was also interviewed. The provision of further training to increase awareness of the biopsychosocial impacts on sexuality prostate cancer can have, in addition to treatment and support options to manage these impacts, was strongly recommended by participants in the study, especially for treating specialists and GPs. As per the recommendations in the sexual healthcare guidelines for prostate cancer patients, clinicians involved in patient care should discuss all available erectile dysfunction treatment options with patients, including PDE-5 inhibitors, ICI therapy, vacuum erection devices and penile implants [7]. While most of the HCPs in the study described feeling confident in fulfilling this role, they often felt that many treating specialists and GPs lacked the knowledge to support these discussions and assist in facilitating treatment where necessary. Research suggests that HCP avoidance of discussing sexual well-being is often due to a lack of education and confidence in discussing a patient's sexual well-being, in addition to a lack of time available in appointments [19, 24, 25]. To ensure HCP participation in further education/training, it must be accessible, concise and relevant. One solution may be the provision of a brief, mandatory e-learning module tailored to treating specialists and GPs who manage prostate cancer survivorship care. A recent pilot study conducted in the United Kingdom with 44 HCPs involved in prostate cancer care confirmed that this strategy was acceptable and effective in improving HCP knowledge and understanding of sexual issues after prostate cancer and increased HCP confidence in discussing sexual well-being with patients [26]. Whilst further research on this intervention is required, results are promising, and such training modules warrant

consideration for adaption and integration into the Australian healthcare context.

Other recommendations made by HCPs in the study were for a more standardised treatment and care pathway for patients—both in regard to the referral and inclusion of allied health professionals for pre- and posttreatment care, and for the development and adoption of penile rehabilitation clinical guidelines. Penile rehabilitation is defined as interventions used to restore penile health and erectile function [27]. Currently, there are no standardised treatment regimens or clinical guidelines for penile rehabilitation for prostate cancer patients in Australia, though typically involves the use of PDE-5 inhibitors (to restore blood flow to the pelvis/penis), vacuum erection devices (to prevent atrophy) and, if desired, erectile dysfunction treatments such as ICI therapy (to restore erections) [27].

There is a plethora of evidence to suggest that penile rehabilitation after treatment improves patient outcomes in both their physical function and quality of life [28–31], though a significant proportion of the research focuses on postprostatectomy patients [31]. Further research studies, including randomised controlled trials, are required to better inform treatment algorithms and recommendations for both surgical and radiation treatment modalities. Regardless, given many HCPs are recommending and/or implementing penile rehabilitation protocols as part of routine care, standardisation of guidelines informed by the currently available evidence is recommended and will likely improve patient care delivery and outcomes.

HCPs in the present study also suggested that allied health professionals, particularly sexual well-being specialists (i.e., specialist nurses, pharmacists, physiotherapists and sexologists) and mental health experts, should also be involved from diagnosis onwards to both facilitate and support patient's rehabilitation and survivorship care. There is growing evidence and support for specialised nurse-delivered survivorship care improving patient outcomes [32–34]. Australian survivorship care has seen an increasingly prominent role played by government and charity-funded prostate cancer specialist nurses, with demonstrated competency in managing aspects of survivorship care. However, the number of specialist nurse positions falls well short of what is required to guarantee all men with prostate cancer have access to this support. With further resourcing, there is an opportunity for specialist nurses to assume a more central role in sexual survivorship care, linking in with other HCPs and taking advantage of other available services.

There are several limitations to the present study which should be considered when interpreting these results. First, the sample of HCPs was somewhat limited such that only one specialist clinician (a medical oncologist) was recruited into the study, despite significant efforts to recruit urologists and radiation oncologists. In addition, whilst our sample did include two sexologists, we were not able to recruit any other HCP who specialised in counselling, such as psychologists. While qualitative research does not necessarily aim to be representative and generalisable, inclusion of these professionals would have offered greater diversity in

perspectives and contributed to the understanding of issues/challenges faced by HCPs when providing sexual well-being support. Furthermore, this study was limited to practitioners working in Australia, and therefore, the experiences and perspectives of the HCPs involved reflect the Australian healthcare system. Differences in HCP roles and responsibilities, as well as healthcare and treatment options available to patients, may differ in other settings, particularly those without government-funded medical care.

5. Conclusions

This study utilised a qualitative approach to provide in-depth insight into the issues in prostate cancer sexual well-being survivorship care delivery from the perspectives of the HCPs providing such care. HCPs face numerous challenges in providing sexual well-being care to men with prostate cancer, many of which can be addressed by increasing the awareness of the importance of sexual well-being as part of high-quality survivorship care, at both the HCP level and through the greater healthcare system at large. Key priority areas for change, as informed by the HCPs in this study, include the creation and standardisation of penile rehabilitation guidelines, increased training for treating specialists and GPs and greater access to and involvement of nursing and allied HCPs with expertise in sexual health as part of routine care both pre- and posttreatment.

Data Availability Statement

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy and ethical concerns.

Ethics Statement

This study was performed in line with the principles of the Declaration of Helsinki. Approval was granted by the Southern Adelaide Clinical Human Research Ethics Committee in November 2023 (LNR/23/SAC/146).

Consent

Informed consent was obtained from all individual participants included in the study. The authors confirm that all participants consented to the inclusion of their deidentified quotes being used for publication.

Disclosure

The funders had no role in the design or conduct of the study including the collection, management, analysis, and interpretation of data, writing of the manuscript or decision to submit for publication.

Conflicts of Interest

The authors declare no conflicts of interest.

Author Contributions

Megan Charlick: conceptualisation, methodology, data collection, validation, formal analysis, writing—original draft, writing—review and editing and project administration. Kerry Ettridge: writing—review and editing. Tenaw Tiruye: writing—review and editing. Michael O’Callaghan: writing—review and editing and project administration. Sally Sara: writing—review and editing. Alexander Jay: writing—review and editing. Kerri Beckmann: conceptualisation, formal analysis, writing—review and editing and funding acquisition.

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Supporting Information

Additional supporting information can be found online in the Supporting Information section. (*Supporting Information*)

The supporting information provided includes the interview guide used in this study and the participant profile (supporting table 1).

References

- [1] “Cancer Data in Australia,” (2023), <https://www.aihw.gov.au/reports/cancer/cancer-data-in-australia>.
- [2] D. P. Smith, M. T. King, S. Egger, et al., “Quality of Life Three Years After Diagnosis of Localised Prostate Cancer: Population Based Cohort Study,” *Bio Medical Journal* 339, no. 2 (2009): b4817, <https://doi.org/10.1136/bmj.b4817>.
- [3] J. Dunn, A. Green, N. Ralph, et al., “Prostate Cancer Survivorship Essentials Framework: Guidelines for Practitioners,” *BJU International* 128, no. S3 (2021): 18–29, <https://doi.org/10.1111/bju.15159>.
- [4] M. K. Hyde, R. U. Newton, D. A. Galvão, et al., “Men’s Help-Seeking in the First Year After Diagnosis of Localised Prostate Cancer,” *European Journal of Cancer Care* 26, no. 2 (2017): e12497, <https://doi.org/10.1111/ecc.12497>.
- [5] C. G. Mazariego, I. Juraskova, R. Campbell, and D. P. Smith, “Long-Term Unmet Supportive Care Needs of Prostate Cancer Survivors: 15-Year Follow-Up From the NSW Prostate Cancer Care and Outcomes Study,” *Supportive Care in Cancer* 28, no. 11 (2020): 5511–5520, <https://doi.org/10.1007/s00520-020-05389-x>.
- [6] C. G. Mazariego, S. Egger, M. T. King, et al., “Fifteen Year Quality of Life Outcomes in Men With Localised Prostate Cancer: Population Based Australian Prospective Study,” *Bio Medical Journal* 371 (2020): m3503, <https://doi.org/10.1136/bmj.m3503>.
- [7] D. Wittmann, A. Mehta, E. McCaughan, et al., “Guidelines for Sexual Health Care for Prostate Cancer Patients: Recommendations of an International Panel,” *The Journal of Sexual Medicine* 19, no. 11 (2022): 1655–1669, <https://doi.org/10.1016/j.jsxm.2022.08.197>.
- [8] E. Chartier-Kastler, E. Amar, D. Chevallier, et al., “Does Management of Erectile Dysfunction After Radical Prostatectomy Meet Patients’ Expectations? Results of a National Survey (REPAIR) by the French Urological Association,” *The Journal of Sexual Medicine* 5, no. 3 (2008): 693–704, <https://doi.org/10.1111/j.1743-6109.2007.00743.x>.
- [9] A. Dyer, M. Kirby, I. White, and A. Cooper, “Management of Erectile Dysfunction After Prostate Cancer Treatment: Cross-Sectional Surveys of the Perceptions and Experiences of Patients and Healthcare Professionals in the UK,” *Bio Medical Journal Open* 9, no. 10 (2019): e030856, <https://doi.org/10.1136/bmjopen-2019-030856>.
- [10] C. Fernandez-Sola, A. Martinez-Bordajandi, A. Puga-Mendoza, et al., “Social Support in Patients with Sexual Dysfunction After Non-Nerve-Sparing Radical Prostatectomy: A Qualitative Study,” *American Journal of Men’s Health* 14, no. 2 (2020): 1557988320906977, <https://doi.org/10.1177/1557988320906977>.
- [11] S. Hayashi, K. Sato, F. Oishi, H. Fukuda, Y. Hayama, and S. Ando, “Care Needs of Japanese Men for Sexual Dysfunction Associated With Prostate Cancer Treatment,” *Supportive Care in Cancer* 31, no. 7 (2023): 378, <https://doi.org/10.1007/s00520-023-07837-w>.
- [12] E. Watson, S. Wilding, L. Matheson, et al., “Experiences of Support for Sexual Dysfunction in Men With Prostate Cancer: Findings From a UK-Wide Mixed Methods Study,” *The Journal of Sexual Medicine* 18, no. 3 (2021): 515–525, <https://doi.org/10.1016/j.jsxm.2020.12.017>.
- [13] D. Doran, S. Williamson, K. Margaret Wright, and K. Beaver, “It’s Not Just About Prostate Cancer, It’s about Being a Gay Man: A Qualitative Study of Gay Men’s Experiences of Healthcare Provision in the UK,” *European Journal of Cancer Care* 27, no. 6 (2018): e12923, <https://doi.org/10.1111/ecc.12923>.
- [14] C. Letts, K. Tamlyn, and E. Byers, “Exploring the Impact of Prostate Cancer on Men’s Sexual Well-Being,” *Journal of Psychosocial Oncology* 28, no. 5 (2010): 490–510, <https://doi.org/10.1080/07347332.2010.498457>.
- [15] R. Li, D. Wittmann, C. Nelson, et al., “Unmet Sexual Health Needs of Patients and Female Partners Following Diagnosis and Treatment for Prostate Cancer,” *The Journal of Sexual Medicine* 19, no. 12 (2022): 1797–1803, <https://doi.org/10.1016/j.jsxm.2022.08.195>.
- [16] R. McConkey and C. Holborn, “Exploring the Lived Experience of Gay Men With Prostate Cancer: A Phenomenological Study,” *European Journal of Oncology Nursing* 33 (2018): 62–69, <https://doi.org/10.1016/j.ejon.2018.01.013>.
- [17] J. Phasrar, P. Schartau, and E. Murray, “Supportive Care Needs of Men With Prostate Cancer: A Systematic Review Update,” *European Journal of Cancer Care* 31, no. 2 (2022): e13541, <https://doi.org/10.1111/ecc.13541>.
- [18] N. Roberts, R. Esler, A. Pearce, et al., “Exploring Unmet Needs in Prostate Cancer Care: A Cross-Sectional Descriptive

- Study,” *European Urology Open Science* 62 (2024): 36–42, <https://doi.org/10.1016/j.euros.2024.01.018>.
- [19] I. Kelder, P. Sneijder, A. Klarenbeek, and E. Laan, “Communication Practices in Conversations About Sexual Health in Medical Healthcare Settings: A Systematic Review,” *Patient Education and Counseling* 105, no. 4 (2022): 858–868, <https://doi.org/10.1016/j.pec.2021.07.049>.
- [20] V. Braun and V. Clarke, “Using Thematic Analysis in Psychology,” *Qualitative Research in Psychology* 3, no. 2 (2006): 77–101, <https://doi.org/10.1191/1478088706qp063oa>.
- [21] V. Braun, V. Clarke, N. Hayfield, G. Terry, and P. Liamputtong, “Handbook of Research Methods in Health Social Sciences,” *Handbook of research methods in health and social sciences* (2019): 843–860.
- [22] J. Ussher, J. Perz, E. Gilbert, et al., “Talking about Sex After Cancer: A Discourse Analytic Study of Health Care Professional Accounts of Sexual Communication With Patients,” *Psychology and Health* 28, no. 12 (2013): 1370–1390, <https://doi.org/10.1080/08870446.2013.811242>.
- [23] M. Hyde, M. Opozda, K. Laurie, et al., “Men’s Sexual Help-Seeking and Care Needs After Radical Prostatectomy or Other Non-Hormonal, Active Prostate Cancer Treatments,” *Supportive Care in Cancer* 29, no. 5 (2021): 2699–2711, <https://doi.org/10.1007/s00520-020-05775-5>.
- [24] R. Fennell and B. Grant, “Discussing Sexuality in Health Care: A Systematic Review,” *Journal of Clinical Nursing* 28, no. 17–18 (2019): 3065–3076, <https://doi.org/10.1111/jocn.14900>.
- [25] C. F. Annerstedt and S. Glasdam, “Nurses’ Attitudes Towards Support for and Communication About Sexual Health—A Qualitative Study From the Perspectives of Oncological Nurses,” *Journal of Clinical Nursing* 28, no. 19–20 (2019): 3556–3566, <https://doi.org/10.1111/jocn.14949>.
- [26] E. McCaughan, C. Flannagan, K. Parahoo, et al., “Effects of a Brief E-Learning Resource on Sexual Attitudes and Beliefs of Healthcare Professionals Working in Prostate Cancer Care: A Pilot Study,” *International Journal of Environmental Research and Public Health* 18, no. 19 (2021): 10045, <https://doi.org/10.3390/ijerph181910045>.
- [27] R. Prasad, M. Wanjari, Y. R. Lamture, S. Late, and R. Sharma, “Penile Rehabilitation Effectiveness After Prostate Cancer Treatment: A Systematic Review of Randomized Controlled Trials,” *Narrative J* 3, no. 2 (2023): e174, <https://doi.org/10.52225/narra.v3i2.174>.
- [28] R. Wang and J. Clavell-Hernandez, “Penile Rehabilitation Following Prostate Cancer Treatment: Review of Current Literature,” *Asian Journal of Andrology* 17, no. 6 (2015): 916–922, <https://doi.org/10.4103/1008-682x.150838>.
- [29] X. Wang, X. Wang, T. Liu, Q. He, Y. Wang, and X. Zhang, “Systematic Review and Meta-Analysis of the Use of Phosphodiesterase Type 5 Inhibitors for Treatment of Erectile Dysfunction Following Bilateral Nerve-Sparing Radical Prostatectomy,” *PLoS One* 9, no. 3 (2014): e91327, <https://doi.org/10.1371/journal.pone.0091327>.
- [30] F. Qin, S. Wang, J. Li, C. Wu, and J. Yuan, “The Early Use of Vacuum Therapy for Penile Rehabilitation After Radical Prostatectomy: Systematic Review and Meta-Analysis,” *American Journal of Men’s Health* 12, no. 6 (2018): 2136–2143, <https://doi.org/10.1177/1557988318797409>.
- [31] M. Nicolai, A. Urkmez, S. Sarikaya, et al., “Penile Rehabilitation and Treatment Options for Erectile Dysfunction Following Radical Prostatectomy and Radiotherapy: A Systematic Review,” *Front Surg* 8 (2021): 636974, <https://doi.org/10.3389/fsurg.2021.636974>.
- [32] S. Chambers, C. Pinnock, S. Lepore, S. Hughes, and D. O’Connell, “A Systematic Review of Psychosocial Interventions for Men With Prostate Cancer and Their Partners,” *Patient Education and Counseling* 85, no. 2 (2011): e75–e88, <https://doi.org/10.1016/j.pec.2011.01.027>.
- [33] J. Cockle-Hearne, F. Charnay-Sonnek, L. Denis, et al., “The Impact of Supportive Nursing Care on the Needs of Men With Prostate Cancer: A Study Across Seven European Countries,” *British Journal of Cancer* 109, no. 8 (2013): 2121–2130, <https://doi.org/10.1038/bjc.2013.568>.
- [34] S. Çolak and F. Vural, “Effect of Nurse-Led Interventions on Patient Outcomes in Patients With Prostate Cancer: A Systematic Review,” *International Journal of Urological Nursing* 16, no. 2 (2022): 105–113, <https://doi.org/10.1111/ijun.12310>.