An environmental scan of sexual health services for cancer survivors among Canadian institutions

Ryan Flannigan*1,2, Andrew Matthew*3, Sydney Sparanese*1,2, Eugenia Wu2, Steven Guirguis3, Monita Sundar2, Fred Saad4, Andrew Loblaw5, Jessica Nargi6, Luke Witherspoon1,2, Christina Canil7, Ricardo A. Rendon8, Laura Labelle9,10, Jill Turner11,12, Celestia Higano1,2
1Department of Urologic Sciences, University of British Columbia, Vancouver, BC, Canada; 2Prostate Cancer Supportive Care Program, Vancouver Prostate Centre, Vancouver, BC, Canada; 3Department of Surgical Oncology, Princess Margaret Cancer Centre, Toronto, ON, Canada; 4Department of Surgery, Division of Urology, Centre Hospitalier de l’Université de Montréal, Université de Montréal, Montreal, QC, Canada; 5Odette Cancer Centre, Sunnybrook Health Sciences Centre, University of Toronto, Toronto, ON, Canada; 6Department of Physical Therapy, University of Toronto, Toronto, ON, Canada; 7Department of Medicine, Division of Medical Oncology, The Ottawa Hospital and the University of Ottawa, Ottawa, ON, Canada; 8Department of Urology, Queen Elizabeth II Health Sciences Centre and Dalhousie University, Halifax, NS, Canada; 9Supportive Care Lead, South Cancer Care Alberta, Alberta Health Services, AB, Canada; 10Division of Psychosocial Oncology, Department of Oncology, Cumming School of Medicine, University of Calgary, Calgary, AB, Canada; 11Supportive Care Lead, North Cancer Care Alberta, Alberta Health Services, AB, Canada; 12Division of Palliative Medicine, Department of Oncology, University of Alberta, Edmonton, AB, Canada
*Equal contributors


Need for sexual health services
Following treatment, cancer survivors face many lasting side effects that can negatively impact their quality of life. Sexual dysfunction, in particular, is cited as one of the most common and challenging side effects in gynecologic and urologic malignancies.

Among Canadian men, prostate cancer is the most common malignancy. The side effects of treating prostate cancer pose significant obstacles, including sexual dysfunction (i.e., erectile dysfunction, loss of libido), urinary incontinence, complex pain, and fatigue. Erectile dysfunction is reported to be as high as 60-70% in patients treated with nerve-sparing radical prostatectomy and between 20-50% in patients treated with radiation therapy. Upwards of 60% of men report...
“moderate” to “big” bother with their sexual symptoms two years post-surgery, further underscoring the deleterious and lasting effects on their quality of life. Systemic therapies, such as androgen deprivation therapy, are associated with detrimental effects on sexual function including five- to six-fold increased risk of reduced libido, impaired penile contractility and reduced response to phosphodiesterase type 5 inhibitors.

Adjustment after cancer treatment requires individualized, patient-centered approaches to navigate changes in sexual function. There is increasing evidence supporting a biopsychosocial approach to holistically address the medical, psychological, and interpersonal aspects of sexual health (SH). In Canada, there is ongoing work to adapt this framework in establishing cancer survivorship resources and clinics to address the sexual dysfunction amongst survivors and their partners.

Development of COSHI
Despite the demand, SH needs in the oncology patient population are currently under-addressed and underfunded. Multidisciplinary SH clinics in oncology settings are uniquely positioned to address the complexities of cancer-related SH concerns. The Canadian Oncology Sexual Health Initiative (COSHI) was conceived to facilitate and improve the delivery of SH resources across Canadian cancer care settings. COSHI proposes a national, multidisciplinary coalition of SH experts working towards the following objectives: 1. Develop SH virtual resources for Cancer Centres; 2. Develop standardized treatment protocols for SH; 3. Develop cancer-type-specific guidelines for SH treatment; 4. Leverage a nationwide team approach to research SH in oncology settings, and develop novel treatment strategies and resources. COSHI will begin with a focus on prostate cancer and then expand to include other cancer subtypes across biological sex and gender.

Clinical programs that provide sexual medicine for cancer survivors were contacted to participate in the development of COSHI, with purposeful effort to ensure regional and multidisciplinary representation. In June 2021, a meeting was held to define the scope, mission, and governance of COSHI. It was agreed that an essential first undertaking was to characterize the current state of programmatic sexual healthcare in oncology in Canada. Accordingly, the COSHI team developed and distributed a survey querying the nature or characteristics of the sexual healthcare offered at 13 healthcare institutions. The participating institutions were purposefully
sampled to ensure regional and multi-disciplinary representation of sexual medicine provision in oncology in Canada.

Survey results
Of the 13 institutions participating, 12 Cancer Centers, representing a broad regional and multi-disciplinary scope, reported on the delivery SH care in oncology in Canada. All sites reported at least some form of SH care: 7 have clinics for cancer-specific care, 3 have SH clinics for all cancers, regardless of organ site, and 5 have sexual education classes. These are offered mainly in person, with fewer sites offering virtual care or web-based educational materials. MDs (urologists) provide patient care at most locations, with 50% or fewer programs having dedicated psychologists, counselors, physiotherapists, or social workers. While nearly all institutions that were reached with our survey identified that the partners of patients are actively involved in the treatment, there was a noticeable gap in the provision of care that is inclusive of gender and sexual diversity. The collection of patient-reported outcomes was inconsistently reported. All centres polled agree that SH should be an integral part of cancer care for Canadians, but many additionally identified that, at present, this was a gap in patient care.

Call to action
Sexual dysfunction in cancer survivors is complex and requires a treatment plan addressing the physiological and psychosocial factors that contribute to sexual identity, mental health, and overall quality of life. While most centers reached with this survey do have some form of SH educational materials to offer cancer survivors, all responding institutions agreed that their programs would benefit from more resources to address this perceived gap in patient care. We identified the following potential areas for improvement:

1. Given advancements in digital healthcare, web-based interventions can provide an innovative and accessible model of oncological sexual healthcare. Compounded by the current COVID-19 pandemic, existing literature has demonstrated a desire for virtual health interventions in cancer survivorship and SH.

2. Survivorship programming is shifting to include a biopsychosocial perspective to focus on the interpersonal and psychologic factors contributing to sexual function. SH clinics would benefit from a multidisciplinary team including psychosocial practitioners (e.g. social workers and psychologists), sex therapists, and nurses trained to examine the psychosocial factors affecting sexual dysfunction: arousal, desire, masculinity, grief, and anxiety.

3. To quantify where patients experience gaps in care, it is critical to establish baseline and ongoing assessments of patient and partner experience in biopsychosocial domains of wellness using validated questionnaires and clinical interviews. This would provide enormous potential for creating a national database that will enable quantification of the
efficacy of ongoing sexual rehabilitation interventions, identification of areas for improvement and development, and development of research strategies.

(4) Accounting for diversity in sexual identity and relationships is critical during sexual rehabilitation, and personalized programming to account for differences in sexual health goals is essential for equitable care. The side effects of prostate cancer treatment create different challenges for men who have sex with men: this population may experience disproportionate changes in self-esteem and psychological distress, which contribute to a more significant decline in quality-of-life metrics and less satisfaction with their medical care when compared to heterosexual men.

There is a need for improved access to interdisciplinary, culturally safe treatment approaches and educational materials with collection of standardized outcomes to evaluate their efficacy. These results underpin the importance of the establishment of this initiative. COSHI proposes a national, multidisciplinary coalition of sexual health experts working to develop globally accessible resources for cancer survivors, standardized sexual health treatment protocols and cancer-specific guidelines for health care providers, and the development of a national database that is inclusive of clinical and patient-reported outcomes of sexual health in a stepwise approach.