

Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

Elsevier hereby grants permission to make all its COVID-19-related research that is available on the COVID-19 resource centre - including this research content - immediately available in PubMed Central and other publicly funded repositories, such as the WHO COVID database with rights for unrestricted research re-use and analyses in any form or by any means with acknowledgement of the original source. These permissions are granted for free by Elsevier for as long as the COVID-19 resource centre remains active. available at www.sciencedirect.com journal homepage: www.europeanurology.com/eufocus



Editorial



Addressing Mental Health in Urology Patients: The Time is Now

Zachary Klaassen ^{a,b,*}, Christopher J.D. Wallis ^c

^a Division of Urology, Department of Surgery, Medical College of Georgia, Augusta University, Augusta, GA, USA; ^b Georgia Cancer Center, Augusta, GA, USA; ^c Department of Urology, Vanderbilt University Medical Center, Nashville, TN, USA

Over the past several years we have seen a welcome increase in awareness of mental health illness (MHI) amongst the general public, bolstered by initiatives such as Bell Let's Talk (January in Canada), National Suicide Prevention Week (September in the USA), and Mental Health Awareness Week (May in the UK), among others. More specific to urology, the Movember campaign has been a global leader since 2003, raising awareness for prostate cancer and testicular cancer, as well as MHI and suicide prevention. These are timely and crucial initiatives. Conservative metrics suggest that in Western countries the lifetime prevalence of major depressive disorder is 17%, of alcohol abuse is 12%, and of generalized anxiety disorder is 6% [1]. Not surprisingly, MHI is higher among patients with cancer: 14-27% of patients have depression during treatment, 9-21% in the first year after diagnosis, and 8-15% >1 yr after diagnosis [2].

Previous work assessing the interaction of MHI and urology conditions has primarily centered on patients with genitourinary malignancies. Using the Surveillance, Epidemiology and End Results (SEER)-Medicare database, Ravi et al [3] reported that 20.4% of patients with nonmetastatic prostate cancer had MHI, including 29.7% of patients undergoing watchful waiting, 29.0% of patients receiving radiotherapy, and 22.6% of patients undergoing radical prostatectomy. Among men with prostate cancer in Ontario, Canada, those treated with radical prostatectomy had a 49% greater likelihood of receiving antidepressant therapy in the 5 yr following treatment (odds ratio [OR] 1.49, 95% confidence interval [CI] 1.35-1.64), whereas those receiving radiotherapy had a 33% increase in odds (OR 1.33, 95% CI 1.21-1.47), and those treated with active surveillance had a 15% increase in likelihood (OR 1.15, 95% CI 0.94-1.41) [4]. Specific to bladder cancer and the highly comorbid patient population afflicted by this disease, Jazzar et al [5] found that 50.4% of bladder cancer patients in the SEER-Medicare database were diagnosed with a post-treatment psychiatric disorder. In addition, those undergoing radical cystectomy were 19% more likely to be diagnosed with a psychiatric disorder compared to those undergoing chemoradiation.

Cancer patients with MHI also have worse survival outcomes compared to those without MHI. Among the top ten prevalent solid-organ malignancies in Ontario, Canada (including prostate, bladder, and kidney cancer), patients hospitalized for MHI in the 5 yr preceding a cancer diagnosis had worse 1-yr (absolute difference 4.8%), 2-yr (5.5%), 5-yr (5.1%), and 10-yr (4.0%) cancer-specific mortality (CSM) probability compared to patients without MHI preceding a cancer diagnosis [6]. In this study, patients with prostate cancer (hazard ratio [HR] 2.23, 95% CI 1.69-2.94) and bladder cancer (HR 2.18, 95% CI 1.62-2.93) hospitalized for MHI before diagnosis were significantly more likely to die of their malignancy. Poor survival outcomes among bladder cancer patients with MHI were also confirmed in the US SEER-Medicare cohort, with an increase in the risk of allcause mortality (HR 2.80, 95% CI 2.47-3.17) and of CSM (HR 2.39, 95% CI 2.05–2.78) [5].

Population-based studies suggest that patients with genitourinary malignancies are also at higher risk of suicide. Among 2268 suicidal deaths reported in the SEER database from 1988 to 2010, bladder cancer patients had a higher standardized mortality ratio (SMR) for suicide compared to the general population (SMR 2.71, 95% CI 2.02–3.62), as did patients with kidney cancer (SMR 1.86, 95% CI 1.32–2.62) [7]. High risk factors for suicidal death in this study included older age, male gender, metastatic disease, and Caucasian race. Although there have been a plethora of populationbased studies suggesting a higher risk of suicide for patients with cancer, a major limitation of these studies is the

* Corresponding author. Division of Urology, Department of Surgery, Medical College of Georgia, Augusta University, 1120 15th Street, Augusta, GA 30912, USA. Tel. +1 706 7212519; Fax: +1 706 7212548. E-mail address: zklaassen19@gmail.com (Z. Klaassen).

https://doi.org/10.1016/j.euf.2020.08.009 2405-4569/© 2020 European Association of Urology. Published by Elsevier B.V. All rights reserved. inability to account for psychiatric comorbidities. To address this, Klaassen et al [8] matched cancer patients to noncancer controls based on utilization of psychiatric resources before cancer diagnosis, and noted a 60% increase in the risk of suicidal death in the first 50 mo after diagnosis. In this study, patients with bladder cancer were at higher risk of suicide (HR 1.73, 95% CI 1.14–2.62), whereas those with prostate (HR 1.07, 95% CI 0.90–1.27) and kidney cancer (HR 1.26, 95% CI 0.79–2.02) were not at higher risk.

The aforementioned body of literature emphasizing disparities in MHI among urology patients sets the backdrop for a call to action to increase awareness of MHI, improve comfort levels in discussing MHI with our patients, and educating urologists to make appropriate referrals to psychiatric and/or psycho-oncology providers. This issue of European Urology Focus contains contributions from experts in the arena of MHI and urology. Two articles focus on suicide and genitourinary malignancies [9,10], including a high-level review of suicide and patients with bladder cancer [10]. The association of androgen deprivation (ADT) for prostate cancer with depression has been previously established: higher risk of depression is associated with longer duration of ADT use [11]. In this issue, Izard and Siemens [12] review the impact of ADT on depression and cognition, and Siebert et al [13] provide recommendations for clinicians regarding the neuropsychiatric impact of ADT for patients with prostate cancer. Dr. Benjamin Davies has long been a voice on understanding the damaging effects of opioids, specifically among patients undergoing robotic radical prostatectomy [14], and in this issue he provides a Grey Zone article discussing the importance of the "no-opioid urologist" [15]. To round out the issue, Fernando [16] emphasizes why it is time to integrate mental health and cancer, Bergerot et al [17] discuss distress and quality of life among patients with advanced genitourinary cancer, Washington et al [18] highlight the impact of racial disparities on the diagnosis and receipt of mental health care among urology patients, and Sekar and Gore [19] discuss the importance of using validated tools when assessing patients and integrating mental health metrics into patient-centered care.

The time for addressing mental health in urology patients is now. Perhaps serendipitously, this thematic issue is being published in the middle of the coronavirus disease 2019 (COVID-19) pandemic. A recent meta-analysis suggests that nearly one in four adults are experiencing significant distress secondary to the pandemic [20], with more concerning MHI among cancer patients who are ultimately not seeking psychological counseling during COVID-19 [21]. While treatment of our patients' MHI is beyond the scope of most urologists, making timely and appropriate referrals to psychiatrists and/or psycho-oncologists [22] is our clinical duty. To date, concerted prospective studies assessing outcomes of treatment for urology patients with MHI are lacking. Given the current global landscape, multidisciplinary efforts are both timely and warranted.

Conflicts of interest: The authors have nothing to disclose.

References

- Volkert J, Schulz H, Harter M, et al. The prevalence of mental disorders in older people in Western countries—a meta-analysis. Ageing Res Rev 2013;12:339–53.
- [2] Krebber AM, Buffart LM, Kleijn G, et al. Prevalence of depression in cancer patients: a meta-analysis of diagnostic interviews and selfreport instruments. Psycho-Oncology 2014;23:121–30.
- [3] Ravi P, Karakiewicz PI, Roghmann F, et al. Mental health outcomes in elderly men with prostate cancer. Urol Oncol 2014;32:1333–40.
- [4] Matta R, Wallis CJD, Goldenberg MG, et al. Variation and trends in antidepressant prescribing for men undergoing treatment for nonmetastatic prostate cancer: a population-based cohort study. Eur Urol 2019;75:3–7.
- [5] Jazzar U, Yong S, Klaassen Z, et al. Impact of psychiatric illness on decreased survival in elderly patients with bladder cancer in the United States. Cancer 2018;124:3127–35.
- [6] Klaassen Z, Wallis CJD, Goldberg H, et al. The impact of psychiatric utilisation prior to cancer diagnosis on survival of solid organ malignancies. Br J Cancer 2019;120:840–7.
- [7] Klaassen Z, Jen RP, DiBianco JM, et al. Factors associated with suicide in patients with genitourinary malignancies. Cancer 2015;121:1864–72.
- [8] Klaassen Z, Wallis CJD, Chandrasekar T, et al. Cancer diagnosis and risk of suicide after accounting for prediagnosis psychiatric care: a matched-cohort study of patients with incident solid-organ malignancies. Cancer 2019;125:2886–95.
- [9] Ramakrishnan VM, Trinh QD. Suicide risk among patients with genitourinary malignancies: where do we stand? Eur Urol Focus. In press. https://doi.org/10.1016/j.euf.2019.09.007.
- [10] Vartolomei L., Vartolomei M.D., Shariat S.F. Bladder cancer: depression, anxiety, and suicidality among the highest-risk oncology patients. Eur Urol Focus. In press. https://doi.org/10.1016/j.euf. 2019.10.008.
- [11] Dinh KT, Reznor G, Muralidhar V, et al. Association of androgen deprivation therapy with depression in localized prostate cancer. J Clin Oncol 2016;34:1905–12.
- [12] Izard JP, Siemens DR. Androgen deprivation therapy and mental health: impact on depression and cognition. Eur Urol Focus. In press. https://doi.org/10.1016/j.euf.2019.11.010.
- [13] Siebert A.L., Lapping-Carr L., Morgans A.K. Neuropsychiatric impact of androgen deprivation therapy in patients with prostate cancer: current evidence and recommendations for the clinician. Eur Urol Focus. In press. https://doi.org/10.1016/j.euf.2020.05.014.
- [14] Theisen KM, Davies BJ. A radical proposition: opioid-sparing prostatectomy. Eur Urol Focus 2020;6:215–7.
- [15] Pekala K.R., Jacobs B.L., Davies B.J. The shrinking grey zone of postoperative narcotics in the midst of the opioid crisis: the noopioid urologist. Eur Urol Focus. In press. https://doi.org/10.1016/j. euf.2019.08.014.
- [16] Fernando A. Mental health and cancer: why it is time to innovate and integrate—a call to action. Eur Urol Focus. In press. https://doi. org/10.1016/j.euf.2020.06.025.
- [17] Bergerot C.D., Philip E.J., Bergerot P.G., Pal S.K. Distress and quality of life among patients with advanced genitourinary cancers. Eur Urol Focus. In press. https://doi.org/10.1016/j.euf.2019.10.014.
- [18] Washington SL 3rd, Nyame Y.A., Moses K.A. What is the impact of racial disparities on diagnosis and receipt of appropriate mental health care among urology patients? Eur Urol Focus. In press. https://doi.org/10.1016/j.euf.2019.08.017.
- [19] Sekar R, Gore JL. Integration of mental health metrics into patientcentered care of urology patients. Eur Urol Focus. In press. https:// doi.org/10.1016/j.euf.2020.04.003.

- [20] Cooke JE, Eirich R, Racine N, Madigan S. Prevalence of posttraumatic and general psychological stress during COVID-19: a rapid review and meta-analysis. Psychiatry Res 2020;292:113347.
- [21] Wang Y, Duan Z, Ma Z, et al. Epidemiology of mental health problems among patients with cancer during COVID-19 pandemic. Transl Psychiatry 2020;10:263.
- [22] Patel SB, McCall WV. Interface of psychiatric services with urological oncology practice. Eur Urol Focus. In press. https://doi.org/10. 1016/j.euf.2020.04.002.