



Editorial

Tobacco Cessation Counseling in Urology: Time to Take the Lead



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Smoking is the leading preventable cause of death worldwide.¹ Even though smoking is a well-known risk factor for many diseases, health professionals are not making a united effort to prevent smoking habits and support the enrollment of patients who smoke in tobacco cessation programs. Medicine has shifted towards a specialized art. Moreover, specialties contain many other sub-specialties. There is no doubt that specialization is the future and the reason for many advances that challenge healthcare boundaries. However, specialists should also provide patients with general health advice.

Tobacco cessation should be a priority in all consultations. Unfortunately, this is rare among specialists. Particularly in urology, tobacco cessation counseling is not a widespread practice. The lack of awareness of the effect of smoking cessation on patient outcomes, and the time-consuming nature of tobacco cessation counseling, explain the vague interest in this practice.

One-third of urological patients' diseases are either caused or exacerbated by tobacco.² Nonetheless, based on an American urologist national survey, only 19.8% of respondents declared that they always discuss smoking cessation with their patients with bladder cancer.³

Moreover, a recent study including 1,058 physicians from six different specialties demonstrated very low adherence (18%) to the United States (U.S.) Public Health Service Clinical Practice Tobacco Cessation Guidelines, revealing that the lack of smoking cessation in practice is a problem that affects many specialties.⁴ This situation represents an enormous economic burden for the health care system.⁵ Particularly in urology, where over 50% of bladder cancers are related to tobacco smoking. Nonetheless, the lay population is unaware of the direct and strong relationship between smoking and bladder cancer.^{6,7} Notwithstanding, it is the most important environmental risk factor. Classically, tobacco is related to lung cancer, and often patients who smoke become surprised when learning about their bladder cancer diagnosis. Specialists must address the lack of awareness regarding smoking and its connection to many different cancers, not just lung and mouth cancer (Table 1).⁸ Furthermore, smoking is associated with other prevalent diseases like cardiovascular disease (coronary artery

disease, stroke, thromboembolism), respiratory diseases (chronic obstructive pulmonary disease, asthma), diabetes, cataracts, infertility, bone disorders, and rheumatoid arthritis among many others that affect a patient's quality of life. Better education is paramount to address these undesired healthcare problems in a public health fashion. Specialists should devote more time and effort to achieving patient and society education for primary prevention rather than solely finding better treatments that only tackle one prong of the issue.

Science is achieving advancements in bladder cancer treatments. In May 2016, the U.S. Food and Drug Administration approved Atezolizumab as second-line therapy for patients with urothelial carcinoma that progresses after platinum-based chemotherapy.⁹ This opened the door to a new era of immunotherapy. Today, seven years later, there are five immunotherapy available drugs for advanced urothelial carcinoma treatment. Furthermore, the U.S. Food and Drug Administration recently approved Enfortumab Vedotin in July 2021, a Nectin-4 antibody and microtubule inhibitor conjugate - that combines immunotherapy and chemo-

Table 1. Tobacco-Related Cancers, data from National Cancer Institute.

| Tobacco-related cancers |
|-------------------------|
| Lung |
| Larynx (voice box) |
| Mouth |
| Esophagus |
| Throat |
| Bladder |
| Kidney |
| Liver |
| Stomach |
| Pancreas |
| Colon |
| Rectum |
| Cervix |
| Acute Myeloid Leukemia |

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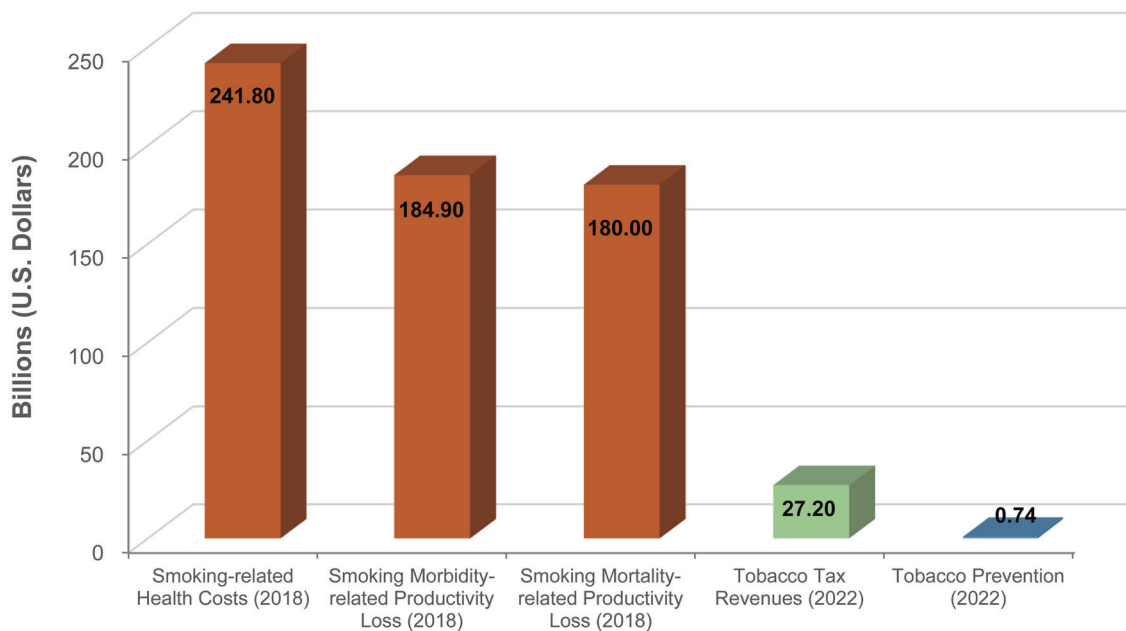


Fig. 1. Economic cost estimates associated with cigarette smoking in 2018 vs. tobacco tax revenue and prevention investment in 2022.

therapy as a third-line treatment for urothelial carcinoma.¹⁰ The healthcare system is committing considerable time, money, and human resources to improve bladder cancer treatment. Nevertheless, how much effort is being committed to primary prevention?

In 2018, cigarette smoking cost the U.S. more than \$600 billion.¹¹ The health policy answer to this tremendous economic burden is insufficient investment in prevention. In 2022 the U.S. government collected \$27.2 billion in taxes from tobacco; however, it only spent \$740 million on prevention campaigns for smoking cessation and smoking prevention (Fig. 1).¹² Only 2.7% of this revenue was designated to prevention. Efforts are disproportionately oriented toward treatments compared to prevention. It is critically important to address this disparity.

Unfortunately, some patients diagnosed with cancer continue to smoke. Evidence shows that smoking in bladder cancer patients can increase the odds ratio of recurrence and progression.¹³ Additionally, smoking increases the risk of a second smoking-related malignancy. There is a unique opportunity to advise patients to quit smoking, known as a “teachable moment”.¹⁴ This phenomenon explains that counseling patients against smoking when they receive a cancer diagnosis is associated with a higher quitting rate than other moments of advice. When a patient is diagnosed with cancer, it is already too late for primary prevention. Therefore, it is paramount not to lose this unique secondary prevention opportunity. Basset *et al.* showed that smoking-related cancer survivors have a higher prevalence of smoking status than non-smoking cancer survivors. Furthermore, they found that quitting attempts motivated by bladder cancer diagnosis were highly associated with smoking cessation success (odds ratio: 11.6; 95% confidence interval: 3.73–35.8).¹⁵

For patients who are current smokers, physicians should devote the necessary time to educate them about smoking consequences. Additionally, doctors must offer alternatives and support for those willing to quit. Emphasizing this issue in a doctor-patient conversation can trigger a quitting desire. On the contrary, if specialists do not deepen the discussion after inquiring about smoking status, they unconsciously do not show concern about the patient’s smoking status.

Urologists must become advocates of change and focus on education and prevention. Secondary prevention can achieve a significant difference by lowering the risk of cancer recurrence and progression.

In addition to cancer treatment, doctors must enroll all willing patients in smoking cessation programs. Ultimately, it is the patient’s decision whether or not to take the risk by continuing to smoke. It is their choice and responsibility. However, to make their decision, they should have all the cards on the table, which is the healthcare provider’s responsibility and mission. It is critically essential that urologists investigate and make joint efforts to stop the smoking pandemic in a multidisciplinary way.

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Conflict of interest

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Author contributions

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References

- [1] Samet JM. Tobacco smoking: the leading cause of preventable disease worldwide. *Thorac Surg Clin* 2013;23(2):103–112. doi:10.1016/j.thorsurg.2013.01.009, PMID:23566962.

- [2] Bernstein AP, Bjurlin MA, Sherman SE, Makarov DV, Rogers E, Matulewicz RS. Tobacco Screening and Treatment during Outpatient Urology Office Visits in the United States. *J Urol* 2021;205(6):1755–1761. doi:10.1097/JU.0000000000001572, PMID:33525926.
- [3] Bjurlin MA, Goble SM, Hollowell CM. Smoking cessation assistance for patients with bladder cancer: a national survey of American urologists. *J Urol* 2010;184(5):1901–1906. doi:10.1016/j.juro.2010.06.140, PMID:20846679.
- [4] Schaer DA, Singh B, Steinberg MB, Delnevo CD. Tobacco Treatment Guideline Use and Predictors Among U.S. Physicians by Specialty. *Am J Prev Med* 2021;61(6):882–889. doi:10.1016/j.amepre.2021.05.014, PMID:34364726.
- [5] Svatek RS, Hollenbeck BK, Holmäng S, Lee R, Kim SP, Stenzl A, *et al.* The economics of bladder cancer: costs and considerations of caring for this disease. *Eur Urol* 2014;66(2):253–262. doi:10.1016/j.eururo.2014.01.006, PMID:24472711.
- [6] Mithani MH, Khan SA, Khalid SE, Siddique R, Humayun H, Awan AS. Awareness of risk factors and fallacies associated with urinary bladder cancer in our population: A prospective survey. *J Pak Med Assoc* 2018;68(1):55–58. PMID:29371719.
- [7] Rouprêt M, Morère JF, Touboul C, Lhomel C, Couraud S, de la Motte Rouge T. Knowledge of bladder cancer in the French population: results of the EDIFICE 6 survey. *Eur J Cancer Care (Engl)* 2021;30(3):e13392. doi:10.1111/ecc.13392, PMID:33336542.
- [8] National Center Institute. Tobacco. Available from: <https://www.cancer.gov/about-cancer/causes-prevention/risk/tobacco#:~:text=Tobacco%20use%20causes%20many%20types,well%20as%20acute%20myeloid%20leukemia>. Accessed January 4, 2023.
- [9] The U.S. Food and Drug Administration. FDA approves new, targeted treatment for bladder cancer. Available from: <https://www.fda.gov/news-events/press-announcements/fda-approves-new-targeted-treatment-bladder-cancer>. Accessed December 23, 2022.
- [10] The U.S. Food and Drug Administration. FDA grants regular approval to enfortumab vedotin-efyv for locally advanced or metastatic urothelial cancer. Available from: <https://www.fda.gov/drugs/resources-information-approved-drugs/fda-grants-regular-approval-enfortumab-vedotin-efyv-locally-advanced-or-metastatic-urothelial-cancer>. Accessed November 11, 2021.
- [11] Centers for Disease Control and Prevention. Economic Trends in Tobacco. Available from: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/economics/econ_facts/index.htm. Accessed November 16, 2022.
- [12] Centers for Disease Control and Prevention. Costs and Expenditures. Available from: https://www.cdc.gov/tobacco/data_statistics/fact_sheets/fast_facts/cost-and-expenditures.html. Accessed November 16, 2022.
- [13] Crivelli JJ, Xylinas E, Kluth LA, Rieken M, Rink M, Shariat SF. Effect of smoking on outcomes of urothelial carcinoma: a systematic review of the literature. *Eur Urol* 2014;65(4):742–754. doi:10.1016/j.eururo.2013.06.010, PMID:23810104.
- [14] Gritz ER, Fingeret MC, Vidrine DJ, Lazev AB, Mehta NV, Reece GP. Successes and failures of the teachable moment: smoking cessation in cancer patients. *Cancer* 2006;106(1):17–27. doi:10.1002/cncr.21598, PMID:16311986.
- [15] Bassett JC, Matulewicz RS, Kwan L, McCarthy WJ, Gore JL, Saigal CS. Prevalence and Correlates of Successful Smoking Cessation in Bladder Cancer Survivors. *Urology* 2021;153:236–243. doi:10.1016/j.urology.2020.12.033, PMID:33450283.