

Dr. Taylor:

Now, it's very exciting to see the work that Dr. Williams has put together with that amazing team of scientists around the country. And I will make a shout out that veterans contribute to a lot of research without realizing that there is a huge amount of data that's available. And as Dr. Meeks does work with, and I do work with, there's a lot of clinical material that we can leverage in a really remarkable way. And so veterans should be very proud of participating in this healthcare system that is making such a difference to clinical medicine, cancer care, bladder cancer. It's really amazing.

So, as Dr. Williams said, the bladder cancer rates in the VA system are different than in the United States population. And in that same registry paper from 2010 that he included, when you combine the invasive cases and the noninvasive cases, bladder cancer actually adds up to 6% of all new cancer cases in 2010 in male veterans. So it's only number three behind lung and prostate cancer. So although it looks like a small number nationwide, it's actually a very significant player on the new cancer cases in the VA system.

Bladder Cancer in U.S. Veterans

2010 VA Cancer Registry

Stages 1-4: 1,546 new cases Stage 0 (Ta, Tis): 1,473 new cases

6% of all new cancer cases >> #3 behind lung and prostate

Other risk factors in U.S. Veterans for BCa

- Smoking
- Occupational/environmental exposure
- Military or non-military exposure

And we know that the factors as we've discussed, include smoking and the occupational environmental exposures. Veterans are particularly exposed to some unique types of environments, including in the burn pits as we mentioned at the very beginning and some other very specific work-related environments that have undefined and unknown risks. Agent Orange is one of these that has not been fully elucidated, but there is this suggestion that it could be associated. It's confounded



of course, by the rates of smoking in the veterans, but it's a very significant risk. And as many of you may be experiencing, it's contributing to your dealings in the VA system right now for your care.

So, on that note of smoking, however, the VA is unique because there's a nationwide system and every local VA has programs available. Our VA, prior to the pandemic, had workshops twice a month in person in our clinic. And now they're doing some of those virtually, but the VA system nationally provides some outreach, provides some resources, a really impressive electronic, text-based system that lets veterans connect to other veterans and other advocates and coaches to help them try to keep that habit at bay and all of the smoking cessation medical tools that we can prescribe are readily available. Any clinician in the VA system can prescribe the basics, and at least in our electronic medical record, it's a quick set. It's an order set that you can very easily go in and click one, two, three, and prescribe.

So it is really a mandatory part of counseling for a new diagnosis of bladder cancer, but it's a very important conversation to be having long before veterans ever get to the point to be diagnosed with bladder cancer because we do know veterans are still smoking at very significant rates, even compared to the non-veteran population. So, I put this note in here because it's a really critical part of even surviving your bladder cancer. If you can quit after your diagnosis, that does improve survival as well.

Some of the needs and care are universal. So these do not apply specifically only to veterans, but the needs that are specific to bladder cancer are, getting information about the diagnosis and treatment options at the time of diagnosis, and then getting access to all the care that you need. Once you've received definitive treatment or initial treatment, then you can be labeled a bladder cancer survivor.

Survivorship is a larger body of care after definitive treatment of cancer. In my case, with a grant sponsored by my

Needs in Care

- Information about diagnosis and treatment options
- Access to Care
- Survivorship: care of patient after definitive treatment of cancer
- VA national system: connected network
- Veterans can transfer care more easily
- Long-term care continues within system

Houston VA, I conducted interviews with veterans on their survivorship needs, and we developed a veteran centered survivorship care plan. This is being used in our regular clinical care now with plans being developed to broaden these services and provide more outreach for bladder cancer survivors. And

this is going to connect veterans to services that are available in the VA, whether or not he or she has cancer, but they may benefit of a person who has survived bladder cancer, such as nutrition, exercise, physical activity other healthcare, kind of improvement of your other conditions.

But like we have talked about, just in the same way that Dr. Williams was able to leverage this huge national system, it's important to realize there are advantages in your clinical care too, when you're in the VA system, because it is a connected network. So all your doctors and clinicians can see all of your records and history easily, and it is also easier, I would say relatively speaking, to transfer care and move and have your records go with you. So the long-term care continues within the system. And so anytime a primary care provider has a question about a patient that I've treated in the past, it's as simple as an email or a note within the record. So I do think I would emphasize it's good to be proud of the system that you're in for your care.

This population in the VA system has to deal with a lot of other trauma that has occurred because of your military service and mental health issues can affect your management of your cancer and coping with your cancer. The intersection between the mental health issues and being positive about your cancer and having the right outlook are important. So, many of the VAs in the country have a specific cancer center, psychology providers and psychologists who can work on that as well.

Effects of PTSD & Mental Health Issues

PTSD symptoms can increase during cancer treatment.

Substance abuse is used as coping with anger.

Mental health issues such as depression or anxiety may increase.

So, some of the strategies for veterans with bladder cancer and survivors are to really focus on getting the education that you need. Beacon has an amazing set of resources online and in print that will certainly help the newly diagnosed and longer-term survivors. But knowing your treatment plan helps make the what-ifs less threatening so that you can approach your care with confidence and feel

empowered. Lifestyle and diet modification are important to help you live healthier and maybe help your cancer not have as much effect on your day-to-day, and then the support systems that you already have, or that you can develop. The VA also provides a lot to veterans, including support groups and the smoking cessation as discussed. And in general, anyone facing a serious diagnosis should have opportunity to look at creating a power of attorney. And I do think the VA has a lot of

Strategies

Education on bladder cancer

- Knowing your treatment plan makes the "what if's" less threatening
- Lifestyle and Dietary modification

Seek support

- Family and friends
- VA Social Worker or a Mental Health provider
- VA support groups, Smoking Cessation

Complete a Power of Attorney for Healthcare and Living Will

avenues to help connect you to that resource as well.

So, I really appreciate the opportunity to be here and talk with you and look forward to taking questions and speaking more about it. Thank you.

