

Urologic Disease in America Podcast Series

Episode 2: Urinary Incontinence

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Guests: Kathleen Kobashi, MD and Una Lee, MD, *Virginia Mason Medical Center*

Brian Matlaga, MD: Hello, this is Brian Matlaga. I'd like to introduce you to this installment of the Urological Diseases in America podcast series, graciously hosted by the American Urological Association. In this episode, we'll be reviewing what we've learned regarding urinary incontinence from the Urologic Diseases in America project. And today, we will have joining us two of the investigators that really explore these data in a robust, comprehensive fashion. I'm pleased to introduce Dr. Una Lee, Dr. Kathleen Kobashi from Virginia Mason Medical Center. Thank you for being here with us today.

Kathleen Kobashi, MD: Thanks for having us.

Brian Matlaga, MD: And I think that one of the first questions that we have about urologic diseases in America with related to urinary incontinence is, what are the knowledge gaps in the area of urinary incontinence, and what are the possibilities that an initiative such as the Urologic Diseases in America project can bring to try to fill those gaps?

Kathleen Kobashi, MD: Yeah. Well, I think this data, looking at this data has really emphasized that we need to know what the prevalence of urinary incontinence is. It's obviously a highly prevalent condition that really affects patients' quality of life, but also has a tremendous economic impact on our system. So I think it's very important to bring that to light so that we can manage the condition in an effective, but economically sound way. I think also in looking at the prevalence, we also, with this data, can look at the trends in utilization of the treatment options that we have and, over the longterm, really probably can make a difference in how we utilize these tools that we have.

Brian Matlaga, MD: Yeah. Thank you, Dr. Kobashi. And so, and in previous episode of the Urologic Diseases in America podcast, we reviewed what the different data sources that we have access to are. And there are survey instruments such as NHANES, data from CMS regarding the Medicare population, and then, we have access to an understanding of data from the working age population with Optum. So what are the benefits of bringing together those data from NHANES, CMS and Optum?

Una Lee, MD: Thank you, Dr. Matlaga, for having us today. These datasets actually each provide a different lens, and they're comprehensive, they're large. They're looking either at the population through questionnaires and interviews, or the Medicare population, or like you said, this adult insured population. So we're basically looking at the entire lifespan of men and women and the impact of urinary incontinence across the entire population. So it's pretty powerful data and it's pretty exciting to have all these different viewpoints into this problem.

Brian Matlaga, MD: Thank you, Dr. Lee. So what then has the Urologic Diseases in America project showed us about the prevalence of urinary incontinence?

Una Lee, MD: Very interestingly, the annual average, annual prevalence of urinary incontinence among women was 53%, and minimal change over the time span that we looked at, 2005 to 2016. If you look at the different subtypes, 16% had mixed incontinence, this is of women, 26% had stress incontinence only, and 10% had urgent incontinence only. The prevalence increased with age, although as you can imagine, the pattern differed across the different subtypes. So while

stress incontinence was high in the 40 to 50 year olds, mixed incontinence was the 60, age 60 and plus.

So while prevalence was high, only a subset of these women had moderate or severe symptoms, and only a subset of these had a major daily impact on their life. So, very interesting and very big picture look at prevalence.

Brian Matlaga, MD: Yeah. And given, obviously, both of you are very well versed in the field of urinary incontinence, but was anything within those prevalence rates particularly surprising to you?

Kathleen Kobashi, MD: Well, I think in looking at this data, we were surprised that in spite of the aging population, that prevalence overall was quite stable, quite steady. But I think, and really as Dr. Lee just mentioned, in really dissecting down in each age group, the distribution of type of incontinence that patients, or people, are experiencing differs. And I think that can help direct our management of this condition. But it was steady in spite of the aging population and that, to us, was a surprising revelation.

Brian Matlaga, MD: And then, moving from prevalence and on the diagnostic side of the spectrum into the therapeutic side of the spectrum, what did you learn when you looked at the utilization of surgical treatments, especially over the decade-long period that the Urologic Diseases project studied?

Una Lee, MD: So very interestingly, our recent publication looked at surgical trends in urinary incontinence in women and it showed, not surprisingly, that the mid urethral slings surgery or sling surgery in general is the most common procedure. And this utilization increased until about 2011, and then it started to decline.

It also showed that while suspension procedures were done in the past, they're really no longer being done. Bulking procedures were steady, but still low. And neuromodulation increased, but again, at a low range, so increased over this time period. Certainly the decline in sling is multifactorial, but based on an inflection point around 2011, we have to think that it's related to the FDA notification in 2008 and 2011 on the risks of mesh.

Brian Matlaga, MD: And then, exploring on the neuromodulation therapy, so in a little more detail. Do you think, whether it was introduction of new nurse techniques or technology or, how that may have played a role in the evolution of the therapy over the time period study?

Kathleen Kobashi, MD: Right. So what's interesting is it took a while for neuromodulation to really gain traction. And I actually would anticipate then, in the next data set, if we look at the next decade starting from about 2013 until now, that we're going to see a tremendous growth curve regarding neuromodulation. Again, neuromodulation was introduced in the late nineties, and yet, it hadn't really gained traction during this decade that we're studying.

And yet, we started to see a little bit of an increase as several things occurred that I think really brought neuromodulation onto the forefront. And not the least of which was the AUA guidelines on overactive bladder, which has really brought to our attention a little bit more of a step wise approach to overactive bladder. And it's really brought that successful technique into the minds of those of us who treat overactive bladder and urinary incontinence.

However, we also have another publication that looked at how many patients actually get to third line therapy, of which neuromodulation is a big part. And it's a very small percentage. I

think that's one of the big lessons we can see in trends overall, that we're actually not even touching ... It's the tip of the iceberg that we're touching right now and we have a huge opportunity. But I suspect that if we look at the next timeframe, we're going to see even more growth in neuromodulation.

Una Lee, MD: I would agree with that. Oh, sorry, Dr. Matlaga.

Brian Matlaga, MD: No, no. Please, no. Please go ahead, Una, Dr. Lee.

Una Lee, MD: The neuromodulation was interesting in that there was steady growth in both men and women, but it was still less than 1%.

Kathleen Kobashi, MD: Yes, very small.

Una Lee, MD: Of the ... yeah, so very small. So 0.3, 0.4% to 0.8% is the growth, but it's still less than 1%. I mean, I gave those numbers as just an example, but it was in that range.

Brian Matlaga, MD: Yeah. No, and that's incredibly helpful detail to have. And I guess when you look at urinary incontinence as a whole affects over half of the female cohort studied, there are these variety of surgical therapies that can be employed, then you're able to, by having these claims data, have a little deeper understanding of what costs may be associated with these therapies. And with just the sheer prevalence of the condition, what were you able to learn about costs for say with urinary incontinence?

Una Lee, MD: Yeah, the cost data was very interesting and these are expenditures on urinary incontinence. And one trend that was prevalent throughout all the looks, all the viewpoints that we had was that in this time period, the costs were moved from inpatient to outpatient procedures. And like I said, very consistent, and then that's consistent with what we see in real life.

The cost and expenditures stayed stable over time, but there were some racial differences. So there were more expenditures in white women compared to black women. And as we know, there's disparities in access and all kinds of things. But that was a consistent finding in both the Medicare dataset and the Optum dataset. So certainly, food for future investigation.

And actually, that showed up in the prevalence data too, just difference in ethnic variation. In the prevalence data, it showed that African American women had higher prevalence of urge incontinence compared to white women, and white and other ethnicities had higher rates of stress incontinence compared to black women. So that could play into it too.

Brian Matlaga, MD: And we've spent some time now talking about female incontinence, but obviously, men are also effected by urinary incontinence. And I know that was a part of the work that you did. So can you share with us a little bit about what you learned about urinary incontinence in the male population?

Kathleen Kobashi, MD: Yeah. Well, this was also very interesting. In looking at the prevalence in men compared to women, it's much higher in women. The prevalence of incontinence overall and men was just over 15%. Interestingly, however, 81% of the people described that urinary incontinence did not affect their daily life. So not only is it less prevalent in men, but it's not seemingly as bothersome to men.

The other thing is that the type of incontinence that men experience tends to be more in the urgency incontinence rather than the stress incontinence or mixed urinary incontinence. I mean, as you know, stress urinary incontinence in men is most commonly post prostate surgery. So if they haven't had prostate surgery, it's not common for men to have stress incontinence without had some intervention, or some surgical intervention regarding the prostate typically.

The other thing is that there was an increase in the treatment of men with incontinence in this decade, over the decade, in men over age 65, and it was primarily related to neuromodulation, which is quite interesting. And I think, again, it's the introduction of a new technique or a new technique gaining traction. And I think, probably, that's just related to the fact that urgency incontinence, which is what neuromodulation is utilized for, is more common in men than the other types of incontinence.

Brian Matlaga, MD: Yeah. And so, we've spoken a lot about the data and the analytics that you did, which was obviously an incredible amount of work. But to shift the focus from those data and those findings to you, what did each of you, Dr. Lee, Dr. Kobashi, find as the most exciting thing that you learned from this project?

Kathleen Kobashi, MD: Well, I would say, as we mentioned before earlier in this podcast, that we just really haven't even touched this. And we have a huge body of patients who we have the ability to provide some relief for, assuming that they're bothered. I mean, I think first of all, it brings to light the fact that we should really be considering how much the incontinence bothers an individual, first and foremost. But in those who are bothered, I think that there are a lot of people who we haven't touched.

And I think this high prevalence, and yet with such a low, like Una was saying, or Dr. Lee was saying about neuromodulation, we're doing less than 1% of the population. And yet, we know that the prevalence of urgency incontinence is tremendous. And so, I think we have a lot of opportunity here to get the word out. Sorry about that. And educate our colleagues and patients ... sorry about that. And educate our colleagues and patients on the fact that we have things to offer and then really get it out there for them.

Una Lee, MD: Yeah, I agree completely, Dr. Kobashi. I think it's exciting. I think it's exciting to see these contemporary, comprehensive datasets, and they can inform us on these big trends. And it's interesting, because it sometimes validates what we see clinically and sometimes it makes us think, why? What's going on? Can we look deeper into that? What's the next study? How can we slice and dice that differently? And so, I think it's exciting to have big data, but then also look at the smaller, more clinically relevant day-to-day questions.

Brian Matlaga, MD: Yeah. And actually, building off of that idea of taking data to the next step, what do you see for ... Obviously, we're speaking to the urologic community today on this podcast. What do you see as the value of the Urologic Diseases in America project to that community?

Una Lee, MD: Great question. I think as urologists, it's important to have an overall understanding of urinary incontinence. It affects our patients, it affects our society, it's impactful and it's a big problem in men and women. The prevalence in women was 53%, the prevalence in men was 15%, and certainly, not all of them are bothered. But I think that this deeper understanding raises our awareness, so then we can therefore then treat women and men better, I should say, and improve their quality of life. So absolutely important for all urologists to know this data and understand this data.

Kathleen Kobashi, MD: If I could add one thing. There was a point in time, I don't know if it's true today, but there was a point in time where urinary incontinence was the number one diagnosis for admission to a nursing home facility. Clearly that has, again, economic impact, but it also has social impact. And I think if we can head that off at the pass, that can have a tremendous impact on so many levels for our patients or people. And so, this really brings that to light and emphasizes the importance of urinary incontinence.

Brian Matlaga, MD: And the data that you were working with for this project are obviously a decade old. It's been several years of analysis. So all the work historically to bring you up to present day has been really a tremendous amount. But then, looking forward from today to the future, what would you like to see in future iterations of the Urologic Diseases in America? Are there certain areas with incontinence you'd like to see addressed in order to really try to further increase and advance our understanding of the epidemiology of this condition?

Kathleen Kobashi, MD: Yeah. Well, one thing that we realized, and I guess this is a reflection of the evolution of our thinking, but in this dataset when we were looking at things, for instance, there were some categories that were lumped together, that if we could tease them out ... For instance, injection, treatment of incontinence utilizing injection, the urethral bulking injections and Botox or onabotulinum toxin A injections into the bladder, were clumped together as one category. Why that's a problem, of course, is that bulking agents are for stress incontinence and onabotulinum toxin A injections are for overactive bladder. So we lost the opportunity there to tease out treatment of specific types of incontinence.

I think in the next iteration, we'll analyze it differently. I think the data is there, but some of this is obviously just a reflection of us evolving in our thinking. So, I mean, just little different angles on things. I'm sure the data is going to change a lot in this last decade, because so much more attention has been put on incontinence as an important entity. And our thinking has really changed as a whole also, that we're concentrating much more on quality of life issues than we used to, say two decades ago. It was really just treating the cancer or treating X, Y or Z, without really taking into account the effects on quality of life and day-to-day living.

Una Lee, MD: I would agree with what Dr. Kobashi said, but I also think that the next dataset will be just more contemporary and it will reflect ... There's been a lot of changes in the way people are treating and thinking about urinary incontinence. And I think that we can better meet the needs of our patients once we have a better understanding of these big trends, whether they're surgical trends, economic trends, prevalence trends. I think it's really important and I'm excited to see the next iteration.

Kathleen Kobashi, MD: Absolutely.

Brian Matlaga, MD: Great. Well, I would like to just, as we close this podcast, like to thank both of you, Dr. Lee, Dr. Kobashi, for taking the time out of your very busy schedules to share with us your insights into what you've learned about urinary incontinence.

And I think that as we've seen recently and then going forward, we have a number of publications that'll be coming out in the Journal of Urology and other journals that go into a much deeper dive into the data, the findings that we spoke about. Obviously, there was a number of abstracts that were to be on the program of the 2020 AUA annual meeting, which unfortunately has been canceled due to the COVID-19 concerns. And I know that there will be efforts made to take those data and disseminate them in other fashion as well, and certainly, within the peer reviewed literature too.

So again, I'd like to thank you Dr. Lee, Dr. Kobashi, for spending the time with us today. I'd like to, of course, thank the American Urological Association for providing such a robust platform for us to share these findings from the Urologic Diseases in America project. And of course, the project would not be possible without the support of the National Institute for Diabetes, Digestive, and Kidney Disease, the NIDDK. So again, thank you all for joining us and we hope this was an informative information transfer for everyone. Thank you.