Variation in Communication of Side Effects in Prostate Cancer Treatment Consultations

Aurash Naser-Tavakolian, MD[1] • Rebecca Gale, MPH[2] • Michael Luu, MPH[3] • Abhishek Venkataramana, MD[4] • Dmitry Khodyakov, PhD[5] • Edwin Posadas, MD[6] • Howard Sandler, MD[7] • Jennifer T. Anger, MD, MPH[8] • Brennan Spiegel, MD, MSHS[2,9] • Stephen J. Freedland, MD[1,10] • Timothy J. Daskivich, MD, MSHPM[1,2]

1. Department of Surgery, Division of Urology, Cedars-Sinai Medical Center, Los Angeles, CA 2. Cedars-Sinai Center for Outcomes Research and Education (CS-CORE), Cedars-Sinai Medical Center, Los Angeles, CA 3. Department of Biostatistics, Cedars-Sinai Medical Center, Los Angeles, CA 4. Department of Urology, University of Southern California, Los Angeles, CA 5. RAND Institute, Santa Monica, CA 6. Division of Medical Oncology, Cedars-Sinai Medical Center, Los Angeles, CA 7. Department of Radiation Oncology, Cedars-Sinai Medical Center, Los Angeles, CA 8. Department of Urology, University of California, San Diego, CA 9. Divisions of Gastroenterology and Health Services Research, Cedars-Sinai Medical Center, Los Angeles, CA 10. Section of Urology, Durham VA Medical Center, Durham, NC

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BACKGROUND

Effective communication of risk of major side effects of prostate cancer treatment is critical for patient-informed shared decision making.

Little is known about how side effects are specifically communicated in practice.

OBJECTIVE

We sought to qualitatively characterize how physicians communicate risk of side effects during prostate cancer treatment consultations.

METHODS

We conducted a qualitative analysis of treatment consultation transcripts of 42 men with low- and intermediate-risk prostate cancer across 10 multidisciplinary providers (urology, radiation oncology, and medical oncology).

Quotes pertaining to side effects of radiation and surgery were extracted.

Coders analyzed isolated quotes using an inductive coding approach to identify types of side effects discussed and mode of risk communication.

Coders met to define a consensus list of modes of risk communication. A consensus hierarchy was established noting increasing granularity of risk communication:

1. Not Mentioned
2. Name Only (without risk quantification)
3. Generalization ("High" or "Low")
4. Average % Incidence at Timepoint
5. Precision Estimate/Nomogram

Primary outcome: most granular mode of risk communication used to describe each side effect throughout the entire consultation.

RESULTS

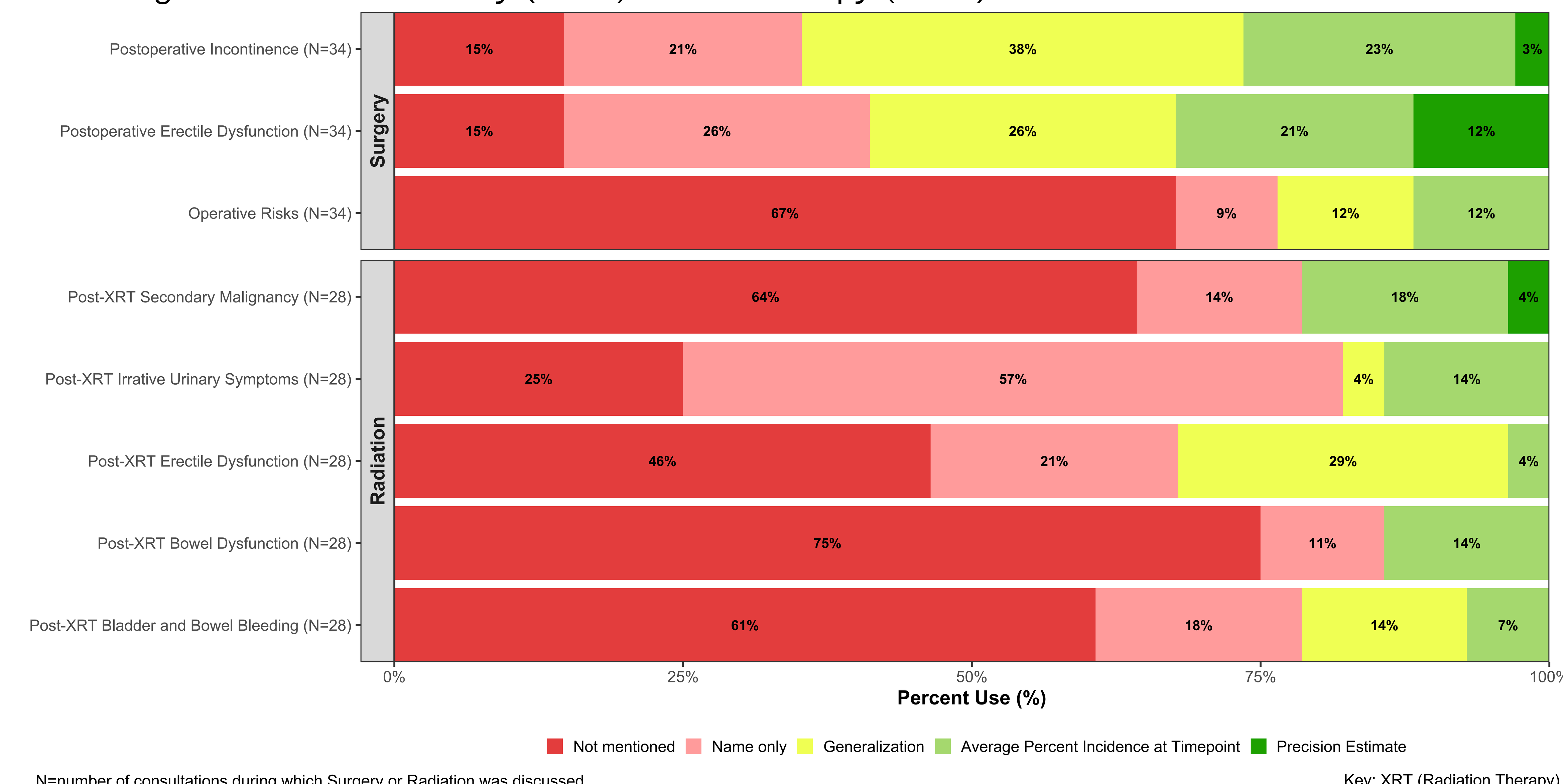
Table 1. Sample Population Characteristics

Characteristics	All Patients
Characteristics	N=42
Age [median (IQR)]	67 (60.2, 71.8)
Race [n (%)]	
Black	7 (17%)
White	35 (83%)
Clinical T-Stage [n (%)]	
T1a-b	1 (2%)
T1c	36 (86%)
T2a-b	3 (7%)
T2c	2 (5%)
PSA [mean (IQR)]	7.38 (5.2, 10.9)
Diagnostic Gleason Score [n (%)]	
3+3	10 (24%)
3+4	20 (48%)
4+3	12 (28%)
Prostate Cancer Comorbidity Index Score [median (IQR)]	2 (0, 4)
Prostate Cancer Comorbidity Index Score [n (%)]	
0	12 (28%)
1-2	16 (38%)
3-4	5 (12%)
5-6	4 (10%)
7-9	4 (10%)
10+	1 (2%)
D'Amico Tumor Risk [n (%)]	
Very low or Low	9 (21%)
Favorable Intermediate Risk	14 (33%)
Unfavorable Intermediate Risk	19 (45%)
Treatment Type [n (%)]	
Watchful Waiting	4 (10%)
Active Surveillance	14 (33%)
Radical Prostatectomy	5 (12%)
Radiation Therapy	5 (12%)
HIFU	3 (7%)
Undecided / Not recorded	11 (26%)

Table 2. Variation in Provider Risk Communication of Side Effects After Radical Prostatectomy

Mode of Communication	Illustrative Quote
Modes of Communicating Risk of Postoperative Erectile Dysfunction	
Not Mentioned	
Name Only	"For potency, the rates are more variable, but it's all dependent on what you bring to the table."
Generalization	"The erectile dysfunction can be long term."
Average % Incidence at Timepoint	"But everybody becomes impotent, so 100 percent. And then if you have normal erectile function now, it takes 12 to 24 months for it to come back, and 20 percent never recover."
Precision Estimate / Nomogram	"In general the curve looks like this if you look at all men with prostate cancer in both continence and potency is that this is your baseline, 100% of urinary function, continence or potency. This is 3 months, 6, 9, 12. And this is surgery, okay, baseline. Right after surgery things get worse and then they get drastically better between 3 and 6 months. And then they get a little better up to a year and then it tails off. So the statistics we quote out are here... So it's less of a decremented function and earlier return to baselines. So these are all averages."
Modes of Communicating Risk of Postoperative Urinary Incontinence	
Not Mentioned	
Name Only	"You're probably going to be doing your normal things except if you're leaking you're going to be wearing a pad so that it catches that. And when you're doing vigorous exercise, you're probably going to leak a little bit, so you just wear a pad and you change the pad out every so often."
Generalization	"I would say, you should expect to wear a pad, like kind of a pullup and a pad, for a couple of months, but that said, the 50 year olds I've operated on, most of them within a couple of weeks have been, you know, wearing a pad or two, maybe."
Average % Incidence at Timepoint	"The long-term consequences of surgery, urinary leakage, incontinence when you cough or sneeze, that lasts for about a year. I look at that as a temporary inconvenience because beyond a year about 10% of men need a pad and the rest are totally continent."
Precision Estimate / Nomogram	"In general the curve looks like this if you look at all men with prostate cancer in both continence and potency is that this is your baseline, 100% of urinary function, continence or potency. This is 3 months, 6, 9, 12. And this is surgery, okay, baseline. Right after surgery things get worse and then they get drastically better between 3 and 6 months. And then they get a little better up to a year and then it tails off. So the statistics we quote out are here... So it's less of a decremented function and earlier return to baselines. So these are all averages."

Figure 1. Variation in Communication of Prostate Cancer Treatment Side Effects Among Consultations Discussing Radical Prostatectomy (n=34) or Radiotherapy (n=28)



CONCLUSIONS

Side effects of prostate cancer treatment are often omitted or not quantified in treatment consultations.

Physicians should strive to articulate all major side effects of treatments discussed, as well as quantify and provide a timeline for these risks.

These findings argue for greater standardization of the data communicated to ensure that patients are sufficiently informed of potential risks when weighing them against the benefits of treatment.

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