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## **Reproductive and sexual health care in oncology: current practice and challenges**

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# Chapter 6

## *Omissions in Urology Residency Training Regarding Sexual Dysfunction Subsequent to Prostate Cancer Treatment: Identifying a Need*

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## INTRODUCTION

Prostate cancer is the most commonly occurring male urological cancer. In 2012, about 1.1 million cases were diagnosed worldwide.<sup>1</sup> Accordingly, prostate cancer's diagnostics, treatment, and follow-up are part of every urologist's training. Sexual dysfunction, usually resulting from erectile dysfunction (ED), is one of the most prevalent consequences of prostate cancer treatment.<sup>2</sup> Other sexual side effects include decreased sexual desire, ejaculation disorders, and orgasm impairment.<sup>3</sup> After radical prostatectomy (RP), the rate of ED varies from 25% to 90%, depending on pre-existing erectile function, age, definition of ED, preservation of neurovascular bundles, the surgeon's experience, and surgical technique.<sup>2, 4, 5</sup> Up to 64% of patients experience ED after external beam radiation therapy, and about 50% of men report ED following brachytherapy.<sup>2, 6</sup> Furthermore, the erectile function is affected in up to 85% of patients receiving androgen deprivation therapy.<sup>7</sup>

Experiencing sexual problems, which is in most cases ED, can severely affect quality of life.<sup>8</sup> Consequently, it is crucial that patients are well informed about the possibility of developing sexual dysfunction as a part of informed consent and about treatment options for ED.<sup>9</sup> Training in the counseling of sexual issues and the treatment of sexual dysfunction frequently does not form part of the medical school curriculum,<sup>10</sup> implying that few physicians receive education about sexual function and practical skills to adequately perform sexual counseling before starting urology residency.<sup>11</sup> Due to the lack of fundamental training, urology residents may not feel well equipped or sufficiently confident to discuss these problems. Considering urologists are consulted by numerous prostate cancer patients during their careers, it is highly relevant that residents obtain knowledge and skills and are comfortable about addressing sexual concerns. The aim of this study was to assess urology residents' current knowledge and practice in and barriers to discussing sexual dysfunction, whether formal training in the counseling of prostate cancer-related sexual dysfunction is provided, and the potential need for additional training.

## MATERIALS AND METHODS

Questionnaires were distributed to Dutch urology residents visiting a national training course halfway through the academic year in June 2015, to perform a cross-sectional survey. The study sample targeted all third to sixth year urology residents in the Netherlands (n = 101), excluding first and second year residents as they perform general surgery rotations and do not yet counsel prostate cancer patients. Residents who were not able to attend the course have not been approached. Questionnaires were completed individually and anonymously at the beginning of a lecture, after which they were returned in the envelope provided.

The instrument was designed by the authors, as no validated questionnaire for assessing the study objectives is available. Questions were based on the study aim and previous questionnaires investigating the provision of sexual health care by oncology care providers.<sup>12, 13, 14</sup> A pilot study was performed by three senior medical interns, checking the length, layout, linguistic flaws, comprehensiveness of questions, and responses. On the basis of their comments, questions were removed and small modifications were made. The final questionnaire consisted of 25 items assessing the following topics:

- demographic details
- previously received educational training in sexual dysfunction
- sufficiency of current education on sexual dysfunction and potential training need
- competence in discussing sexual function with prostate cancer patients
- practice in addressing and treating sexual function. Familiarity with referral options, awareness of responsibility for addressing sexuality within the treatment team, and availability of information material
- possible barriers that prevent residents from discussing sexuality
- factors that would assist in implementing sexual counseling in daily practice

Quantitative data were analyzed using SPSS 20 (Chicago, IL). Frequency analysis and descriptive statistics were used to assess numerical values. Bivariate associations between demographic information and categorical data were calculated using Pearson's chi-square procedure and means in different groups using independent sample *t* test. Two-sided *P* values <.05 were considered statistically significant.

## RESULTS

### Survey Population

All residents who attended the course (*n* = 87) agreed to participate in the survey, resulting in a response rate of 100%. Currently, the Netherlands comprises a total of 101 third to sixth year urology residents; thus, 86.1% of all residents were included in the sample. Demographic characteristics, residency year, and clinical settings are presented in Table 1.

### Knowledge and Training

Of all participating residents, 58.6% had never received training or education about addressing sexuality during their career (*n* = 51); also, a significant percentage of fifth and sixth year residents had never attended a sexuality training (Fig. 1). Of the participants who had received training or education, 17 residents stated they had attended a lecture concerning this subject, 8 respondents had undertaken self-study, 6 had participated in a workshop, 8 had attended an educational training within their hospital, and 5 declared they had visited reference evenings or congresses that addressed sexuality. When it comes to knowledge, 45 residents reported possessing sufficient knowledge (51.7%), 39 had limited knowledge (44.8%), and 3 had little knowledge (3.5%). Table 2 shows the level of knowledge in relation to other reported factors.

**Table 1.** Demographic characteristics (n = 87)

	<i>n</i> (%)
<b>Gender</b>	
Male	39 (44.8)
Female	48 (55.2)
<b>Age (years)</b>	
Median 32.0 (range 28-38)	87 (100.0)
Mean 32.7	
<b>Year of residence</b>	
3 <sup>rd</sup> year	17 (19.5)
4 <sup>th</sup> year	23 (26.4)
5 <sup>th</sup> year	25 (28.7)
6 <sup>th</sup> year	21 (24.1)
NA	1 (1.1)
<b>Clinical setting</b>	
University hospital	46 (52.9)
District general teaching hospital	35 (40.2)
District general hospital	5 (5.7)
Cancer institute	1 (1.1)

NA: Not available

**Table 2.** Association between level of knowledge and characteristics of residents (n = 87)

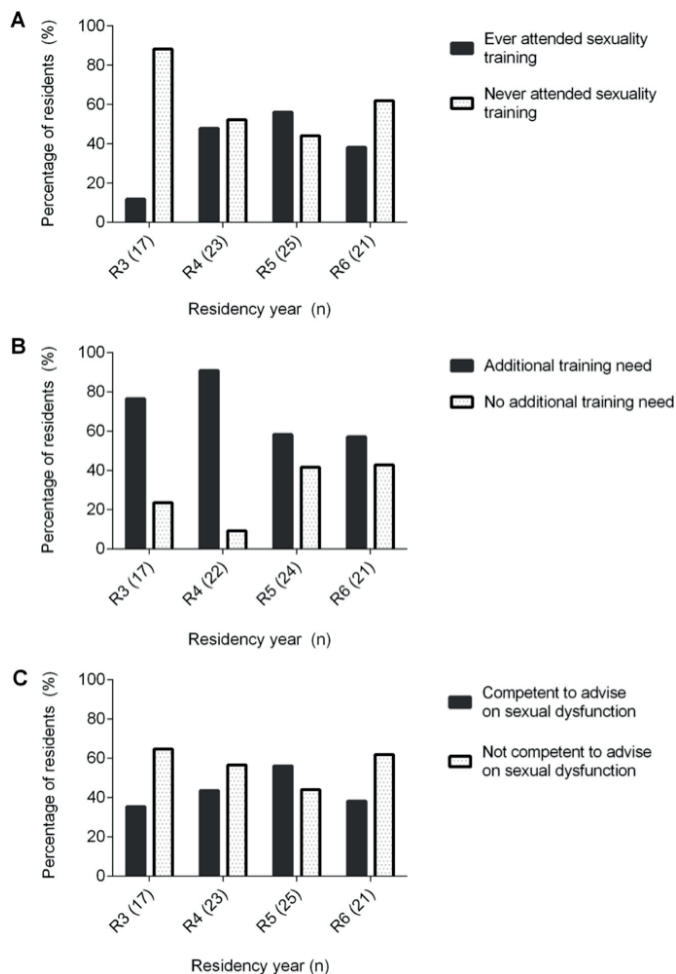
	<b>Sufficient knowledge</b>	<b>Limited and little knowledge*</b>	<i>P</i> value <sup>†</sup>
	<i>n</i> (%)	<i>n</i> (%)	
Male	25 (64.1)	14 (35.9)	0.037
Female	20 (41.7)	28 (58.3)	
Third and fourth year of residency	16 (40)	24 (60)	0.053
Fifth and sixth year of residency	28 (60.9)	18 (39.2)	
28 to 32-year-old residents	23 (52.3)	21 (47.7)	NS
33 to 38-year-old residents	22 (51.2)	21 (48.8)	
Attended a sexuality training	24 (66.7)	12 (33.3)	0.019
Never attended a sexuality training	21 (41.2)	30 (58.8)	
Feels competent to advise on treatment of sexual dysfunction	27 (69.2)	12 (30.8)	0.003
Does not feel competent to advise on treatment of sexual dysfunction	18 (37.5)	30 (62.5)	
Preference for enhancing knowledge	24 (40.7)	35 (59.3)	0.006
No need to enhance knowledge	19 (73.1)	7 (26.9)	

NS: Not significant

\* Limited and little knowledge taken together, as the expected measure of limited knowledge (n = 3), was too low for adequate computing.

† Chi-square procedure.

More than half of the residents agreed that poor (54.8%,  $n=46$ ) and below-average (3.6%,  $n=3$ ) attention is paid to sexual health issues during their current urology residency. Sixty-nine percent ( $n=59$ ) would like to enhance their knowledge with regard to discussing sexuality with patients and treatment of sexual dysfunction, including fifth and sixth year residents who indicated a preference for additional training (Fig. 1).



**Fig. 1.** Attendance of sexual dysfunction training in the past (A), additional training need (B), and self-reported competence in advising on sexual dysfunction (C) presented by residency year (R3–R6).

### Competence in Discussing Sexuality

The statement “I feel competent to address sexual side effects” was answered affirmatively by 50.6% of the residents, and a majority of 78.2% felt sufficiently competent to inquire about sexual problems. Gender did not influence the competence measured by these items ( $P=.240$ ,



respectively,  $P = .439$ ). Less than half of the residents (44.8%) reported being competent when it came to advising patients specifically about the treatment of sexual dysfunction; again, there was no difference between male and female residents ( $P = .520$ ).

## Practice and Treatment for Sexual Dysfunction

To the question: “With which percentage of your prostate cancer patients did you discuss their sexual function in the past year?,” residents answered with an average of 56.8% patients ( $n = 85$ ; standard deviation 27.7; range 0%-100%). The average percentage of patients with whom sexual dysfunction was discussed did not differ between male and female residents (58% vs 55.8%,  $P = .713$ ). Table 3 presents the current practice regarding information provision and treatment of sexual dysfunction. Ninety percent of the residents ( $n = 78$ ) inquire about pre-existing ED before patients undergo prostate cancer treatment, with no difference in frequency of prescribing between male and female residents ( $P = .935$ ). Thirteen participants request that patients bring their partners for a consultation on sexual function (15.1%); 84.9% ( $n = 73$ ) does not.

**Table 3.** Answers to questions regarding practice patterns

	Often/ always	More than half of the cases	Half of the cases	Less than half of the cases	Never/ rarely
	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)
Patients report sexual concerns by themselves	1 (1.1)	5 (5.7)	16 (18.4)	49 (56.3)	16 (18.4)
Informing patients about possible sexual side-effects	77 (88.5)	8 (9.2)	0 (0.0)	1 (1.1)	1 (1.1)
Asking about patients' sexual function during follow-up	29 (33.7)	26 (30.2)	12 (14.0)	15 (17.4)	4 (4.7)
Prescribing phosphodiesterase-5 inhibitors to patients with ED	22 (25.3)	23 (26.4)	27 (31.0)	13 (14.9)	2 (2.3)

ED, erectile dysfunction.

## Referral and Availability of Information Materials

Seventy-seven percent of the residents ( $n = 67$ ) were aware of where patients should be referred for counseling of complex sexual dysfunction. Most residents (54.0%) stated that they refer patients to a sexologist, 19.5% to a urologist–sexologist or andrologist, and 8.0% to an oncology nurse. Two residents reported referral to a pelvic floor therapist. Regarding responsibility within a department, 40.7% of the participants ( $n = 35$ ) reported that there are no agreements on who is responsible for discussing sexuality; 38.4% was unaware of such agreements ( $n = 33$ ). A minority of the residents were employed in a hospital where the task of addressing sexual concerns within the urology department was allocated ( $n = 18$ , 20.9%). According to 46% of the residents ( $n = 40$ ), information on treatment-related sexual dysfunction is available; 32.2% ( $n = 28$ ) was unaware of the presence of such documentation, and 21.8% ( $n = 19$ ) indicated that this material is not present in their hospital.

## Responsibility Among Treatment Team Members

Residents reported the urologist (n = 86, 98.9%), radiotherapist (n = 63, 72.4%), oncology nurse (n = 62, 71.3%), and the general practitioner (n = 35, 40.2%) as being most responsible in the area of diagnosis. During follow-up, the oncology nurse (n = 72, 82.8%), sexologist (n = 68, 78.2%), general practitioner (n = 59, 67.8%), psychologist (n = 47, 54%), and the pelvic floor physiotherapist (n = 38, 43.7%) were considered responsible for discussing sexuality with prostate cancer patients.

## Obstacles Preventing Sexual Communication

The reasons for residents not discussing sexual concerns with their prostate cancer patients were: “lack of time during a consultation” (67.1%), “lack of training” (35.3%), “language or ethnicity barrier” (34.1%), “the patient is too ill” (31.8%), “presence of a third party” (24.7%), “advanced age of the patient” (24.7%), and “surviving is more important” (20%).

## Implementing Sexual Health Care

The residents were asked to indicate which factors would be helpful in implementing sexual health care for men with prostate cancer in their current practice. The most convenient solution would be the assistance of a nurse who routinely discusses sexual concerns with all prostate cancer patients (n = 65, 78.1%). A majority (n = 60, 72.4%) indicated that the availability of information material regarding treatment related to sexual dysfunction would be beneficial. More than half of the residents (n = 46, 54.8%) indicated that a practical training on how to discuss sexual problems would help them to initiate these discussions, as well as good referral options for patients with sexual concerns (n = 46, 54.8%).

# DISCUSSION

## Key Results

The purpose of this survey was to provide an insight into the current urology residency training and the confidence of residents in addressing and advising on sexual dysfunction. The most important results encompass an evident need for additional training on the counseling and treatment of sexual dysfunction in men facing prostate cancer. Regardless of the residency level, most trainees have never received sexual education, report a limited level of knowledge, and require a need for training. Residents do not regularly prescribe medication for erectile dysfunction and less than half of them feel competent to treat patients for sexual dysfunction. Almost every resident provides information regarding sexual dysfunction prior to treatment, yet addressing the subject during follow-up is not a matter of routine. Barriers to discussing sexual function were lack of time during a consultation, lack of training, language obstacles, and a severe degree of illness. Residents indicated that assistance of a nurse, extended availability of

information material, and additional practical training would assist them in routinely providing sexual health care.

## Comparison With Literature

Luján et al surveyed 140 urology residents from 19 European countries with regard to the management of premature ejaculation.<sup>15</sup> Supposing this is not a condition associated with prostate cancer treatment-related sexual dysfunction, it is a condition associated with the field of sexual issues. Likewise, the results of this survey showed that urology residents received insufficient education in sexual dysfunction. In 2012, a survey was carried out among Canadian urology chief residents regarding satisfaction with their surgical training.<sup>16</sup> It, however, also assessed level of training in andrology and sexual dysfunction. Of the graduated participants, 67.8% believed they received inadequate training in andrology and sexual dysfunction. Although the Canadian Urological Association might have different educational programs and training requirements compared to the European Board of Urology, the lack of training does not only seem to apply to the European situation. A survey among physician members of the American Urogynecologic Society<sup>17</sup> on addressing female sexual dysfunction showed that half of the respondents were not satisfied with their training in this subject and also that they did not consistently screen for female sexual dysfunction.<sup>17</sup> Participants in the current survey reported a lack of knowledge on prostate cancer-related sexual dysfunction regardless of residency year, an outcome that does not correspond to the expected learning curve during residency. As residents gain training and knowledge, they might also recognize gaps in their knowledge. The lack of training among residents conjointly indicates that education in sexual dysfunction is not adequately represented in undergraduate programs. Up-to-date research on the provision of sexual education within medical schools is, however, limited.<sup>18</sup> In 2008, for instance, a survey among 2261 students enrolled in MD degree granting in the United States and Canada was described.<sup>19</sup> More than half of the respondents (n = 1206) stated that they had not received sufficient training on how to address sexual concerns clinically, corresponding with our results. This finding indicates that training in sexual communication is already lacking among medical students, the phase before starting a residency. To prevent a knowledge gap between developments in sexual dysfunction treatments and clinical practical skills, education during an earlier phase could significantly enhance the feeling of competence in discussing sexual concerns among future physicians.

## Urology Residency

The specific skills covered during urology residency differ between individual training programs, as well as between countries and continents. In the Netherlands, urology training consists of 2 years' general surgery, followed by 4 years of urology training, covering benign and malignant diseases. During urology training, the residents regularly have independent patient consultations in both the outpatient and inpatient clinics. Current educational program provides a 1-day andrology training, where sexual dysfunction is a leading subject. Whether other training

on sexual dysfunction is attended, depends on the local training program. As reported by the Dutch learning objectives, a urologist should possess sufficient knowledge about male sexual dysfunction and should be able to diagnose adequately and treat the problem with medication or by surgery. Another important objective is that the urologist is able to adequately communicate about sexual dysfunction by taking a sexual history and explaining treatment possibilities. Minimum level of knowledge for European board-certified urologists is considered familiarity with all the European Association of Urology Guidelines. The European Association of Urology Guidelines on male sexual dysfunction pay significant attention to post-prostate cancer treatment ED.<sup>20</sup> All future urologists are supposed to receive adequate training on the subject to be able to advise and treat their patients. Although an evident lack of knowledge and wish for training among Dutch urology residents are presented here, it is not clear whether these results are applicable to other residency trainings or to what extent other training facilities address male sexual dysfunction.

### **Importance of Adequate Sexual Communication Skills**

Changes in sexual functioning as a result of prostate cancer treatment can severely affect the quality of life and influence the relationship with the partner.<sup>21, 22, 23, 24</sup> More than half of all men with prostate cancer reported being in great need of discussing sexuality issues with their healthcare professionals.<sup>25</sup> Furthermore, focus group research indicated that partners of men with prostate cancer had not sufficiently received emotional and psychological support.<sup>26</sup> Sexual function is as highly valued by patients as urinary control and more highly valued than other side effects and treatment characteristics.<sup>9</sup> Patients indicated that the provision of useful information and satisfactory interaction with their healthcare providers was a large part of their adaptation when it comes to changes in their sexuality.<sup>27</sup> The apparent need for information and psychosexual support reported by patients, and even more by their partners, endorses the fact that it is important that urologists are aware they should offer this crucial component of care.

### **Strengths and Limitations**

As all urology residents present at the national training course completed the questionnaire, a nonresponse bias was not induced. However, a social desirability bias could still be present, resulting in an under- or overestimation, as residents participated during a training day organized by the educational board. Furthermore, as the survey was conducted prior to a lecture on andrology, it is plausible that an increased focus on the subject of sexual dysfunction was introduced. A non-validated questionnaire has been used, as a validated instrument assessing the specific study aims is not available. Content or construct validity was not measured as the instrument was not developed for purposes other than this specific survey. This was a single-country survey, and so the results may not be representative of the European and worldwide situation. Still, the results demonstrate an evident problem which provides us with

future research topics regarding the current international educational program, both for urology residents as well as medical students opting for an MD degree.

### **Clinical Implications**

Considering that physicians from other medical specialties involved with prostate cancer patients (ie, radiation oncologists<sup>14</sup> and oncology nurses<sup>13</sup>) do not routinely advise men on treatment-related sexual dysfunction and generally refer to urologists and urology residents, urologists should feel competent to treat sexual dysfunction. Nevertheless, residents experience various barriers to communicating about this topic, mainly reporting a lack of time and practical training. The survey results implied that residents consider oncology nurses responsible and helpful in providing sexual health care for patients after prostate cancer treatment. Although the oncology nurse could play a significant role in signaling and discussing sexual issues, the etiology and medical treatment remain a physician's specialty and thus responsibility. Enhancement of the cooperation between trained nurses and urologists could save time and dramatically improve care. Regardless of a task allocation, the urologist is supposed to have sufficient knowledge of the underlying etiology and the treatment of sexual dysfunction. Education starts during medical school followed by urology residency. To reinforce residents' elemental knowledge and skills, institutions are urged to develop an intensified course and ensure that the subject is studied in depth during their training programs. It is recommended that all international residency trainings be checked for compliance with regard to the implementation of education on male sexual dysfunction.

### **CONCLUSION**

Urology residency trainings do not pay sufficient attention to sexual communication skills and the treatment of sexual dysfunction. The residents are in need of more knowledge and more practical training in sexual counseling. As adequate training is a requirement for managing sexual health problems, the education provided during urology residency should be enhanced for the benefit of prostate cancer patients and future urologists to improve confidence and competence in providing sexual health care. The development of a core curriculum for urology residencies, including full coverage of sexual communication skills, knowledge on the etiology of sexual dysfunction, and the treatment of sexual issues, should be a priority for program directors.

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