Cancer & Sexual Health The Male Patient

John P. Mulhall MD MSc FECSM FACS

Director
Sexual & Reproductive Medicine Program
Urology Service
Memorial Sloan Kettering Cancer Center

Disclosures (COI)

Grants

- Center for Intimacy after Cancer Therapy (CIACT)
- •NIH
- Sexual Medicine Society of North America (SMSNA)

"It takes 50 years to get a wrong idea out of medicine and 100 years to get a right one into it"

John Hughlings Jackson Neurologist

The goal of the sexual medicine clinician is to facilitate the patient (or couple) resuming satisfactory sexual relations

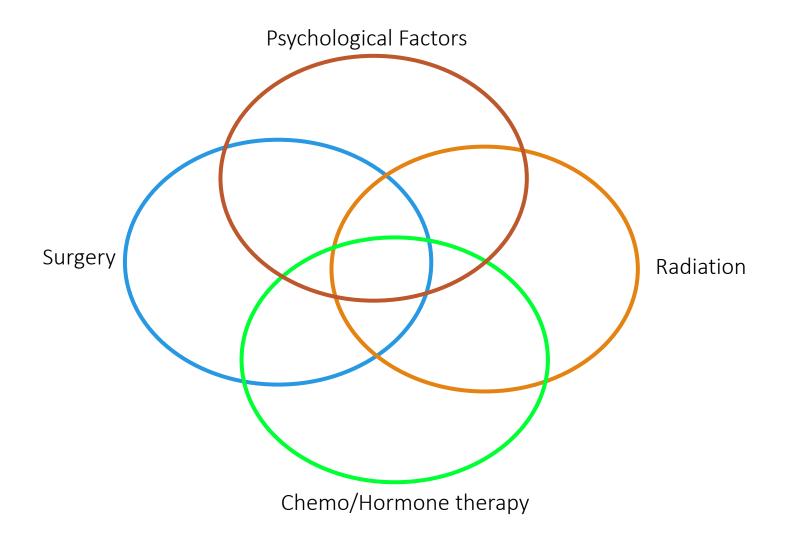
Male Sexual Dysfunctions

- Erectile dysfunction
- Low libido
- Penile morphology changes

- Failure to ejaculate
- Delayed orgasm
- Painful orgasm
- Sexual incontinence

Infertility

How Cancer Causes Sexual Problems



Impact of Sexual Dysfuction

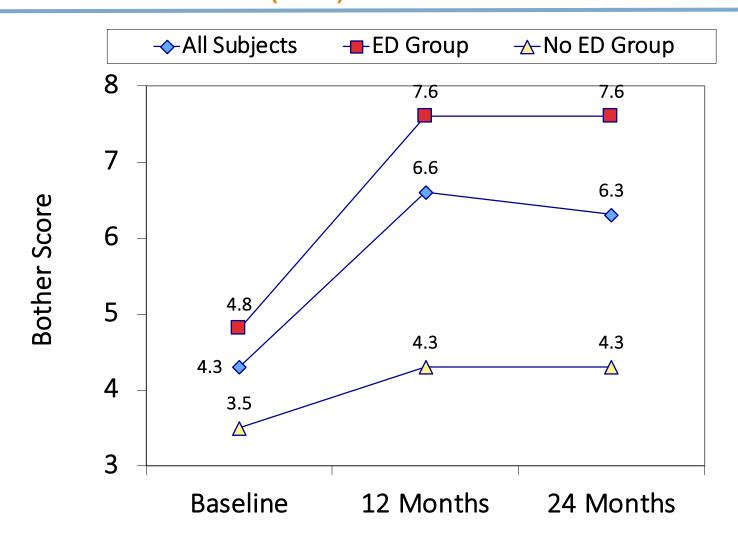
Sequelae: The Spiral Downwards

- Loss of sexual confidence
- Reduced sexual satisfaction
- Loss of self-esteem
- Sexual avoidance
- Changes in relationship satisfaction
- Female sexual dysfunction

Regret with RP

- Multivariate logistic regression analysis of men (n=400) treated with either ORP or RALP between 2000-2007
- 84% satisfied with their treatment
- Predictors of lower patient satisfaction
 - Lower income
 - Shorter follow-up
 - LARP (vs ORP)
- Reasons for higher regret among RALP patients?

ED & Bother (RP)



Optimal Outcomes

The Big Sins in Sexual Health Care

- Apathy
- Ageism
- Projection
- Judgement
- Intolerance

Optimal Outcomes

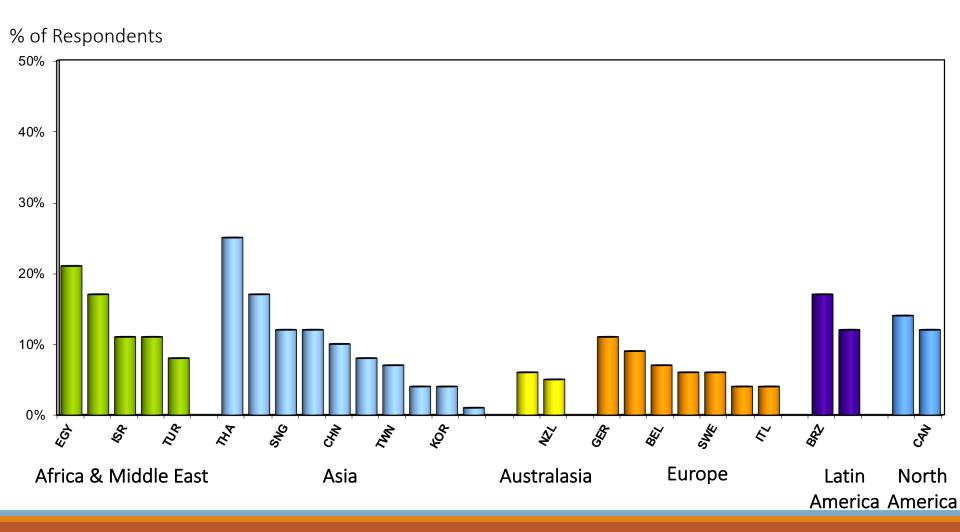
Achieving optimal outcomes requires full informed consent before treatment which requires that the clinician gives realistic expectations about the effectiveness and side effects of treatment

Barriers To Good Sexual Health Care

- Physician discomfort
- Physician bias
- Physician projection
- Concept of physician as a technician
- Time constraints
- Ageism
- The patient with pre-treatment ED
- The non-partnered patient
- The gay patient

Communication

Has Your Doctor Asked Whether You Have Sexual Difficulties?



The Top 10 Medical Conditions Too Embarrassing for Patients to Discuss With Their Family Physician

- 1. ED
- 2. STI
- 3. Physical and sexual abuse
- 4. Prostate problems
- 5. Incontinence of bladder or bowels
- 6. Emotional problems like depression
- 7. Eating disorders
- 8. Alcohol or drug abuse
- 9. Birth control and sex (especially teens)
- 10. Menopause



JOURNAL OF CLINICAL ONCOLOGY

ORIGINAL REPORT

Measuring Quality of Life in Routine Oncology Practice Improves Communication and Patient Well-Being: A Randomized Controlled Trial

Galina Velikova, Laura Booth, Adam B. Smith, Paul M. Brown, Pamela Lynch, Julia M. Brown, and Peter J. Selby

From the Cancer Research UK Clinical Centre-Leeds, Cancer Medicine Research Unit, St James's University Hospital: and Northern and Yorkshire Clinical Trials and Research Unit, Leeds, United Kingdom.

Submitted June 18, 2003; accepted December 5, 2003.

Purpose

To examine the effects on process of care and patient well-being, of the regular collection and use of health-related quality-of-life (HRQL) data in oncology practice.

Patients and Methods

In a prospective study with repeated measures involving 28 oncologists, 286 cancer patients were









Realistic Expectations

Realistic Expectations

- Discussion of prevalence of the major sexual problems
- Discussion of chronology of recovery
- Discussion of strategies to minimize long-term effects
- Discussion of strategies to treat adverse effects
- Referral pre-therapy to a sexual medicine clinician

Patient Expectations

	Open	Robotic	p Value+
Time to recovery of functional erections (months)	12	6	0.02
Proportion of patients having recovery of EF to baseline level (%)	50	75	0.01

Patient Expectations

	Open	Robotic	p Value+
Anejaculatory status (%)	70	60	NS
Potential for orgasmic pain (%)	2	0	NS
Potential for climacturia (%)	2	0	NS

Patient Benefit

For qualified ca numerous pote prostatectomy,

- Retentio
- Retentio
- Shorter
- Less po
- Less an
- Less blo
- No blood
- Less scarring
- Faster and more complete recovery
- Ouicker return to normal daily activitie

For qualified candidates, the *robotic* prostatectomy offers numerous potential benefits over the traditional open prostatectomy, including:

- Retention of bladder control
- Retention of erectile function

Incontinence is the inability to control urine and may result in leakage or dribbling of urine, News & Articles

impotence

Impotence is the inability to have an erection of the penis. For a month, or so, after surgery, most men are not able to get an erection. For men who have open retropubic radical prostatectomy, approximately 40 to 60 percent will be able to get an erection sufficient for sexual intercourse, but without ejaculation of semen, since removal of the prostate gland prevents that process.

the patient's age. However, most men who have surgery should expect some decrease in

Potential patient benefits of robotic prostatectomy include:

Minimal pain

Potential patient benefits of robotic prostatectomy include:

- Minimal impact on quality of life including sexual function and urinary control
- control



An analysis of sexual health information on radical prostatectomy websites

John P. Mulhall*, Cesar Rojaz-Cruz* and Alexander Müller*†

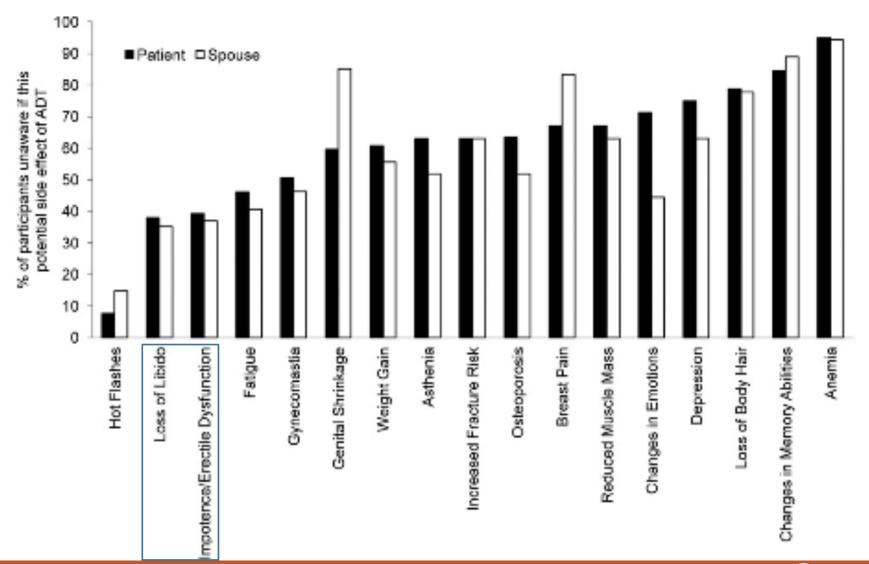
*Department of Urology, Memorial Stoan-Kettering Cancer Center, New York, NY, USA and *Department of Urology, University Hospital Zürich, Zürich, Switzerland Accepted for publication 8 April 2009

TABLE 1 Grading of information on erectile function

	RALP			
Grade	Total	University	Private	ORP
N	70	36	34	20
%:				
Α	0	0	0	10†
В	19	19	18	20
С	38	44	32*	45
U	43	36	50*	25†

P<0.05, *Private vs Academic RARP; +ORP vs RALP.

Knowledge of ADT Adverse Effects



Defining Outcomes

ED Prevalence Reporting

- Data acquisition
- Definition of ED
- Population studied

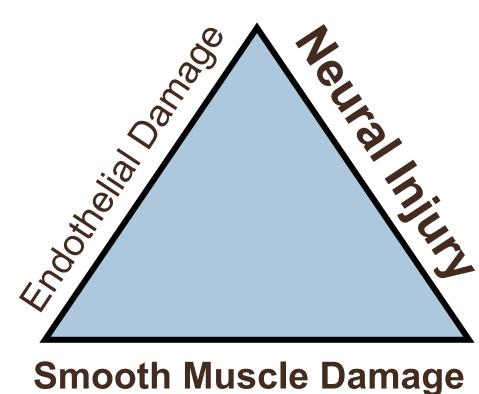
Radical Pelvic Surgery

EFR Rates = 0-97%

Metanalysis Tal et al. JSM 2010

Study	Time	N	EFR	95%	CI						
(k=22)	point		%				Ι.				
Anastasiadis et al., 2003	12	32	0.42	0.26	0.59		-				
Cohn et al., 2002	18	201	0.69	0.62	0.75						
Curto et al., 2006	12	137	0.59	0.50	0.66			2			
Dalkin et al., 2006	24	56	0.35	0.30	0.70	-		•		-	
Deliveliotis et al., 2004	24	105	0.25	0.17	0.34		+	⊣			
Deliveliotis et al., 2005	12	60	0.59	0.46	0.70			⊢	•	⊣	
Descazeaud et al., 2006	12	189	0.43	0.36	0.50			+ ◆	1		
Ficarra et al., 2006	12	17	0.65	0.41	0.83			<u> </u>	•		
Hsu et al., 2003	24	261	0.46	0.40	0.52			-	-		
Kaul et al., 2006	12	102	0.69	0.59	0.77				\vdash	\vdash	
Kundu et al., 2004	18	1,834	0.78	0.71	0.84					-	
Martis et al., 2007	24	100	0.60	0.50	0.69			8		ı	
Michl et al., 2006	12	302	0.74	0.62	0.84				-	350	
Noh et al., 2003	12	172	0.66	0.59	0.73					-i I -	
Noldus et al., 2002	12	68	0.35	0.24	0.49		I				
Rabbani et al., 2000	24	207	0.51	0.38	0.64						
Rocco et al., 2006	18	43	0.44	0.30	0.59						
Rogers et al., 2006	12	127	0.60	0.41	0.76						
Salomon et al., 2002	12	43	0.51	0.37	0.66					·	
Saranchuk et al., 2005	24	647	0.62	0.58	0.66						
Wagner et al., 2006	12	53	0.60	0.47	0.72			_ L	T		
Zorn et al., 2007	24	227	0.76	0.69	0.81			- 1	1.0	l.	
2011 20 41., 2007	2.		0.70	0.00	0.01					7	
Mean (Fixed Effects)		4,983	0.58	0.56	0.60						
Mean (Random Effects)		4,983	0.56	0.51	0.62		1	*	7		
ment (minuom Enects)		1,503	0.50	0.51	0.02	1000		1	-		_
						0.00	0.20	0.40	0.60	0.80	1.00

Pathophysiology



BTB

Patients with baseline EFD ≥24: Impact of age

Variable	With/Without PDE5 at 24m	Never Used PDE5 at 24m
< 60 (n= 81)	48%	23%
≥ 60 (n= 51)	16%	4%

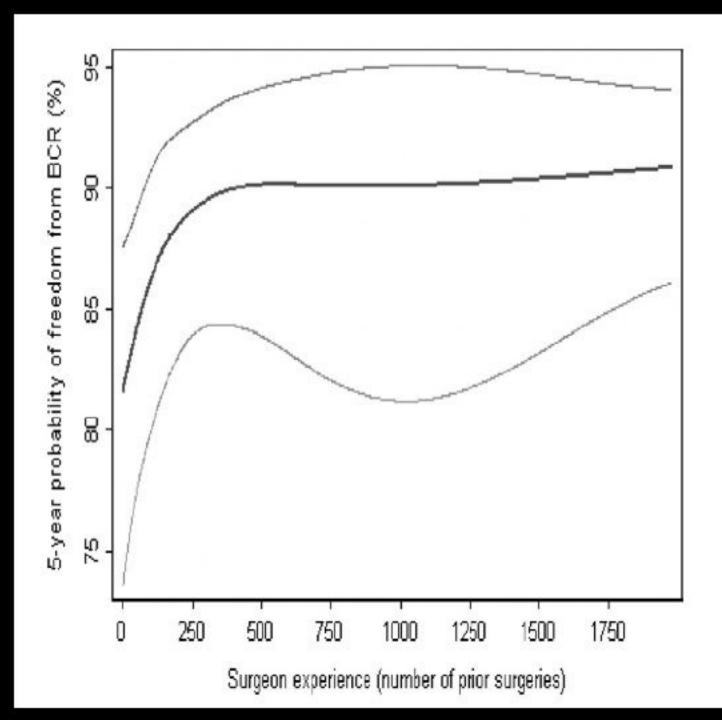
Chronology

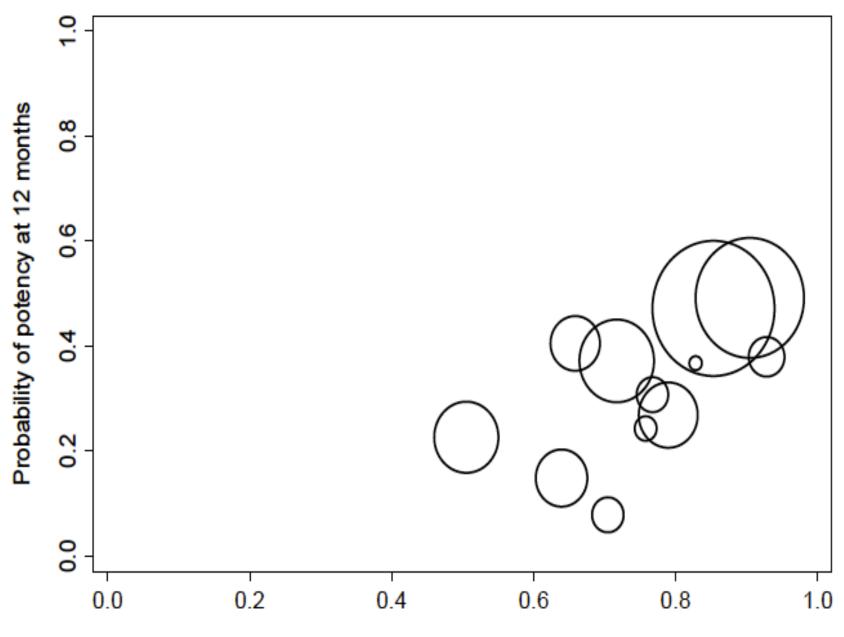
- Optimal recovery 18-24 months
- •Nadir in EF @ 3-4 months
- Recovery beyond 2 years

Recovery of Erections after RP

- Degree of nerve sparing
- Preoperative erectile function
- Patient age
- Postoperative erectile hemodynamics
- Surgeon experience
- Surgeon volume
- Vascular comorbidities
- Serum testosterone levels







Probability of continence at 12 months

Testosterone

Statement of Need

- •In USA T prescriptions have nearly tripled in recent years
- About 1/3 of patients on T therapy do not meet the criteria
- 25% of men on T therapy have not had T levels tested
- •40% on treatment have no follow-up labs performed
- Many men in need of T therapy not receiving it
- •AUA guidelines based on systematic review (multidisciplinary panel)

4. Measure T levels Even in the Absence of Symptoms/Signs

- Unexplained anemia
- Bone density loss
- Diabetes
- Exposure to chemotherapy
- Exposure to testicular radiation
- •HIV/AIDS
- Chronic narcotic use
- Male infertility
- Pituitary dysfunction
- Chronic corticosteroid use

(Moderate recommendation; evidence level: grade B)

Definition

- Total T level <300 ng/dL as a cut-off for diagnosis of low T (Moderate Recommendation; Evidence Level: Grade B)
- 2. Low T diagnosis: two total T measurements; separate occasions; same lab; same assay; early morning fashion (Strong Recommendation; Evidence Level: Grade A)
- T deficiency (TD) diagnosis made with low total T levels combined with symptoms and/or signs (Moderate Recommendation; Evidence Level: Grade B)
- 5. Use of validated questionnaires not recommended (Conditional Recommendation; Evidence Level: Grade C)

T & The Heart

19. There is no definitive evidence linking T therapy to venothrombo-embolic events

Moderate Recommendation; Evidence Level Grade C

13. Low T is a risk factor for CVD Strong Recommendation; Evidence Level Grade B

20. It cannot be stated definitively whether T therapy increases or decreases the risk of MACE

Moderate Recommendation; Evidence Level Grade B

24. T therapy should not be commenced for 3-6 months in patients with a history of a MACE Expert Opinion

T therapy and MACE Risk

RCTs demonstrate no significant difference in the incidence of MACE

```
OR (MI) = 0.61

OR (stroke) = 0.98

OR (CV death) = 0.54

OR (all-cause mortality) = 0.46
```

 Epidemiologic, observational studies, and meta-analyses evaluating T therapy and risk of MACE have reported conflicting data

Increase in MACE (Vigen, Finkle, Basaria)
Decrease in MACE (Shores, Jones, Sharma, Muraleedharan, Cheetham)
Neutral effect on MACE (Nair, Borst, Amory, Snyder, FernandezBalsells, Calof, Haddad, Corona, Baillargeon).

T & Fertility

10. TD patients interested in fertility should have a reproductive health evaluation pre-T therapy

Moderate Recommendation; Evidence Level Grade B

- 16. The long-term impact of exogenous T on spermatogenesis should be discussed with patients who are interested in future fertility Strong Recommendation; Evidence Level Grade A
- 23. Exogenous testosterone therapy should not be prescribed to men who are currently trying to conceive.

Strong Recommendation; Evidence Level Grade A

27. Clinicians may use aromatase inhibitors, hCG, SERMs, in men with TD desiring to maintain fertility

Conditional Recommendation; Evidence Level Grade C

T & Prostate

- 12. Measure PSA in men ≥40y pre-T therapy Expert Opinion
- 17. There is an absence of evidence linking testosterone therapy to the development of prostate cancer Strong Recommendation; Evidence Level Grade B
- 18. For the prostate cancer patient with TD , there is inadequate evidence to quantify the risk-benefit ratio of testosterone therapy

Expert Opinion

Lifestyle Modifications

21. All men with testosterone deficiency should be counseled regarding lifestyle modifications as a treatment strategy.

Conditional Recommendation Evidence Level Grade B

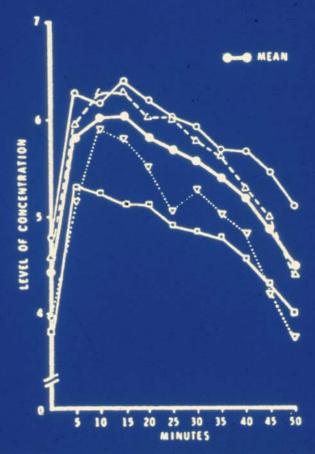
Dignity

Dignity is pre-eminent. It is an unconditional value, possessed by all. A treater's action (treatment) expresses respect for a person's dignity if, they are treated as an individual, and we are seen to maximize the preservation of personhood, through honesty, balance, and the optimization of outcomes

Maximizing Dignity Preservation

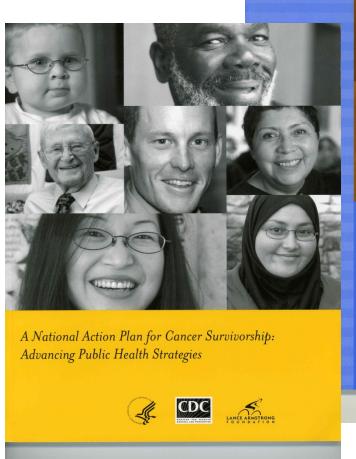
- Set realistic expectations (Honesty)
- Partner with them in the decision-making (Relationship)
- Listen to their concerns and complaints (Communication)
- Develop systems to aid patients with problems (Support)

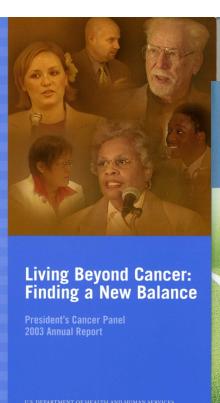
We should focus not solely on adding years to life but also on adding life to years

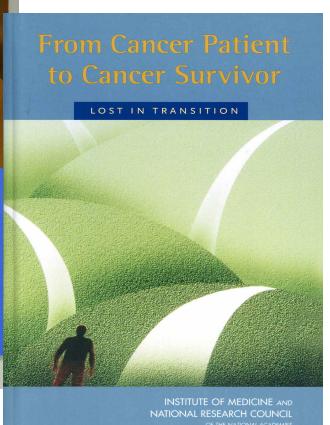


Variation in mean level of student concentration with time from start of lecture (mean for 12 lectures plus profiles for each of the four lecturers).

National Direction for Cancer Survivorship Initiatives







ED & Depression (RP)

Correlations with HADS Depression Scores

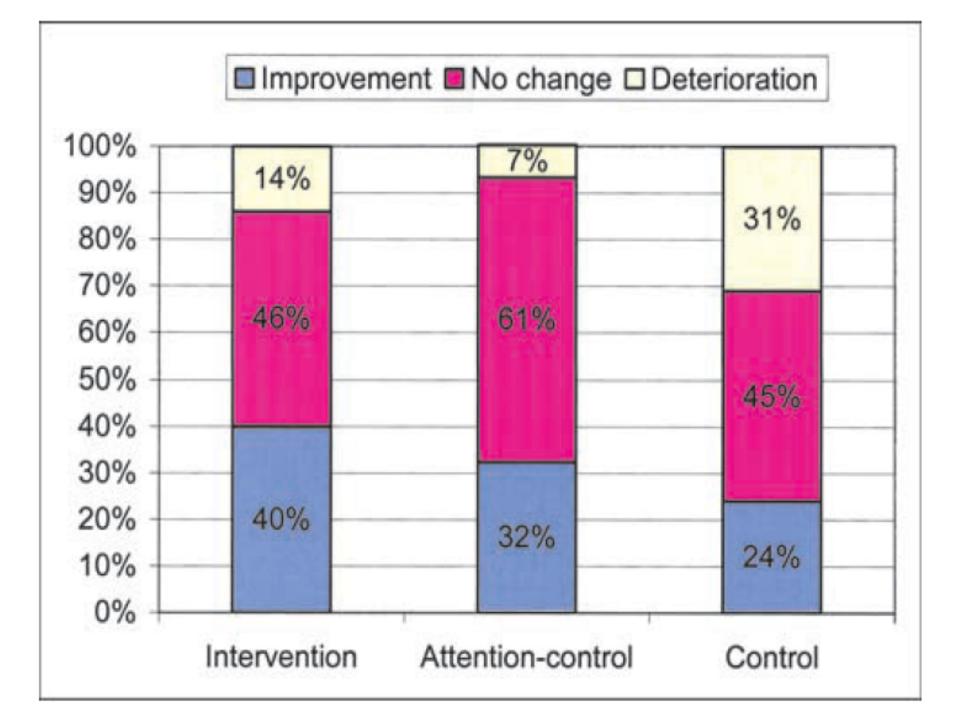
Variable	r	р
Marital Status	0.15	0.01
Age	0.07	0.17
Disease Stage	0.03	0.64
Treatment (RT vs. RP)	-0.16	0.01
Anxiety	0.56	0.001
Social Support	-0.43	0.001
Erectile Function	-0.12	0.03

Multiple regression results predicting HADS depression scores

Variable	Beta	t	р
Marital Status	-0.05	-1.16	0.25
	-0.05	-1.10	0.25
Age	0.11	2.24	0.03
Disease Stage	0.01	0.03	0.98
Treatment Type	-0.09	-1.17	0.08
Social Support	-0.20	-4.14	0.001
Anxiety	0.51	10.83	0.001
Erectile Function	-0.10	-2.26	0.02

Institute of Medicine Report

- Establish survivorship as a distinct phase of care
- Implement survivorship care plans
- Build bridges between oncology and primary care
- Develop and test models of care
- Develop and evaluate clinical practice guidelines
- Institute quality of survivorship measures
- Strengthen professional education
- Expand use of psychosocial and community support services
- Invest in survivorship research



Health-Related Quality-of-Life Assessments and Patient-Physician Communication

A Randomized Controlled Trial

Symone B. Detmar, PhD

Martin J. Muller, MSc

Jan H. Schornagel, MD, PhD

Lidwina D. V. Wever

Neil K. Aaronson, PhD

expressed in the use of health-related quality-of-life (HRQL) assessments in daily clinical practice as an aid to detect physical or psychosocial problems that otherwise might be overlooked, monitor disease and treatment, and improve the delivery of care. 1-4 Although the literature enumerates the putative benefits of routine assessment of patients' HROL in clinical practice. 3-6 relatively few

Context There has been increasing interest in the use of health-related quality-of-life (HRQL) assessments in daily clinical practice, yet few empirical studies have been conducted to evaluate the usefulness of such assessments.

Objective To evaluate the efficacy of standardized HRQL assessments in facilitating patient-physician communication and increasing physicians' awareness of their patients' HRQL-related problems.

Design Prospective, randomized crossover trial.

Setting Outpatient clinic of a cancer hospital in the Netherlands.

Participants Ten physicians and 214 patients (76% women; mean age, 57 years) undergoing palliative chemotherapy who were invited to participate between June 1996 and June 1998.

Intervention At 3 successive outpatient visits, patients completed an HRQL questionnaire (European Organization for Research and Treatment of Cancer Quality of Life Questionnaire-Core 30). The responses were computer scored and transformed into a graphic summary. Physicians and patients received a copy of the summary before the consultation.

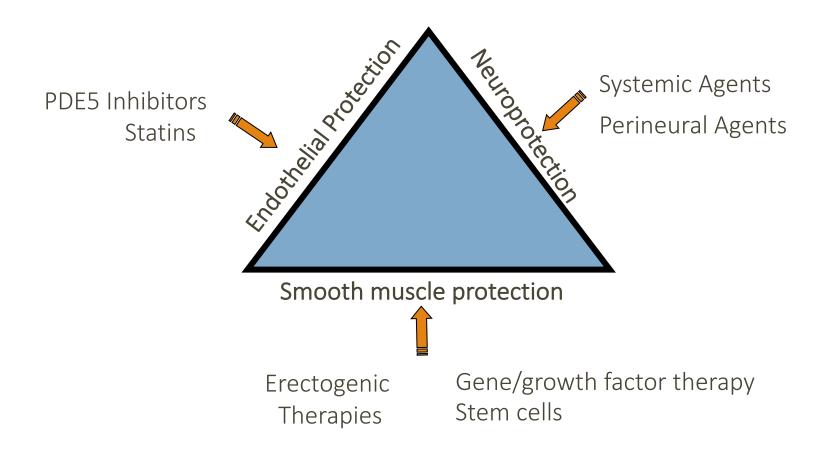
Main Outcome Measures Audiotapes of the consultations were content ana-

ICSM 2009 Recommendation Grade C

Given the strong animal and basic science evidence and understanding the strengths and weaknesses of the existing human studies and the negative consequences of long-term ED after RP, the committee suggests that penile rehabilitation has significant potential benefits for the patient/partner and should be considered after RP.



The Future



The next decade will see greater focus on modulation of host factors

