

# Prostate Cancer-Related Quality of Life and Risk for Anxiety and Depression

Shauna McManus, BS, Julie S. Olson, PhD, Melissa F. Miller, MPH, PhD, Kelly Clark, MA, Kevin Stein, PhD, FAPOS  
Cancer Support Community, Research and Training Institute, Philadelphia PA

## Background

- Due to side effects of invasive treatments, prostate cancer patients face long-term quality of life concerns and enduring psychosocial distress

## Aims

- The objective of this study was to explore how quality of life is linked to distress among a national sample of men with prostate cancer

## Methods

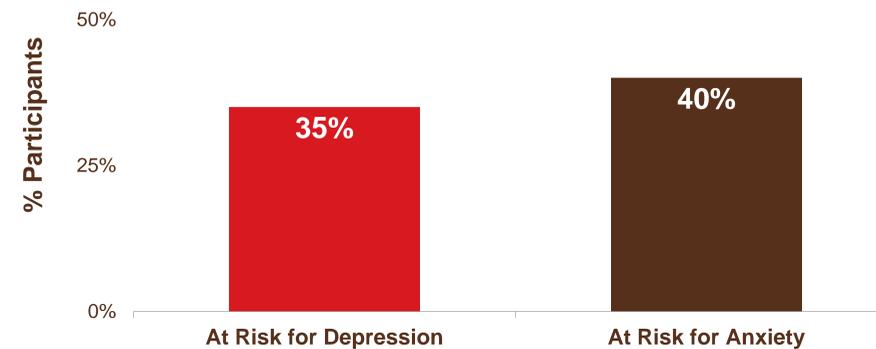
- 214 men with prostate cancer enrolled in the Cancer Support Community's Cancer Experience Registry®
- Participants provided demographic/clinical background and completed the Prostate Cancer-Related Quality of Life Scales, covering 6 quality of life domains (*urinary control, sexual intimacy, sexual confidence, masculine self-esteem, cancer control, and treatment regret*)
- Psychosocial distress was captured by CancerSupportSource®, a 25-item tool with 2-item depression and anxiety screening subscales. Scores  $\geq 3$  indicate risk for clinically significant depression or anxiety respectively, and signal need for referral and further assessment
- We examined bivariate correlations between demographic/clinical background, quality of life, and prevalence of 'risk for clinically significant anxiety and depression', and used logistic regression to calculate odds of anxiety and depression risk by quality of life, adjusting for demographic/clinical variables

## Participants

	M/n	SD/%
Age (years)	64	12 <i>Range: 18 – 88</i>
White	198	93%
Time Since Diagnosis (years)	4.3	4.9 <i>Range: &lt;1 – 25</i>
Metastatic Disease	52	25%
Experienced Recurrence		%
Treatment History		
Surgery	107	65%
Radiation Therapy (past)	83	52%
Radiation Therapy (current)	32	20%

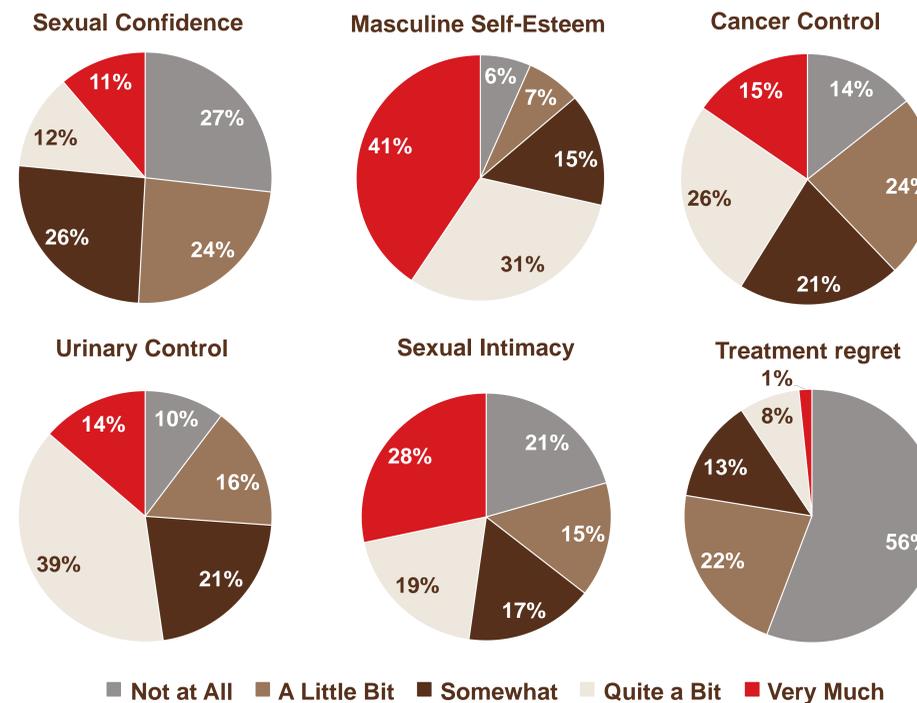
## Results

Risk for Anxiety and Depression Among Prostate Cancer Survivors



- 35% of our sample was at risk for clinically significant depression
- 40% were at risk for clinically significant anxiety

Prostate Cancer-Related Quality of Life



For each domain, respondents were asked to rate "how true are each of the following for you"; responses are averaged by domain; higher ratings represent higher quality of life for all domains except treatment regret, where higher ratings represent poorer quality of life

Bivariate Associations with Anxiety and Depression Risk

	Anxiety Risk		Depression Risk	
	r	p	r	p
Sexual Intimacy	-.44	<.001	-.46	<.001
Sexual Confidence	-.33	<.001	-.41	<.001
Masculine Self-Esteem	-.49	<.001	-.64	<.001
Perceived Cancer Control	-.51	<.001	-.42	<.001
Treatment Regret	.20	<.05	.31	<.001

- Poorer quality of life scores for sexual intimacy, sexual confidence, masculine self-esteem, cancer control, and treatment regret were associated with anxiety ( $p < .05$ ) and depression ( $p < .001$ ) risk at a bivariate level

Multivariate Logistic Regression Analyses Predicting Odds of Anxiety and Depression Risk by Prostate Cancer-Related Quality of Life

Predictor	Anxiety		Depression	
	OR	p	OR	p
Perceived Cancer Control	.97	<.05		
Masculine Self-Esteem			.88	<.05

\* Significant associations only displayed; associations controlled for number of comorbidities, perceived health, metastatic status, and education

- In logistic regression models, poorer perceived cancer control was significantly associated with increased odds of anxiety risk ( $OR=0.97$ ;  $p < .05$ )
- Lower masculine self-esteem was significantly associated with increased odds of depression risk ( $OR=0.88$ ;  $p < .05$ )

## Implications and Conclusions

- Questioning treatment efficacy and worrying about disease progression (i.e., lower perceived cancer control) predicts greater likelihood of anxiety risk
- Lower masculine self-esteem predicts increased odds of depression risk
- These findings elucidate the ways that prostate cancer patients' perceptions of advancing disease and diminishing masculinity are linked to distress, thus identifying areas for psycho-educational and supportive interventions

## Acknowledgments

This work is sponsored by Janssen Oncology, Bayer HealthCare, Genentech, Inc., Novartis

## References

- Balderson, N. and Towell, T. (2003). The prevalence and predictors of psychological distress in men with prostate cancer who are seeking support. *British Journal of Health Psychology*, 8: 125-134.
- Iark JA, Inui TS, Silliman RA, Bokhour BG, Krasnow SH, Robinson RA, Spaulding M, Talcott JA (2003) Patients' perceptions of quality of life after treatment for early prostate cancer. *Journal of clinical oncology: official journal of the American Society of Clinical Oncology* 21 (20):3777-3784.
- Nordin K, Berglund G, Glimelius B, Sjöden PO (2001) Predicting anxiety and depression among cancer patients: a clinical model. *European Journal Of Cancer (Oxford, England: 1990)* 37 (3):376-384.
- Watts S, Leydon G, Eyles C, Moore CM, Richardson A, Birch B, Prescott P, Powell C, Lewith G (2015) A quantitative analysis of the prevalence of clinical depression and anxiety in patients with prostate cancer undergoing active surveillance. *BMJ Open* 5 (5):e006674-e006674.

- The Registry is for all cancer survivors and caregivers, and also includes 11 disease-specific surveys.
- Findings contribute toward advancing research, health care and policy.
- Over 13,000 cancer survivors and caregivers are registered in the Cancer Experience Registry.

Learn more or join the Registry at [www.CancerExperienceRegistry.org](http://www.CancerExperienceRegistry.org)