

# Psychosocial Trajectories of Men Monitoring Prostate-Specific Antigen Levels Following Surgery for Prostate Cancer

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The American Cancer Society ([ACS], 2014) estimated that 233,000 new cases of prostate cancer will be diagnosed and 29,480 men will die from this disease in 2014. Prostate cancer is the most common noncutaneous cancer in men, particularly older men, and the second leading cause of death from cancer among men in the United States (ACS, 2014). For men diagnosed with localized prostate cancer, treatment strategies include active surveillance, radiation therapy, cryotherapy, surgery, and prostatectomy. A study of 11,892 men enrolled in the Cancer of the Prostate Strategic Urologic Research Endeavor database, a national registry of men with prostate cancer, found that 50% (n = 5,931) of participants underwent prostatectomy for their disease (Cooperberg, Broering, & Carroll, 2010).

After prostatectomy, prostate-specific antigen (PSA) values are used to provide information about potential progression or recurrence. Dinnes, Hewison, Altman, and Deeks (2012) reviewed guidelines from nine organizations and reported the lack of systematic guidelines to monitor treated patients. Some studies used any detectable PSA, and others used PSA doubling time. In a review of the monitoring role of PSA, Payne and Cornford (2011) reported that PSA doubling time can determine risk for clinical progression in men who experience a rise in PSA results postprostatectomy. You et al. (2009) reported the importance of PSA clearance, identified as four PSA values obtained during the first month following surgery, was predictive of relapse risk in treated men. PSA is a useful tool for monitoring disease status following prostatectomy; however, uncertainty remains for patients and providers on what values may prompt additional treatment in the case of biochemical recurrence, defined as a PSA value of at least 0.4 ng/ml followed by a second increase in value.

Despite the potential clinical use of PSA measurement after treatment, recurrent PSA testing may cause psychological distress and lead to a decrease in health-related quality of life in men who use those values

**Purpose/Objectives:** To describe the psychosocial trajectories of men treated surgically for prostate cancer after monitoring their prostate-specific antigen (PSA) levels until 24 months post-treatment.

**Design:** Descriptive longitudinal study.

**Setting:** Urology clinic at Duke University Health System.

**Sample:** 12 men diagnosed and treated for prostate cancer.

**Methods:** Men were interviewed in their homes at baseline and at 24 months and via telephone at 6, 12, and 18 months. Scores from the Profile of Mood States, Mishel Uncertainty in Illness Scale, Self-Control Schedule, and Cantril's Ladder were entered into a database for analysis. Graphs of individual participants' scores were plotted.

**Main Research Variables:** PSA values, mood state, cognitive reframing, impact of event, quality of life, illness uncertainty, and growth through uncertainty were measured.

**Findings:** Three trajectories were identified (i.e., stable, unstable, and mixed) and graphed using a typological or health pattern approach.

**Conclusions:** Monitoring PSA levels is critical for men treated for prostate cancer. This study provides preliminary data on the psychological trajectories of men during the first 24 months postprostatectomy.

**Implications for Nursing:** Rising PSA levels that are associated with the recurrence of disease can cause psychosocial distress among men with prostate cancer.

**Key Words:** prostate cancer; quality of life; survivorship; coping

*ONF*, 41(4), 361–386. doi: 10.1188/14.ONF.361-368

to monitor disease status post-treatment. A study by Dale, Bilir, Han, and Meltzer (2005) revealed that men experienced anxiety while undergoing initial PSA testing for prostate cancer and when it was used to determine if the disease recurred. However, no studies have explored illness uncertainty in the context of PSA monitoring following treatment for localized prostate cancer. The purpose of this exploratory pilot study was to describe the psychosocial trajectories of men newly