

Prostate Cancer: Emerging Challenges



Prostate cancer is the most common cancer among men. According to the American Cancer Society it is estimated that in 2010 in the US, 217,730 men will be diagnosed with prostate cancer and 32,050 men will die from the disease¹. Based on rates from 2005-2007, 16.22% of men born today, or 1 in 6, will be diagnosed with prostate cancer at some time during their life²².

In March 2010, following the publication of several studies showing that a large number of men who undergo prostate cancer screening are found to have (and then are treated for) prostate cancers that likely would never have killed them or caused a great deal of harm, the American Cancer Society (ACS) revised its guidelines regarding routine prostate cancer screening at age 50. Based on emerging evidence, the ACS now recommends that men have a chance to make an informed decision with their health care provider about whether to be screened for prostate cancer. They should first get information about what is known and what is not known about the risks and possible benefits of prostate cancer screening, and should not be screened unless they have received that information.¹

This issue brief provides an overview of the emerging challenges in identifying, diagnosing, acknowledging the relationship to male gender identity, and treating prostate cancer.

SCREENING

Periodic testing with prostate-specific antigen (PSA) may reduce the likelihood of dying from prostate cancer but must be weighed against the serious risks incurred by early detection and subsequent treatment. The potential benefit of screening is finding cancer early when treatment may be more effective. However, potential risks include false positive results, treating prostate cancer that may never affect one's health, and side effects from cancer treatment.

Numerous observational studies have reported conflicting findings regarding the benefit of screening², and as a result, the screening recommendations of various organizations differ. The American Cancer Society recommends that, starting at age 50, men make an informed decision with their doctor about whether to be tested for prostate cancer. African American men or men whose father or brother had prostate cancer before age 65, should have this talk starting at age 45.⁴

The American Urological Association (AUA) recommends PSA screening and digital rectal exam for well-informed men who wish to pursue early diagnosis. The AUA recommends that all discussions of treatment options include active surveillance as a consideration, since many screen-detected prostate cancers may not need immediate treatment. Candidates for early detection testing include men at age 40 years with anticipated lifespan of 10 or more years.³ The National Comprehensive Cancer Network recommends a risk-based screening algorithm, including family history, race, and age²⁴.

In addition, the U.S. Preventive Services Task Force (USPSTF) recently concluded that there was insufficient evidence in men under the age of 75 years

- The age-adjusted incidence rate for 2003-2007 was 150.4 per 100,000 US white men per year whereas for NH it is 154.9 per 100,000 NH males^{22, 23}.
- The age-adjusted death rate was 22.8 per 100,000 US white men per year whereas for NH it is 24.5 for 100,000 NH males^{22, 23}.
- Prostate cancer continues to rank highest in incidence and second highest in mortality among older men²⁴.
- Among its main risk factors are age (50 or older), race (African American), and family history²⁴.
- Older men in general and African American men specifically have an increased burden from the disease.

to assess the balance between benefits and side effects associated with screening, and the panel recommended against screening men over the age of 75 years, given life expectancy and the natural course of untreated disease diagnosed after that age. The USPSTF suggests that men discuss the benefit and risks of screening with their medical provider.²⁵

Timely detection of prostate cancer may be achieved using one or a combination of several methods including digital rectal examination (DRE), measurement of serum Prostrate Serum Antigen (PSA), transrectal ultrasonography (TRUS) and other imaging modalities. Currently, there is no definitive diagnostic test that can reliably predict which tumor will be slow growing and which will become more aggressive. This renders decisions about cancer screening and management difficult.

OVERDIAGNOSIS VS. UNDERDIAGNOSIS

Even though timely cancer detection improves a patient's chance of cure, the overall benefit of prostate screening is still controversial and is currently being assessed in two large clinical trials in Europe: the European Randomized Study of Screening for Prostate Cancer (ERSPC) and the Prostate testing for cancer and Treatment (ProtecT) Trial; and in the US: the Prostate, Lung, Colorectal and Ovarian Cancer Screening Trial. However, the final results are not expected for several years.

It is indeed shown that PSA screening has led to a higher detection of small volume, low grade and organ confined cancers that are diagnosed earlier in their

natural course⁶. This results in over diagnosis, i.e., a frequent discovery of indolent cancers that would otherwise remain clinically unrecognized during the patient's natural lifespan. Over diagnosis is exacerbated by the fact that the PSA thresholds for biopsy are decreasing around the world due to the risk of under diagnosis and missing aggressive cancers in low PSA ranges. In a recent ERSPC report, instances of over diagnosis were identified in up to 60% of prostate cancer cases⁶. If this is an accurate estimate, the potential impact of over diagnosis and unnecessary treatment on patients' health and its burden to healthcare services would be substantial.

CHOICE OF TREATMENT

Apart from the general worries of a new cancer diagnosis, there is still controversy about the selection of primary treatments for prostate cancer making the decision about treatment difficult. The main challenge in prostate cancer treatment is to distinguish between indolent cancers, which require active surveillance or conservative management, and those cancers at high-risk of local and distant spread which may warrant radical therapy. In the latter, the survival benefits of radical therapy may outweigh the associated side effects of treatment such as pain, impotence and incontinence.

In addition, some cancers may evolve from being slow to fast growing, and it is therefore important to detect this early so that the course of the treatment can be changed while the disease is still curable. For early stage cancer, there are four primary treatment options: watchful waiting, radical prostatectomy, external beam radiation, and radioactive seed implants (brachy-therapy)⁷. All options other than watchful waiting can lead to differences in specific areas of functioning, such as sexual, urinary or bowel functioning over time⁷⁻⁸. Advanced prostate cancer is primarily treated by hormonal therapy, which affects sexual desire and function.

Watchful waiting is typically an option for older men with slow-growing prostate cancer, however, specific protocols for this plan have not been fully established or studied and many factors may jeopardize its effectiveness. Watchful waiting requires frequent PSA testing scheduled by a primary care physician, however, if the primary care physician does not or cannot order the required testing, or insurance will not cover the testing, the cancer may go beyond the point of easy (or even any) treatment. In addition, a newly diagnosed patient may be in a state of denial of his disease and decide on his own that watchful waiting is the best choice, especially since it avoids the possible side effects (incontinence, erectile dysfunction, etc.) of treatment. These factors may hinder the patient's ability to be adequately monitored and miss the point where more aggressive treatment should be started, putting him at risk of more serious, untreatable, illness or death later on.²⁷

According to the AUA, four facts are very important when choosing a treatment for prostate cancer. These are how long a life you are expected to live, your overall health status, the tumor's characteristics and your values or personal preferences.²⁶

MALE GENDER IDENTITY

The effects of treatment for prostate cancer can have serious ramifications to a man's perception of his masculinity and quality of life. According to researchers, if you ask men what masculinity means for them, you seldom get a consistent answer. How men are socialized and act as men is constantly practiced in social interaction, and influenced by beliefs and behavior such as being strong and self-sufficient (box). At first glance, the male gender identity described in the box seems stereotypical and exaggerated, but there is some evidence that these characteristics are still real⁹. A man's concept of his masculinity varies greatly according to his socio-cultural background and often changes during his life. Masculinity has close

links to potency, not only in the biological sense, but also in the social sense. Surprisingly, there is little awareness of, or research into, the effect of prostate cancer on male gender identity. By contrast, the effect of surgical techniques (mastectomy versus lumpectomy) on femininity has been investigated extensively.

The lack of information on the effect of quality of life of different treatments for prostate cancer makes it more difficult for men to decide about treatment. However, there is no randomized trial comparing the effect on quality of life of different treatments after localized prostate cancer (surgery, brachy-therapy, and external beam therapy). Although most urologists acknowledge the importance of quality of life in the treatment of prostate cancer, it can be difficult to reconcile this with their training in surgical interventions¹⁰.

The diagnosis of cancer is distressing, and between 20% and 30% of cancer patients continue to be depressed or anxious six months after diagnosis¹¹. Disease stage, uncontrolled pain, and absence of social support correlate more with psychological distress than cancer site. Again more data are available for breast cancer than prostate cancer¹². Being depressed is in contradiction with the core values of male gender identity (box). During stressful times most women with breast cancer want to talk about it and share their feelings with others—most men with prostate cancer would rather not.

The authors of a recent study of men after prostatectomy concluded: "Most men with prostate cancer avoided disclosure about their illness where possible and placed great importance on sustaining a normal life. Factors related to limiting disclosure included men's low perceived need for support, fear of stigmatization, the need to minimize the threat of illness to aid coping, practical necessities in the workplace, and the desire to avoid burdening others."¹³

Support groups for patients with breast cancer have a longer tradition than those for men with prostate cancer, and more women than men attend support groups¹³. Men in support groups prefer to

Male Gender Identity: Masculinity¹⁹

- Strong, silent type (restricted experience and expression of emotions)
- Toughness and violence
- Self sufficiency (no needs)
- Being a stud
- No sissy stuff (such as emotional sensitivity)
- Be powerful and successful

share information whereas women prefer to share emotion. These gender differences are even found in internet cancer support groups¹⁴. More is known about the efficacy of group intervention in breast cancer than in prostate cancer¹⁵⁻¹⁷. Most patients with prostate cancer want to share decision making with the doctor¹⁸ and also consult their partner¹⁹. 23% of men treated for metastatic prostate cancer express regrets about their original treatment choice²⁰. Little is known about the attitudes of urologists concerning shared decision making, and we do not know how urologists really behave in the decision making process²¹.

To achieve a better quality of care for men with prostate cancer and to be more cost effective, it is being suggested that patients should be treated more discerningly. New diagnostic tools are needed to reduce the rate of false positive test results and reliably discriminate between those men with latent cancers and those with more aggressive forms of the disease. There also should be higher priority for research on psychosocial aspects of prostate cancer. Hopefully, more funding for prostate cancer research in the future will close the gap in knowledge and skills regarding screening, treatment, and psychosocial aspects of prostate cancer. In the interim, men should seek balanced information from clinicians about the risks and benefits of screening and treatment to assist in making informed decisions. Since all choices represent trade-offs of different benefits and risks, sharing of information can help patients discuss with their care providers the most important considerations for them in the decisions that need to be made.

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