Prostate Cancer
IN NIGERIA TODAY
Early Detection Is the Key
What Is the Prostate Gland?

- The **prostate** is a small gland
- It is part of the male reproductive system
- It sits low in the **pelvis**
  - Below the bladder
  - Just in front of the rectum
- It helps to make **semen**
- It surrounds part of the **urethra**
  - The urethra is the tube that carries urine out of the bladder and through the penis
Changes with Increasing Age

- Since the prostate gland surrounds the urethra
  - It can be a source of problems as men age because
  - The prostate tends to grow bigger with age and may squeeze the urethra or
  - A tumor can make the prostate bigger

- These changes, or an infection, can cause problems with passing urine
  - Sometimes men in their 30s and 40s may begin to have these urinary symptoms and need medical attention
  - For others, symptoms aren't noticed until much later in life
  - *Seek medical attention* if you have any urinary symptoms
Symptoms You Should Report

- Passing urine *more often* during the day
- An *urgent need* to pass urine
- Experiencing *less urine flow*
- *Burning sensation* when passing urine
- Need to *get up many times* during the night to pass urine
Common Prostate Problems

- The most common prostate problems are:
  - *Infection* of the prostate (prostatitis)
  - *Enlargement* of the prostate (often called BPH)*
  - Prostate *cancer*

- One change does *not* lead to another
  - Having prostatitis or BPH does *not* raise the chance of prostate cancer
  - It is possible to have more than one condition at the same time

- Most prostate changes are *not* cancer

*BPH actually stands for “benign prostatic hyperplasia.”*
Tests for Prostate Problems

THE PHYSICAL EXAM*

- A test to feel for swollen or hard areas of the prostate
- Carried out with a gloved and lubricated finger
- The prostate is examined via the rectum
- It takes about 10-15 seconds

*This test is often called a “digital rectal exam” or DRE.
Tests for Prostate Problems

THE PSA TEST*

- PSA is a protein made by *normal* prostate cells *and* by prostate *cancer* cells
- PSA “leaks” from prostate cells into the blood
- It can be measured by taking a blood sample
- PSA levels *normally* rise if a man has prostate cancer, but
  - A *high* PSA level is *not* proof of cancer
  - A *low* PSA level is *not* proof of no cancer

*PSA stands for “prostate specific antigen” (but actually it is not completely specific to the prostate)
Tests for Prostate Problems

- PSA levels can rise (and fall again) for many reasons
  - *Not* only because of prostate cancer *but also*
  - If you have BPH
  - If you have prostatitis
  - Disturbance of the prostate gland
    - By riding a bicycle or motorcycle
    - By having a prostate examination (a DRE)
    - By having an orgasm within the prior 24 hours
    - By having a prostate biopsy or some types of surgery
Tests for Prostate Problems

- Some men’s prostate glands naturally produce more PSA than others
- PSA levels tend to go up slightly with age
- Black African men tend to have higher PSA levels seem to have higher “normal” PSA levels than men of other races
Tests for Prostate Problems

- PSA levels are measured in very small amounts (nanograms or ng) per volume of fluid (ml) tested.
- A PSA level of 4 ng/ml or higher often is used as the trigger for further tests, such as a prostate biopsy.
- A prostate biopsy is a test to check for cancer.
What is Prostate Cancer?

- Prostate cancer starts in the **prostate**
- If it isn’t treated early, prostate cancer follows a natural course:
  - It starts as a tiny group of cancer cells that
  - Can grow into a full-blown tumor and then
  - Spread throughout the body
Who Gets Prostate Cancer?

- **Each year, thousands** of Nigerian men get prostate cancer
  - The next 2 slides highlight data on prostate cancer in Nigeria

- **Only men** get prostate cancer
  - Women don’t have prostates, so they can’t get prostate cancer
  - Most common in older men
The Nigerian Data

- Osegbe published data about Nigerian men of 45 years old or older with prostatic symptoms
- His paper suggested that:
  - The average age of Nigerian prostate cancer patients at diagnosis was 68.3 years
  - The hospital incidence was 127/100,000 cases
  - The national prostate cancer risk was 2 percent of all patients
  - The annual mortality was 20,000 cancer-specific deaths
  - Most men were being diagnosed with advanced disease
  - Approximately 64 percent of newly diagnosed patients died within 2 years

Mohammed et al. have reported that prostate cancer accounted for 16.5 percent of all cancers reported in 1,001 men based on a 10-year analysis of data from the Kano Cancer Registry (from 1995 to 2004).

Prostate Cancer Prevention

- There is *no sure way* to prevent a man from getting prostate cancer today
- Eating less red meat and fewer fatty foods *may* help
- Taking a drug called finasteride *can* help
  - But many doctors think the risks are as great as the benefits
Who Is at Risk?

- Every man is at *some* risk for prostate cancer
- If you have a close male relative who has or had prostate cancer, *you are at higher risk*
  - Father, grandfather, uncle, or brother
- Black African men seem to be at high risk
  - But we really don’t know why
  - Heredity? Diet? Lifestyle?
- Prostate cancer is most common in men over 50 years of age
What Can Happen?

- Prostate cancer that isn’t treated early can spread (“metastasize”) and cause the death of the patient.
- Over time, prostate cancer commonly spreads into the hips, the spine, and other bones.
What Are the Symptoms?

- In its earliest and most curable stages, prostate cancer has *no symptoms at all*

- Later on, symptoms may include
  - Pain and stiffness in the lower back
  - Frequent need to urinate
  - Other urinary tract problems
  - Blood in the urine or the semen

- By then the cancer may not be curable
Early Detection

- Regular physical exams and a simple blood test (a PSA test) are the keys to early detection
  - Regular physical exams and PSA tests can be started in the early or mid 40s
  - Individuals with a family history of prostate cancer, should start having regular tests earlier
How Is It Diagnosed?

- Prostate cancer can only be diagnosed in its early stages by looking at tissues taken from the prostate (a biopsy) under a microscope.

![Normal, highly structured, prostate tissue](image1)

![Aggressive prostate cancer, lacks all tissue architecture](image2)
If You Are Diagnosed ...

- Don’t panic!
  - Although most prostate cancers grow slowly, Nigerian men are often diagnosed at an advanced stage
  - It is important to get to an expert/specialist as soon as possible and to

- Go to the most expert specialist you can find
  - The most experienced physicians generally have the lowest rates of complications associated with treatment
How Is It Treated?

➢ Treatment depends on many factors
  – The patient’s age, health status, and other factors
    • Prostate cancer commonly grows slowly
    • Older men and men with other health risks may never need treatment
  – The clinical stage of the cancer
    • Whether it is still localized to the prostate (stages T1, T2)
    • How far it has spread outside the prostate
  – The “grade” of the cancer
    • The “grade” is a measure of the “aggressiveness” of the cancer
    • The “aggressiveness” will affect treatment options
How Is It Treated?

- **Early stage disease** can be treated by
  - Active surveillance (careful, regular monitoring over time)
  - Surgical removal of the prostate (radical prostatectomy)
  - External beam radiotherapy (of various kinds)
  - Brachytherapy (implantation of radioactive “seeds”)
  - Cryotherapy (killing the cancer by freezing)
  - Ultrasound beams (killing the cancer through sound waves)

- **Later stages** of the disease may require
  - Hormone therapy
  - Chemotherapy
Are There Risks of Treatment?

- *All treatments for prostate cancer come with risks*

- The risks of active surveillance are
  - That the cancer will progress and become incurable

- The most important risks of invasive treatments are
  - Urinary incontinence (both short term* and long term)
  - Erectile dysfunction (both short term* and long term)
  - Depression (particularly associated with hormone therapy)

*Loss of urinary continence and loss of erectile function are normal short-term side effects of most types of invasive treatment for prostate cancer. The degree of recovery of these functions varies from man to man.*
In Summary

- Only men can get prostate cancer
- All Nigerian men are at risk for prostate cancer
  - But some are at higher risk than others
- It is most common in men over 50
- Early diagnosis requires *early, regular PSA tests and physical exams*
- Good treatment is possible but not all men need invasive treatment
Credits

- This slide kit has been prepared by
  - Prostate Cancer International, Inc.
  - In association with Obiageli N. Nnodu, MD

- For more information about prostate cancer in Nigeria, please see
  - http://pcafrica.wordpress.com/nigeria

- For more information about the details of prostate cancer and its management, please see
  - http://prostatecancerinfolink.net
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