APSHO AP Academy
Healthcare Disparities in Prostate Cancer

Shamsah Lakhani, DHSc, MPH, PA-C
Sanofi
Disclosures

- Shamsah Lakhani is employed by Sanofi.
Learning Objectives

• Describe disparities in prostate cancer prevalence and outcomes
• Identify the social determinants related to prostate cancer outcomes
• Assess barriers to screening and treatment in local communities
Outline

• Prostate Cancer: Facts and Stats
  • Prostate Cancer Incidence
    • Black/African Communities
    • Hispanic/Latino Communities
    • Asian/Pacific Islander Communities
    • The LGBTQI Population

• Disparities in Prostate Cancer: Root causes
  • Trust
  • Social Determinants of Health
  • Education and Awareness
  • Healthcare Workforce Representation
  • Clinical Trial Representation

• Addressing Healthcare-Related Disparities: Implications to Practice
  • Time to Diagnosis
  • Access to Care
  • Practicing Equitable, Evidence-Based Clinical Care
Prostate Cancer
Facts and Stats
Key Facts

• 1 in 8 men will be diagnosed with prostate cancer during their lifetime
• Prostate cancer is the second leading cause of cancer death in men
• The relative 5-year survival rate for prostate cancer diagnosed in its earliest stages is nearly 100%
• The 5-year survival rate for advanced or metastatic prostate cancer drops to 32%
• In 2023:
  • 288,300 new cases of prostate cancer are expected to be diagnosed
  • 34,700 men are expected to die from prostate cancer
  • There will be approximately 3.1 million cancer survivors

Prostate Cancer: Age-Adjusted Rate of New Cases per 100,000 Men by Race/Ethnicity

Prostate Cancer: Age-Adjusted Death Rate per 100,000 Men by Race/Ethnicity

Incidence Rates by Race & Ethnicity

**Incidence rates, 2015-2019**
Prostate, by race and ethnicity

- Non-Hispanic black: 176.2
- Non-Hispanic white: 103.5
- Hispanic: 87.2
- American Indian and Alaska Native: 82.6
- Asian and Pacific Islander: 57.2

**Death rates, 2016-2020**
Prostate, by race and ethnicity

- Non-Hispanic black: 37.5
- American Indian and Alaska Native: 21.9
- Non-Hispanic white: 17.8
- Hispanic: 15.3
- Asian and Pacific Islander: 8.6

Defining Health Disparities and Health Equity

Healthy People 2030

• **Health disparity:** “A particular type of health difference that is linked with social, economic, and/or environmental disadvantage, and that adversely affects groups of people who have systematically experienced greater obstacles to health.”

• **Health equity:** “The attainment of the highest level of health for all people and notes that it requires valuing everyone equally with focused and ongoing societal efforts to address avoidable inequalities, historical and contemporary injustices, and health and health care disparities.”

CDC

• **Health disparities:** “Preventable differences in the burden, disease, injury, violence, or in opportunities to achieve optimal health experienced by socially disadvantaged racial, ethnic, and other population groups and communities.”

• **Health equity:** “When everyone has the opportunity to be as healthy as possible.”

HHS website. Health Equity in Healthy People 2030; CDC website. Health Disparities.
Disparities in Prostate Cancer

Understanding Root Causes
Who Experiences Health Disparities?

- According to the NIH, the following populations experience greater health disparities:
  - Racial and ethnic minority groups
  - People with lower socioeconomic status
  - Underserved rural communities
  - Sexual and gender minorities

NIMHD website. Minority Health and Health Disparities: Definitions and Parameters.
Health Disparities in Prostate Cancer

- 1 in 6 Black men will be diagnosed with prostate cancer during their lifetime
- 1 in 9 Hispanic men will be diagnosed with prostate cancer during their lifetime
- Compared to White men, Black men are
  - 1.7 times more likely to be diagnosed with prostate cancer
  - 2.1 times more likely to die from prostate cancer

ZeroCancer.org website. Understanding Health Equity in Prostate Cancer.
What We Know

- Inequities exist along the continuum of care for prostate cancer management
  - Screening
  - Diagnostic and staging workup
  - Treatment
  - Surveillance

Disparities in prostate cancer outcomes are reduced or eliminated when patients undergoing definitive radiation receive equitable access to high-level, quality care

Addressing Healthcare-Related Disparities

Implications to Practice
Time to Diagnosis

Digging Deeper
Access to Appropriate and Timely Imaging

- Access to baseline diagnostic MRI as part of pretreatment imaging
  - African American and Hispanic patients were less likely than White men to undergo prostate multiparametric MRI
  - Black patients and patients with nonprivate insurance in the low-risk group were less likely to have undergone baseline diagnostic MRI\(^1,2\)
  - Patients with higher income and younger age were more likely to undergo imaging that was adherent to NCCN guidelines

- In a study of nearly 40,000 Medicare beneficiaries\(^1,2\):
  - Black patients with prostate cancer were less likely than White patients to undergo prostate MRI
  - Reasons for this disparity
    - Geographic differences
    - Socioeconomic status
    - Racialized residential segregation were associated with most of the Black vs White racial disparity in prostate MRI use

- Appropriate imaging when found to have elevated PSA levels
  - 800,000 commercially insured men undergoing a PSA test between 2011 and 2017 reported that Black and Hispanic patients were significantly less likely than White patients to undergo prostate MRI\(^2,3\)

Access to Appropriate and Timely Therapies: Radiation

- Older men were less likely to receive definitive radiation or prostatectomy
- Black men were less likely to receive curative therapy or dose-escalated radiation
- Black, Hispanic, and Asian men were less likely to receive proton therapy
- Lower income was associated with decreased PSA testing
- Medicaid patients were less likely to receive definitive treatments
- Rural residents were less likely to receive radiation
- Patients at hospitals serving minority individuals were less likely to undergo definitive treatments for prostate cancer

Access to Timely Care: From Diagnosis to Treatment

• According to SEER-Medicare analysis
  • Black patients with high-risk prostate cancer experienced a significantly longer time from diagnosis to treatment compared to White patients—105 versus 96 days

• According to National Cancer Database analysis
  • Black, Hispanic, and uninsured patients were significantly more likely to experience treatment delays regardless of whether they were treated at academic or community centers

• A study of more than 300,000 patients with prostate cancer found that Black race was not associated with inferior prostate cancer–specific mortality

• With similar access to care and standardized treatment, Black men with nonmetastatic prostate cancer appeared to have stage-for-stage prostate cancer–specific mortality comparable to that of White men

Access to Clinical Trials

- Black patients have **2.1-fold higher mortality** compared to White patients.
- However, **Black patient representation is 12.8%** compared to 81.7% in clinical trials that make up the NCCN guidelines.

<table>
<thead>
<tr>
<th>Factors From 547 Studies</th>
<th>Black Patients</th>
<th>White Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall representation</td>
<td>12.8%</td>
<td>81.7%</td>
</tr>
<tr>
<td>Risk stratification studies</td>
<td>12%</td>
<td>75%</td>
</tr>
<tr>
<td>Imaging and staging studies</td>
<td>11%</td>
<td>80%</td>
</tr>
<tr>
<td>Treatment trials</td>
<td>16%</td>
<td>81%</td>
</tr>
<tr>
<td>Castration-sensitive prostate cancer</td>
<td>9%</td>
<td>84%</td>
</tr>
<tr>
<td>Castration-resistant prostate cancer</td>
<td>8%</td>
<td>73%</td>
</tr>
<tr>
<td>Metastatic bone disease</td>
<td>7%</td>
<td>84%</td>
</tr>
</tbody>
</table>

Prostate Cancer in the LGBTQIA+ Population

• Gay and bisexual men when compared to straight men:
  • Do not have an increased risk of prostate cancer
  • Report a greater negative impact on physical and psychosocial quality of life from prostate cancer

• Approximately 0.4%–1.3% of the worldwide population is transgender
  • A PubMed review by Nik-Ahd & colleagues (2023) to understand PSA screening practices and prevalence of prostate cancer diagnosis in transgender women revealed:
    • Although the prostate cancer rates among this population may be lower, case reports show that they may have a more aggressive disease
    • These cancers may have been present before undergoing gender-affirming hormone therapy
    • These cancers may be castrate resistant at diagnosis

• At the present time, there is no consensus regarding PSA screening in this population
  • Transgender females should be part of prostate cancer detection programs as any cisgender male

Building Trust

• Across racial groups, the internet is a popular source of health information

• Black adults are more likely to trust online health information yet have more medical mistrust than White adults.

• 1703 Black adults and 1201 White adults were randomly assigned to watch 1 of 8 videos about prostate cancer on topics of either prostate cancer screening or clinical trials

• Videos were presented by 1 of 4 speakers: a Black physician, a Black patient, a White physician, or a White patient, followed by a questionnaire

Results

• Among Black adults:
  • Higher trust in videos with Black speakers vs White speakers: 72.7% vs 64.3%
  • Lower trust in with patient vs physician presenter: 64.6% vs 72.5%;
  • Lower trust in clinical trials vs screening: 66.3% vs 70.7%

• Among White adults
  • Lower trust in videos with patient vs physician presenter: 72% vs 78.6%
  • Lower trust in clinical trials vs screening: 71.4% vs 79.1
  • No difference for Black vs White presenters: 76.8% vs 73.7%

Both groups had greater trust in the physician presenter; however, physician racial concordance was significantly associated with trust only among Black adults.

Practicing Equitable, Evidence-Based Clinical Care

Barriers and Facilitators: What Can We Do?
Implementing Quality Metrics: Recommendations

• Develop and track metrics that address modifiable barriers

• Examples:
  • Time to diagnosis
  • Time to obtaining imaging studies
  • Appropriateness of imaging studies ordered
  • Time to starting radiation therapy
  • Variations in treatment regimens offered
    • Radiation therapy
    • Endocrine therapy

“Implementing quality equity metrics, such as monitoring time to treatment and technology use across sociodemographic groups, will provide an initial path to mitigate disparities and achieve health equity in diagnostic imaging and radiotherapy for patients with prostate cancer” –Washington et al.
Implications for Advanced Practitioners

- Practice evidence-based care for every patient regardless of age/sex/ethnicity
- Do not make assumptions
- Obtain continuing education and literacy; understand the unique medical needs of different populations
- Practice self-awareness; be aware of your own biases
- Give culturally competent care
- Be an advocate for clinical trial participation
- Engage in quality improvement projects
Summary of Key Points

• 1 in 8 men will be diagnosed with prostate cancer during their lifetime and prostate cancer is the second leading cause of cancer death in men

• People of color and other underserved groups face ongoing disparities in health

• Disparities in prostate cancer outcomes are reduced or eliminated when patients undergoing definitive radiation receive equitable access to high-level, quality care

• Differences in access to care, treatment delays, timely delivery of care, and variation in treatment schedules are some modifiable barriers that can be addressed

• Quality metrics should be developed and tracked to monitor quality improvement in operational aspects of caring for patients with prostate cancer

• APs can play an invaluable role in addressing barriers to care for patients with prostate cancer
Thank you!

You may now proceed to the post-test questions
Post-Session Test Question #1

1. Black patients with high-risk prostate cancer experience significantly longer time from diagnosis to treatment, compared to White patients.
   - True
   - False
Post Session Test

2. Black men with nonmetastatic prostate cancer appear to have:
   
   A. A higher risk for cancer-specific mortality, stage for stage, comparable to White men even when provided with similar access to care and standardized treatment
   
   B. A lower risk for cancer-specific mortality, stage for stage, comparable to White men even when provided with similar access to care and standardized treatment
   
   C. The same risk for cancer-specific mortality as White men when provided with similar access to care and standardized treatment
Post Session Test

3. Which of the following factors contribute to Black patients with prostate cancer being less likely than White patients to undergo prostate MRI?

A. Geographic differences
B. Socioeconomic status
C. Racialized residential segregation
D. All of the above