

## Diversity, Equity and Inclusion: What Does That Mean for Me?

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UNC ESHELMAN SCHOOL OF PHARMACY

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### Disclosures

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Consultant for Servier Pharmaceuticals and spouse is an employee with stock ownership at Novartis.

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### Learning Objectives

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1. Discuss existing health disparities in cancer care
2. Summarize structural and social factors that perpetuate racism as a risk factor for outcome disparities in oncology
3. Describe a framework for mitigating racial disparities in cancer care with evidence-based interventions in teaching, research, and clinical practice

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Describe existing health disparities in cancer care

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A Targeted Approach

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Closing the Gap

Year	American Indian/Alaska Native	Asian/Pacific Islander	Hispanic	African Americans	Whites
2000	120	125	135	245	195
2005	115	120	130	225	185
2010	110	115	125	205	175
2015	105	110	120	185	165
2017	100	105	115	175	155

Figure used with permission: CancerDisparitiesProgressReport.org [Internet]. Philadelphia: American Association for Cancer Research; ©2020 [cited 2021 06 16]. Available from:

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**Which of the following best represents the disparities that exists in cancer outcomes?**

- A. The disparity in mortality between White and African American patients with cancer continues to worsen, with African American patients experiencing an increasing rate of death relative to that of White patients.
- B. Disparities in cancer outcomes are largely attributable to biological and genetic factors, with limited impact from socioeconomic factors.
- C. The impact of social determinants on outcome in cancer care is limited to only a couple of cancers.
- D. African Americans are more likely to have lower household incomes, be uninsured, and have a lower level of education compared to Whites, contributing to worse cancer outcomes.

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**Summarize structural and social factors that perpetuate racism as a risk factor**

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**James Marion Sims and Henrietta Lacks**

- J. Sims: Practiced surgical techniques on enslaved Black women without anesthesia
  - He later went on to do the same procedures in wealthy white women under anesthesia (1840s)
- Henrietta Lacks' infamous immortalized cell line was harvested from her in the 1940s without her consent.
  - Her cells' success in cancer research remained unknown to her family until 1975, decades after she passed away from cervical cancer




Image used with permission. Image: Henrietta Lacks in 1940s.

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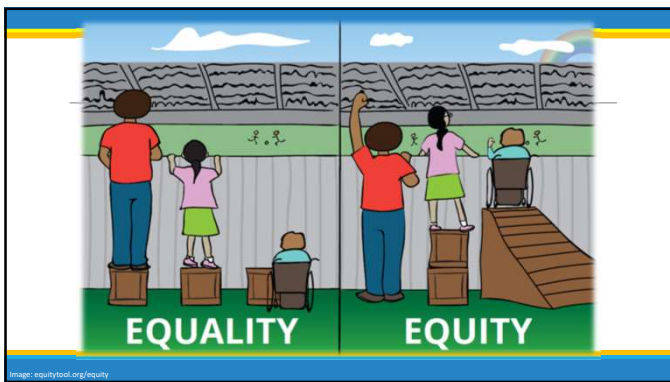
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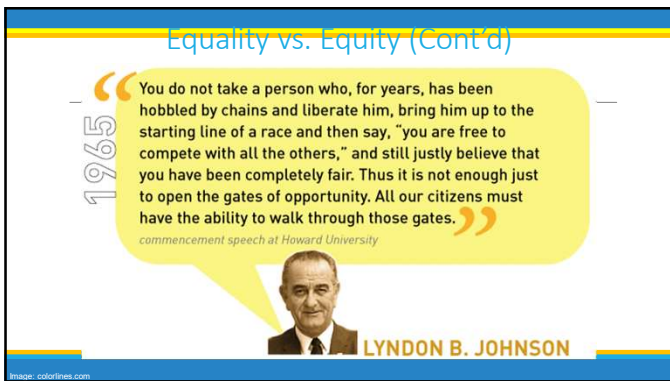
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### Language Matters

Race

Genetics

Racism

A branch of biology that deals with the heredity and variation of organisms and their characteristics in groups or individuals of particular race.

Marion-Webster Dictionary

Dietze, et al. / *Nat Rev Cancer* 2015; Apr;15(4):248-54.

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### Why Do Racial Disparities Exist?

Race

Genetics

Racism

Social construct that is often a poor substitute for genetics

Adverse genetics more likely to be present in Black people (?)

Structural and systemic barriers cause racial disparities

Dietze, et al. / *Nat Rev Cancer* 2015; Apr;15(4):248-54.

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### Case Study: Triple Negative Breast Cancer (TNBC)

Fact: Black women with TNBC have worse clinical outcomes (30% higher mortality) than White women with TNBC.

Dietze, et al. / *Nat Rev Cancer* 2015; Apr;15(4):248-54.

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### Genetics vs. Racism in Breast Cancer

Risk Factors for TNBC (Gierach 2010)

Breastfeeding: Yes > No	Age: Younger > Older	Race: Black > White	Family History: Yes > No	Obesity: Yes > No	Age at menarche <12: Yes > No
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**TNBC Risk Factors impacting Black women:**

Poor access to healthy nutrition → increased risk of obesity

Lack of knowledge, lack of social support, and lower socioeconomic status → reduced breastfeeding rates at 3 months: 53% for White mothers and 36% for Black mothers

Gierach, et al. *Breast Dis.* 2010;32(1-2):5-24; Dietze, et al. *Nat Rev Cancer.* 2015; 15(4):248-64.

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### Dietze's Model for TNBC

Figure 2: Proposed model of how disparities might drive signalling pathways associated with aggressive biology in TNBC.

**Disparities**

- Income disparities
- Lack of access to grocery stores
- Unsafe neighbourhoods
- Lack of exercise

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**Obesity and diabetes**

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**Activation of signalling networks that promote aggressive biology**

**Epithelial cell proliferation and genomic instability**

- STAT3-NF-κB
- PI3K-AKT
- WNT-β-catenin
- Aurora A-PLK

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**Angiogenesis**

- HIF1α

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**Collagen crosslinking**

- CDX2
- FAK and AKT

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**Pre-inflammatory cytokines and factors**

- Leptin
- TGF-β
- IL-6
- Insulin

Figure used with permission. Dietze, et al. *Nat Rev Cancer.* 2015 Apr;15(4):248-64.

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### Genetics vs. Racism?

- Similar to BRCA1, what research has been done to **identify genetic mutations** that may be present at a **higher frequency in women of West African descent?** (eg. *genome-wide association studies by the Black Women's Health Study in Boston University* → *CLPTM1L, LOC643714*)
- What therapeutic areas are currently being **funded in breast cancer research?** (*ER/PR and Her2 vs TNBC*)
- Although Black women develop TNBC at higher rates, **why do disparities exist** in TNBC clinical outcomes?

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Which of the following is true regarding race in the context of cancer care?

- A. Race is a biological construct that can be used accurately to predict the genetic profile of patients
- B. Race is a social construct which is often a poor substitute for genetics
- C. Race is a medical construct that can be an important risk factor for many clinical outcomes
- D. Race is a cultural construct that is a key risk factor for disparities

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Identify strategies for overcoming racial disparities in cancer care

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Antiracist work must happen on every level of structural inequality

Adams M. Blumenfeld WJ. Readings for Diversity and Social Justice. United Kingdom: Routledge, 2018.

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### Individual

- “Recognize and take individual responsibility to deepen our awareness around structural racism and its impact on our patients and communities over time” – Arya V, et al.
- Commit to continuous education and training
- Understanding, recognizing, and responding to:
  - Implicit bias, micro- and macro-aggressions, structural and social determinants of health, gaslighting, structural racism, racist policies, white supremacy, intersectionality, privilege, oppression

Arya V, et al. J Am Pharm Assoc 2020;60(3):e43-46, Adams M, Blumenfeld W.J. Readings for Diversity and Social Justice. United Kingdom: Routledge, 2018.

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### Institutional

Arya V, et al. J Am Pharm Assoc 2020;60(3):e43-46, Isaska RB. JAMA 2020;324(6):556-557.

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### Societal/Cultural

- Continue to advocate for and prioritize antiracist training
  - Local, regional, and national advocacy
- Prepare future pharmacists to engage in care for under-represented groups with cultural humility
- To err is human but ignorance is not bliss: foster a space where reporting racist acts, systems, and policies is seen as a necessary opportunity for growth
- Overt acts of racism must be met with discipline

Arya V, et al. J Am Pharm Assoc 2020;60(3):e43-46, Isaska RB. JAMA 2020;324(6):556-557, Adams M, Blumenfeld W.J. Readings for Diversity and Social Justice. United Kingdom: Routledge, 2018.

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## Practice Equity

Identify strategies for overcoming racial disparities in cancer care

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## Racism in Medicine



Image: ierfler.com/drdenmar

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## Healthcare Workforce

	White	Hispanic	Black	Asian	American Indian/Alaska Native	Native Hawaiian and Other Pacific Islander	Multiple/Other Races
U.S. Population (%)	60.1	18.5	13.4	5.9	1.3	0.2	2.8
U.S. Workforce (%)	64.4	16.1	11.6	5.3	0.6	0.2	1.8
Pharmacists (%)	70.4	3.7	5.9	17.9	0.2	0.1	1.8
Physicians (%)	67.0	6.3	4.8	19.6	0.1	0.0	2.1
Dietitians/Nutritionists (%)	68.7	8.5	15.0	6.0	0.3	0.1	1.4
Nurses (%)	73.5	4.7	10.4	8.4	0.4	0.1	1.5
Advanced Practice Providers (%)	84.0	4.5	5.7	4.1	0.2	NR	1.3
Social Workers (%)	60.6	12.0	21.5	3.0	0.8	0.1	2.0
Oncology Workforce (%)	51.5	4.7	3.0	26.8	0.1	0.1	1.8

<https://www.ama-assn.org/practicing/education/cme/2020/06/14/available-from>  
<https://www.ama-assn.org/practicing/education/cme/2020/06/14/available-from>  
 ©2020, American Society of Clinical Oncology. Facts & Figures: Diversity in Oncology. Available at: <https://www.ama-assn.org/practicing/education/cme/2020/06/14/available-from>  
 Accessed June 14, 2020. CancerDisparitiesProgressReport.org [Internet]. Philadelphia: American Association for Cancer Research; ©2020 [cited 2020.06.14]. Available from

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### Improving Workforce Diversity

- Improving workforce diversity and cultural awareness
  - Prioritize in health affairs and training programs
  - Prioritize in recruitment and retention
  
- Maintaining workforce diversity
  - Mentorship and leadership
  - Minimizing isolation
  - Constant and consistent attention on cultural awareness

CancerDisparitiesProgressReport.org [Internet]. Philadelphia: American Association for Cancer Research; ©2020 [cited 2021.06.14]. Available from <http://www.CancerDisparitiesProgressReport.org/>

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### Improving Workforce Diversity (Cont'd)

Influence	Advantage of Workforce Diversity
Implicit biases	Challenges and rejects biases as false and unreliable
Cultural Incompetence	Improves cultural competence Challenges "one-size-fits-all" approaches
Systemic disparities	Rejects and prevents systematic discrimination and racism
Creativity	Fosters creative solutions, ideas, and innovations

CancerDisparitiesProgressReport.org [Internet]. Philadelphia: American Association for Cancer Research; ©2020 [cited 2021.06.14]. Available from <http://www.CancerDisparitiesProgressReport.org/>

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### Case: Practice Equity

A Black female pharmacist is seeing patients in clinic and walks into the room of an elderly White male patient to counsel him on his new oral chemotherapy. The patient is accompanied by his wife and daughter who are also White. The pharmacist has both a pharmacy resident and a pharmacy student with her to observe the counseling. The patient asks the pharmacist to hold up her hands against his because "Blacks have longer fingers."

**How should she respond? What should she do? What should the pharmacy learners do?**

A pharmacist is rounding with her team and an environmental services worker accidentally hits a code button in a patient's room while cleaning. A nurse responds to the alarm to learn that it was an accident. The nurse states "I know you are from different shores and English is not your first language, but you should know better than to hit that (explicit) button." Other nurses and environmental service team members are around.

**How should the EVS team member respond? What should those observing the scenario do?**

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### Antiracism in the Workplace

**Responding to interpersonal racism**

- Best practices for guiding these responses?
- Protections for employees experiencing racism?
- Resource Awareness

**Feedback and teaching to learners and potential allies**

- Debriefing and diffusing
- Empowering others to respond against discrimination

**Evidenced-based guidance vs. personal experiences**

- Get uncomfortable
- Case discussions - personal experiences are valuable
- Cultural competency and implicit bias education/training

**Education on reporting and escalation pathway**

"The culmination of my 4 years of medical school, 3 years of internal medicine residency, 3 years of hematology/oncology fellowship, and 9 years as a staff oncologist did not protect me from being viewed through a racial lens."

Chenard M. J Clin Oncol. 2020;38(41):4118-4120. Whipple EE, et al. Acad Med. 2016;91:e64-e69.

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### Antiracism in the Workplace (Cont'd)

Theme	Acceptable/Recommended Responses
Assess illness acuity	<ul style="list-style-type: none"> <li>• How sick is the patient? Can patient be transferred?</li> <li>• Is another provider an option?</li> </ul>
Cultivate a therapeutic alliance	<ul style="list-style-type: none"> <li>• Build rapport</li> <li>• Explore biases without intention of changing minds</li> <li>• Redirect focus to the patient's medical care</li> </ul>
Depersonalize the event	<ul style="list-style-type: none"> <li>• Address the behavior</li> <li>• Acknowledge potential fears, anxiety, and lack of control</li> </ul>
Ensure a safe learning environment for trainees	<ul style="list-style-type: none"> <li>• Discuss with leadership/training director</li> <li>• Provide support; establish confidence in the trainee's competence</li> </ul>

Whipple EE, et al. Acad Med. 2016;91:e64-e69.

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## Research Equity

Identify strategies for overcoming racial disparities in cancer care

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**Case: Research Equity**

- You are the PI of a prospective Phase 2 trial studying the impact of duloxetine for treatment of chemotherapy-induced neuropathy in multiple myeloma patients. Six months into the study, you notice that out of 86 patients enrolled, only 1 is Black. Your study team meets to address this, and the study coordinator mentions "it just seems like Black patients don't really want to be on this study. I have tried really hard to make sure to answer all their questions. I don't know if there is anything else we can do."
- What are approaches we could take now, and in the future, to address issues raised in this case?**

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**Considerations of Race in Research**

Mistrust	Eligibility criteria
Trial access (Availability)	Logistical barriers

CancerDisparitiesProgressReport.org [Internet]. Philadelphia: American Association for Cancer Research; ©2020 [cited 2021.06.14]. Available from <http://www.CancerDisparitiesProgressReport.org/>

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**Research Equity: Best Practices**

Conduct studies in facilities that have diversity (partner with these centers)	Flexible eligibility criteria (comorbidities)	Explore biobanking, tumor repositories, and genomic analyses	Culturally sensitive and community-facing education programs
Ongoing community partnerships	Cultural adaptations to marketing materials (e.g., language)	Implicit bias training for health care professionals	Track reasons for patients declining participation in a study

Liang J, et al. J Cancer Educ. 2020;35(5):841-849. CancerDisparitiesProgressReport.org [Internet]. Philadelphia: American Association for Cancer Research; ©2020 [cited 2021.06.14]. Available from <http://www.CancerDisparitiesProgressReport.org/>

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Which of the following is true of antiracist work?

- A. A one-time declaration in which one commits to being antiracist is sufficient
- B. History of implicit bias training qualifies a person as being actively antiracist
- C. Continuous self-reflection, education, and action are required to be antiracist
- D. A true antiracist is always comfortable with engaging in antiracist work




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Summary Take Home Points

1. Discuss existing health disparities in cancer care  
*Black cancer patients face poorer outcomes compared to White counterparts due to systemic racism.*
2. Summarize structural and social factors that perpetuate racism as a risk factor for outcome disparities in oncology  
*Many historical and current racial injustices negatively impact the experiences of Black people in the United States*
3. Describe a framework for mitigating racial disparities in cancer care with evidence-based interventions in teaching, research, and clinical practice  
*In order to solve racial health disparities, a multi-pronged approach must be taken to acknowledge and address the individual, institutional, and societal/cultural impacts of racism.*

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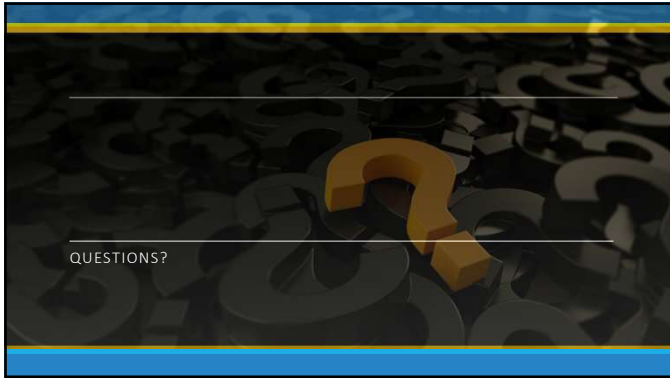
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