Does a scarcity of dark skin tone imagery in nursing and health care literature affect patient quality of care and health care provider competency?

**Optimal Patient Care** 

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## **Learning Objectives**



- Examine the impact on patient care of the scarcity of dark skin tone (DST) imagery in nursing and health care literature:
  - Evidence (research)
  - Cost Burden (economic impact)
  - Relevance to Clinical Practice

"Teach from patient safety and quality of care always".



# Why is this relevant?

# Introduction



- Changes in US demographics
  - By 2045 it is estimated that people with darker skin tone will outnumber people with lighter skin tone (Vespa et al., 2020)
- Evidence of health disparities (Ndugga & Artiga, 2021)
- Structural inequalities (Ellis & Jacobs, 2021), and
- Poorer quality health care and outcomes among people of color (Agency for Healthcare Research and Quality [AHRQ], 2020; Smedley et al., 2003).

# Looking at the evidence

### Evidence of Scarcity of Dark Skin Tone Imagery

- Underrepresentation of darker skin tone in medical literature (Louie & Wilkes, 2018).
  - Researchers reviewed over 4000 images from most purchased foundational textbooks in medicine.
  - Found the following representation 74.5% light, 21% medium, and 4.5% dark skin tone.
  - Representation of dark skin tone in literature helps with validation, normalization and competency skills building.

# Evidence of Scarcity of Dark Skin Tone Imagery



- Survey the landscape of published imaging to understand the degree of racial diversity represented in current biomedical literature.
- Eighteen percent of images portrayed were from non-white skin tone.
- They concluded that this lack of representation could contribute to inequities in health care.

# Evidence of Impact on DST



- Health disparities in the forensic sexual assault examination related to skin color (Sommers, et al., 2009)
  - 120 healthy women underwent forensic SA examination after consensual sexual intercourse (63 Black and 57 white).
  - For the presence of anogenital injury, a significant difference between white and Black participants was only evident for the external genitalia (White = 56%, Black = 24%).
  - SA forensic examiners, may not be able to detect injury in women with dark skin as readily as women with light skin, contributing to health disparities for women with dark skin.

#### Evidence of Impact on DST



- Pressure injuries in people with darker skin tones: A literature review (Oozageer et al., 2018)
  - They reviewed 11 articles.
  - Risk of sustaining a PI based on skin tones; recognition of PI amongst people with DST; and socio-economic impact on pressure injuries development.
  - They elucidated that current skin assessment protocol may not be effective for DST.
  - People with DST are more likely in comparison with people presenting as lighter skin to develop higher stage PIs.

# Economic Impact



#### Social and Economic Costs

- In Oozageer (2018)- findings indicate that people with darker skin tones are more likely to develop higher stage pressure injuries.
- It costs approx. \$893.00 per day for PI stage 1 (Padula & Delarmente, 2019; Murphy et al., 2021).



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# Questions

