



School of Nursing  
UNIVERSITY OF WISCONSIN-MADISON

## Improving Assessment of Darker Skin Tones

Rebecca Muehrer PhD, RN  
Clinical Professor  
ABSN Coordinator

Dana O'Brien PhD, RN, CNE  
Clinical Associate Professor  
Undergraduate Program Director

Olivia Osinski  
Undergraduate Nursing Student

Julie Astrella DNP, RN, CNE  
Assistant Professor

Heidi Neuhauser MSN, RN  
Clinical Instructor II

Lisa Bratzke PhD, RN, FAHA  
Associate Professor  
Associate Dean for Academic Affairs

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## Background and Significance

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There is a dearth of educational information related to assessment of patients with darker skin tones (DST)

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Current educational information focuses on patients with lighter skin tones

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Healthcare providers are missing the earlier stages of pressure injuries in patients with DST, which can lead to poor outcomes (Fogerty, 2009; McCreath et al., 2016; Sommers et al., 2009).

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This gap has also led to frustration expressed by both faculty and students.

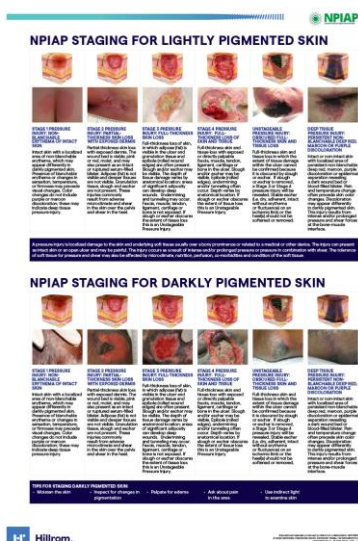
# Purposes

1. Implement diverse educational materials into the undergraduate nursing program
2. Evaluate student's knowledge related to assessment of darker skin tones after materials were presented

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# Implementation of Educational Materials

- 2 Junior Level Courses
  - Health assessment
  - Health and Illness across the lifespan
- Four materials incorporated
  - Video
  - Munsell Color Chart (Bates-Jensen et al., 2017; McCreath et al., 2016).
  - 10 Top Tips Article (Black and Simende, 2020)
  - National Pressure Injury Advisory Panel (NPIAP) staging cards



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# Sample

- Junior students (n = 38)
- Senior students (n = 56)

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# Instruments

- Pre-Survey – 18 questions
  - Perceptions, attitudes, beliefs, and comfort with assessing darker skin tones and identifying pressure injuries.
  - Rated on a Likert-like scale from 1 (strongly disagree) to 5 (strongly agree)
  - Open ended
- Post-Survey – 29 questions
  - Experiences with the four educational materials
  - Perceptions, attitudes, beliefs and comfort with assessing darker skin tones and identifying pressure injuries.
  - Rated on a Likert-like scale from 1 (strongly disagree) to 5 (strongly agree)
  - Open ended

Questionnaires adapted from Dr. Courtney Maurer

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## Results – General Knowledge

Item	Juniors	Seniors (comparison)
Persons with DST at a higher risk for developing more severe pressure injuries	M = 4.28	M = 4.25
Pressure injuries are more likely to be missed when only a visual assessment is performed	M = 4.33	M = 4.39
Objective skin tone is more predictive of skin damage than ethnicity or race	M = 3.72	M = 3.48

1 (Strongly Disagree) – 5 (Strongly Agree)

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## Results – Comfort with assessment

Item	Juniors	Seniors (comparison)
Comfortable identifying pressure injuries for patients of all skin tones	M = 3.20**	M = 2.21
Comfortable assessing the skin of patients with DST	M = 3.36**	M = 2.54
Comfortable with the terminology used to document skin assessment findings of patients with DST	M = 3.11**	M = 2.29
Comfortable assessing abnormal findings for patients with DST	M = 3.28**	M = 2.32

\*\* Significant at  $p \leq .001$

1 (Strongly Disagree) – 5 (Strongly Agree)

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## Results – Education

Item	Juniors	Seniors (comparison)
The School of Nursing provides enough education and resources for assessing DST.	M = 3.43**	M = 1.61
I have received enough education about nursing care specific to DST.	M = 3.00**	M = 1.52

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## Results – Satisfaction with Materials

Item	Juniors
Ten Top Tips Article	M = 4.28
NPIAP Staging Cards	M = 4.28
Munsell Color Chart	M = 3.70
Assessment Video	M = 3.49
Materials provided increased my awareness	M = 4.31

1 (Strongly Disagree) – 5 (Strongly Agree)

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## Conclusions

- Students (both juniors and seniors) were aware of general disparities related to pressure injuries and DST
- Students who received the educational materials were more comfortable performing skin assessment on individuals with DST
- Students who did not receive the educational materials felt less prepared to assess patients with DST in practice
- Overall junior students were satisfied with the materials implemented

## Limitations

- Small sample size of junior students
- Students wanted even more information

## Future Directions

- Curricular Gap Analysis
- Alignment with New Essentials
- Partner with other departments such as Dermatology
- Continue to build opportunities with clinical partners

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## References

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