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## Background

- Over the past few decades, the mortality and incidence of melanoma have been continually on the rise. These trends are similarly evident throughout the world, despite public health efforts to promote prevention and early detection.
- Although melanoma occurs at a higher rate in non-Hispanic whites, patients with skin of color (SOC) have lower survival rates. One reason for this disparity is late-stage diagnosis.
- The most common histological types of melanomas found in non-Hispanic black patients have lower rates of survival than the predominant types of melanoma most common among non-Hispanic white patients.
- From 1990-2004, the frequency of late-stage diagnosis decreased in white patients but remained relatively the same for black patients. One reason for this trend may be lower rates of physician surveillance of melanoma in SOC which could be attributed to the lower awareness of the presentation of this disease in patients with darker skin.
- Primary care physicians have more frequent opportunities to detect skin cancer in high-risk patients compared to other physicians, therefore their ability to detect skin cancer at an earlier stage can have significant public health outcomes.
- Limited time is designated to dermatology during medical school; thus, developing curricular materials that would have the most significant impact on medical students' practice of the full body skin exam (FBSE) is crucial.

## Objectives

- Highlight the need for inclusivity in the Dermatology clinical skills curriculum to improve outcomes for patients with SOC and better serve the population of Detroit
- Determine whether the supplemental inclusive clinical skills module can increase student confidence in performing a FBSE and identifying dermatologic diseases in various skin colors.

## METHODS

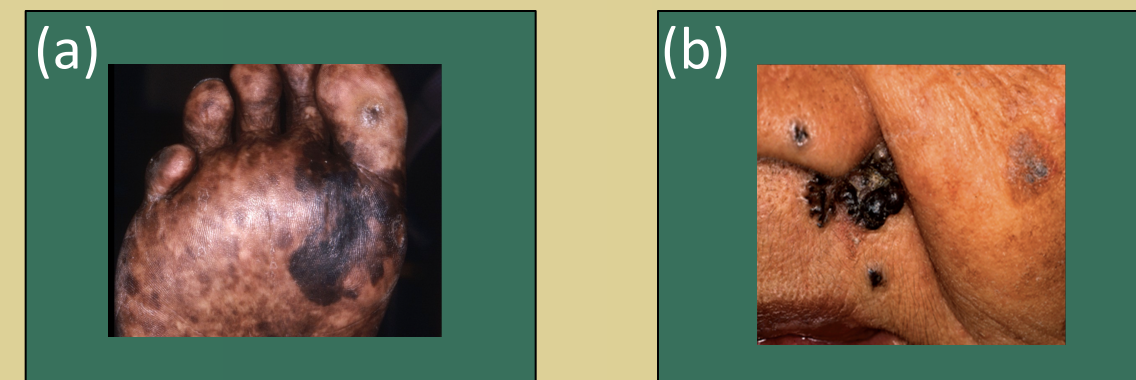
### Setting and Participants:

- The inclusion criteria for this study comprise of M2 students at Wayne State University School of Medicine who are taking the Musculoskeletal, Dermatology, and Peripheral Nervous System course and clinical skills component.
- Participant recruitment will be done by e-mail and participation will be voluntary.
- Participants will be able to complete the FBSE clinical skills module on Canvas (a learning management system).
- Exclusion criteria comprises of anyone not enrolled in the Year 2 Musculoskeletal, Dermatology, and Peripheral Nervous System course and clinical skills component.

### Design and Intervention:

- This is a pre-and post-test survey-based study designed to evaluate student confidence in performing a FBSE and approach the diverse dermatologic patient.
- The optional FBSE clinical skills module contains teaching material for history-taking, the steps of the FBSE, and various skin cancers with images depicting the cancer in different skin phototypes (see figure 1).
- Participants will complete a pre-test and post-test evaluating confidence before and after completing the module based on four questions graded on a Likert scale.
- On a Likert scale, confidence is rated from 1 to 5; 1 being least confident, and 5 being most confident.
- In addition to these four questions, the post-test will also include three questions that measure students' evaluation of the quality and usefulness of the clinical skills module which will also be graded on a five-point Likert scale.

Figure 1: Sample photos from the FBSE clinical skills module: (a) Acral Lentiginous Melanoma, (b) Basal Cell Carcinoma



## RESULTS

- The results for this study are currently pending. This module is planned to launch in May-June 2022, when the second-year medical students will be enrolled in the Year 2 Musculoskeletal, Dermatology, and Peripheral Nervous System course
- Improvement in confidence among the four parameters in the pre-test and post-test will be measured and analyzed.
- The four questions include the following:
  1. What is your confidence level in asking the appropriate questions during history taking in a Dermatology encounter?
  2. What is your confidence level in performing the full body skin exam on a Caucasian patient?
  3. What is your confidence level in performing the full body skin exam on a patient of color?
  4. What is your confidence level in approaching skin cancers in a variety of skin tones?
- In addition to the four questions above, the post-test will include the following questions to evaluate students' appraisal of the clinical skills module on a five-point Likert scale:
  1. How would you rate this module overall?
  2. How helpful were the teaching materials included in this module (HPI, FBSE, photos, etc.)?
  3. How influential was this module in your understanding of the material?
- A paired two-tailed t-test will be used to ascertain whether there was a significant change in confidence after completing the module as well as students' appraisal of the module. A p-value less than 0.05 will be considered significant.

## CONCLUSIONS

- Given the limited time designated to dermatology in the undergraduate medical education curriculum, inclusive supplementary teaching materials that emphasize skin diseases in all patients including skin of color can be important in the training of competent physicians equipped to serve the diverse dermatologic patient.