



A Novel Approach to Teaching Dermatology Issues in Skin of Color to PA Students

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INTRODUCTION

Dermatology issues in skin of color have historically been underrepresented in medical textbooks. Underrepresentation in dermatology has also extended to PAs: 1.6% of dermatology PAs were Black per Arnold et al in 2018.¹ The vast majority of medical professionals do not have medical training in recognizing and managing these dermatology issues or rate their medical education in this area as inadequate.² There is little research available on guidance for PA educators on the best practice model for providing instruction in dermatology issues in skin of color. We propose a novel approach, by coupling traditional lecture with a free, interactive dermatology teaching tool. This can address health disparities and the specialized knowledge can improve access to dermatology for patients with skin of color.^{3,4,5}

OBJECTIVES

1. Recognize the need for PA education regarding dermatology issues in skin of color.²
2. Provide instruction and utilize educational resources on dermatology issues in skin of color.^{3,4,5}

HYPOTHESIS

The research question: How likely is a novel approach for educating PA students in dermatology issues in skin of color going to provide a positive impact on clinical care?
The hypothesis: Most PA students surveyed will rate an interactive dermatology module as likely or most likely to provide a positive impact on clinical care for patients with skin of color.

METHODS

1. **Literature Review**
An extensive literature review revealed that there is a dearth of research on instructional resources on dermatology in skin of color for PA educators.
2. **Curriculum creation & deployment**
This curriculum was created and taught live within the regular dermatology module for one didactic cohort of thirty students. With the clinical students on rotations, the curriculum for the clinical cohort was provided via a recorded presentation. This instruction included the DermSwipe[®] app, a free educational app created by dermatologist Jacob Levitt, MD, with clinical examples for interactive learning.

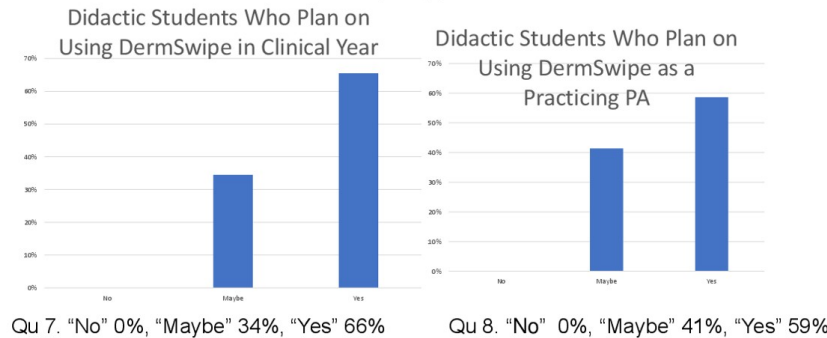
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RESULTS

Retrospective Post Dermatology Instruction Survey

Both the didactic (Class of 2025) and the clinical (Class of 24) cohort completed anonymous Qualtrics surveys after their instruction in dermatology in skin of color and in the DermSwipe app.

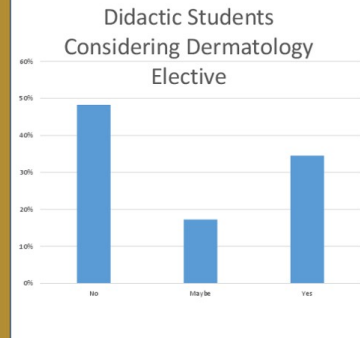


Qu 7: "No" 0%, "Maybe" 34%, "Yes" 66% Qu 8: "No" 0%, "Maybe" 41%, "Yes" 59%

100% of didactic students were planning/ maybe planning to use app

- in clinical year
- as a practicing PA.

This was true regardless of whether the student was considering a derm elective or not.



Qu 6: "No" 48%, "Maybe" 17%, "Yes" 34%

- 29/30, or 96.7%, of the didactic cohort replied to the anonymous survey.
- 5/30, or 16.7%, of clinical students responded to the anonymous survey.
- These results discussed mainly highlight the didactic cohort given the low participation from the clinical cohort.



Didactic Student Survey

- On a scale from 1 to 5, with 1 representing "least informative" and 5 representing "most informative", how would you rate the following prompts?
1. The overall dermatology instruction, apart from the DermSwipe app: 4.41 (av)
 2. The dermatology instruction, apart from the DermSwipe app, regarding patients with skin of color. 4.31 (average)
 3. The dermatology app DermSwipe in terms of dermatology instruction potential overall. 4.34 (average)
 4. The DermSwipe app overall. 4.07 (average)
 5. The DermSwipe app, in terms of instruction regarding patients with skin of color. 4.17 (average)
- The following questions were answered with "Yes" "No" or "Maybe" choices:
6. I am considering a dermatology elective.
 7. I plan on using the DermSwipe app in clinical year.
 8. I plan on using the DermSwipe app as a practicing PA.

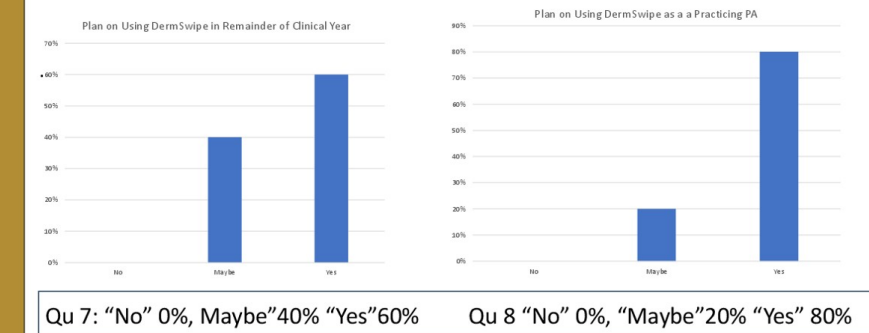
The following question was rated on a scale of 1 to 10, with 1 representing "least likely" and 10 as "very likely":

9. How likely are you to recommend the DermSwipe app to other PA students outside our university and/or to future colleagues? 8.03 (average)

RESULTS

Retrospective Post Dermatology Instruction Survey

- 100% of didactic, and separately, clinical students completing survey were planning or maybe planning to use the derm app in clinical year as well as when a practicing PA. This was true regardless of whether the student planned to have a derm elective or not.
- Clinical students results follow:



Qu 7: "No" 0%, "Maybe" 40%, "Yes" 60% Qu 8 "No" 0%, "Maybe" 20%, "Yes" 80%

Student Survey Comments

I loved this app! I found it very informative and useful during my elective Derm rotation and beyond. I would definitely recommend it as a resource to other healthcare professionals.

Would like to see more photos for each skin condition on DermSwipe.

Discussion

- While there are inherent limits to a small retrospective survey, this survey may start to address the paucity of interactive learning studies focused on dermatology instruction in skin of color.
- The lower participation rate of the clinical students can be explained in part by the additional time needed for the clinical cohort to review the dermatology instruction outside their clinical time. On the other hand, the dermatology instruction was included within the didactic schedule. Also, survey reminders given in person to the didactic cohort which were not possible with the clinical cohort participation level.

CONCLUSION

- 100% of didactic, and separately, clinical students completing the survey were planning or maybe planning to use the derm app in clinical year as well as when a practicing PA. This was true whether the student planned on a derm elective or not.
- Findings from this survey may support including interactive learning with a derm app into traditional dermatology instruction.
- An interactive derm app may support student learning of dermatology in patients with skin of color.
- Regardless of a student's specialty plans for post graduation, a derm app might or could be deemed helpful.

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