

# Beyond Skin Deep: Case-based Online Learning Modules to Teach Multidisciplinary Care in Dermatology among Clerkship Students

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## Identify Problem

- ❖ Among 37 clerkship medical students surveyed, 14% perceived that the one-week pre-clerkship dermatology education received was sufficient. Further, 3% of students felt comfortable seeing patients with skin conditions in clinical settings.
- ❖ Only 29% of all undergraduate dermatology directors think the dermatology education provided at their school is adequate.<sup>1</sup>

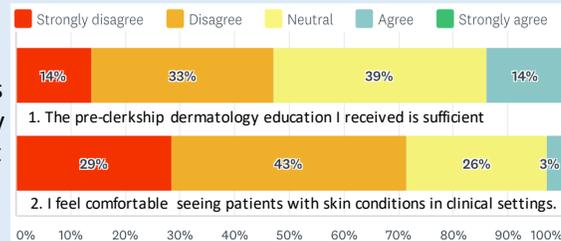


Figure 1. Pre-module Survey

## Target Goal

- ❖ To enhance dermatology knowledge and improve the understanding of multidisciplinary care in dermatology among clerkship students through the development of case-based online modules.

## Implement Change

- ❖ 10 online dermatology online modules (with step-wise progression through a case and 8-10 interactive multiple-choice questions) were developed that emphasize multidisciplinary care in dermatology for patients with different socioeconomic status and skin color.
- ❖ Modules links and post-modules surveys were sent out to 300 clerkship medical students in January 2021.



Figure 2. General outline of the case-based module format.

## Measurement Plan

- ❖ Process Measures
  - ✓ Number of modules developed
  - ✓ Disciplines covered
  - ✓ Number of students who completed the surveys
- ❖ Outcome Measures
  - ✓ **Understanding of multidisciplinary care**
  - ✓ **Enhancement of dermatology knowledge**
  - ✓ **Overall narrative feedback**
  - ✓ Feedback regarding the format of the modules
- ❖ Balancing Measures
  - ✓ Length of time to complete the modules

## Selected Outcome

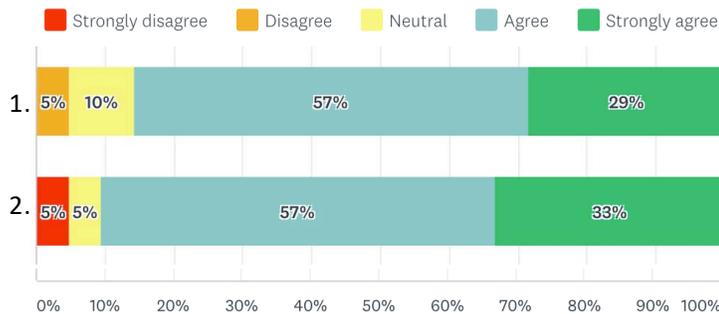


Figure 3. Understanding of Multidisciplinary Care in Dermatology (n = 21). Q1: The questions helped me better understand the multidisciplinary nature of dermatology. Q2: The module was effective in teaching me the multidisciplinary nature of dermatology.

## Selected Outcome

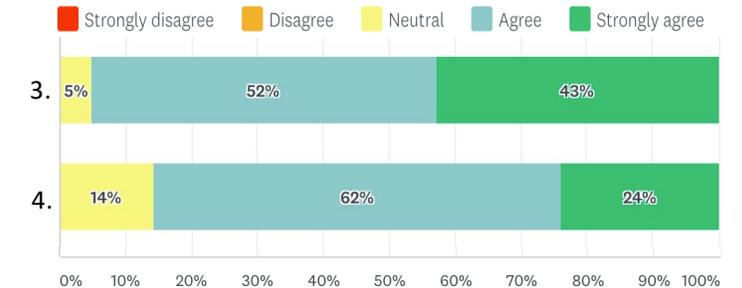


Figure 4. Impact on Dermatology Knowledge (n = 21). Q3: The module enhanced my knowledge on dermatology. Q4: I feel more comfortable in seeing skin presentations similar in the case.

### Narrative Feedback:

- ❖ "Easy to follow, content is **clear and concise**. I like how the answer explanations were thorough and direct"
- ❖ "This module will help me to be a **more well-rounded** physician in the future as I would like to do Rural Family Medicine."

## Conclusion

- ❖ Case-based online modules are an educational tool that meets students' learning style, and students felt case-based online modules enhanced their dermatology knowledge.
- ❖ Case-based online modules are an accessible tool to help students understand the multidisciplinary care in dermatology.

## Next Steps

- ❖ Recruit more participants and conduct focus group.
- ❖ Enhance and develop more modules based on the feedback received.
- ❖ Modules have been extended to UBC MD students for more feedback

