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Ethiopian Residents' Attitudes Toward Dermatology Research: A Survey Study

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Ethiopian residents' attitudes toward dermatology research: a survey study

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Dear Editors,

Introduction

Dermatology programs in resource-limited settings manage high patient volumes.¹ Trainees have extensive clinical responsibilities, which may preclude engaging in research. Programs in such settings may lack the infrastructure to provide adequate support. At the Department of Dermatovenereology at the University of Gondar in Ethiopia, residents anecdotally report a high caseload and lack of resources, including time, to pursue research. Members of Emory and Mount Sinai Dermatology designed and delivered a 30-minute presentation about research design and methods. Residents were surveyed pre- and postintervention about their attitudes toward pursuing dermatology research during residency.

Methods

This study (#23-00286) was deemed exempt from human research by the Mount Sinai Health Institutional Review Board. A presentation was prepared and delivered in person on February 23, 2023, by dermatology faculty and trainees at Emory and Mount Sinai Dermatology to address incorporating research during residency. Strategies were developed assuming a context of limited resources. The process of conducting literature reviews, meta-analyses, Delphi projects, survey studies, and original studies was discussed. A survey instrument was created to assess levels of interest and preparedness to pursue research among dermatology residents at the University of Gondar. The survey was administered pre- and postintervention on February 23, 2023, using ad hoc 0–10 visual analogue scales. Postintervention surveys also assessed satisfaction levels regarding the presentation. No personally identifiable information was collected. Mean values were compared using independent sample *t* tests. Statistical analysis was performed February 23–March 10, 2023, using Stata IC 15.0, with $P < .05$ in 2-sided tests considered significant.

Results

Residents ($n = 12$) in attendance completed pre- and postintervention surveys (response rate 100%). Postintervention, participants reported higher mean levels of interest (9.33 [1.23] vs 6.67 [1.97]) ($P = .0007$) and confidence (6.83 [1.80] vs 4.33 [2.53]) ($P = .01$) in performing research during residency (Fig. 1). Furthermore, participants perceived greater importance of global health collaboration for future research (10.00 [0.00] vs 7.29 [2.27]) ($P = 0.004$). No significant change was noted in mean scores for likelihood of undertaking ≥ 1 research project or for self-perceived ability to balance clinical responsibilities with research during residency. The content and length of the intervention were found to be appropriate (8.83 [1.95]) and easy to follow (9.42 [1.16]).

Discussion

Limitations include single-center data collection with small sample size. This study provided insight into barriers to resident research in resource-limited settings. The intervention was rated favorably and generated interest and confidence among residents to pursue dermatology research during residency. Additionally, interest in global health collaboration increased.

What is known about this subject in regard to women and their families?

- The University of Gondar in Gondar, Ethiopia, is part of a nationwide movement in Ethiopia to promote gender-equitable educational systems.
- As a result of this initiative, female residents comprise two-thirds of the current resident cohort at the Department of Dermatovenereology at the University of Gondar.
- High caseload and lack of resources are cited by this cohort as barriers to pursuing research during dermatology residency at the University of Gondar.

What is new from this article as messages for women and their families?

- Brief, targeted interventions administered by partner programs with greater research resources are effective in increasing residents' level of interest and confidence in pursuing dermatology research during residency.
- Female dermatology residents at the University of Gondar and in other resource-limited training centers may benefit from continued efforts to incorporate targeted interventions and other systemic changes driven by global collaboration.

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Fig. 1. Residents at the Department of Dermatovenereology, the University of Gondar, were surveyed pre- and postintervention to assess attitudes toward dermatology research. Mean levels of interest, confidence, and inclination for global health collaboration are indicated in the figure. All values are statistically significant as defined in the results.

The results indicate that brief, targeted interventions may be effective and should be further assessed in larger cohorts and over longer time intervals. This intervention may be administered virtually, as seen with prior educational tools in global dermatology settings.^{2,3} The low likelihood of undertaking ≥ 1 project and balancing clinical responsibilities with research should be addressed in future studies. Incorporating such interventions may not be sufficient to support a research program. A comprehensive effort, including collaboration with faculty in partner programs, will be required for sustainable change. Global collaboration, particularly for research, may provide substantial value to the field of dermatology.⁴ Global communities should adequately represent skin of color.⁵ Collaboration may thereby further our understanding of dermatological disease in skin of color and instill cultural humility and competency.

Conflicts of interest

None.

Funding

None.

Study approval

N/A

Author contributions

RRR: Participated in research design, participated in the writing of the manuscript, participated in the performance of the research, contributed new reagents or analytic tools, and participated in data analysis. HAP: Participated in the writing of the manuscript, contributed new reagents or analytic tools, and participated in data analysis. JYS: Participated in the writing of the manuscript and participated in data analysis. ABG: Participated in research design and participated in data analysis.

LDK: Participated in the writing of the manuscript and participated in data analysis. BKS: Participated in research design, participated in the writing of the manuscript, participated in the performance of the research, contributed new reagents or analytic tools, and participated in data analysis.

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