

The current state of lesbian, gay, bisexual, and transgender cultural competency among U.S. dermatology residents

Dustin Z. Nowaskie, MD^{a,*}, Sara Garcia-Dehbozorgi, MD^b, Jose L. Cortez, MD^c

ABSTRACT

Background: Lesbian, gay, bisexual, and transgender (LGBT) people interface with dermatology providers for many reasons. Implementing culturally competent LGBT dermatologic care necessitates evaluating provider competency to identify where gaps remain.

Objectives: To assess the LGBT cultural competency among U.S. dermatology residents.

Methods: A self-reporting, cross-sectional survey was emailed to U.S. dermatology program coordinators ($N = 143$). LGBT patient exposure, LGBT educational hours, and LGBT cultural competency via the LGBT-Development of Clinical Skills Scale (with the subscales Clinical Preparedness, Attitudinal Awareness, and Basic Knowledge) were measured.

Results: Dermatology residents ($N = 119$) across the United States completed the survey. They reported caring for less than 20 LGBT patients per year and receiving less than 75 minutes of LGBT education per year. They reported significantly higher Attitudinal Awareness than both Clinical Preparedness and Basic Knowledge; they reported significantly higher Basic Knowledge than Clinical Preparedness. They reported significantly less adequate clinical training and supervision, experience, and competence to assess transgender patients compared to lesbian, gay, and bisexual patients. In general, dermatology residents who reported more LGBT patients and LGBT education also reported higher LGBT cultural competency.

Limitations: A larger national sample of U.S. dermatology residents is necessary for generalizability.

Conclusions: Currently, there is a lack of LGBT education in U.S. dermatology residency curricula, which may delay addressing the health disparities that exist in this patient population. Due to such dearth of standardized LGBT education, dermatology residents likely do not feel adequately knowledgeable or prepared to address LGBT needs. Both LGBT education and LGBT patient experiences may help alleviate these shortcomings and help LGBT patients feel affirmed in their dermatologic care.

Keywords: Attitudes, dermatology, education, knowledge, LGBT, preparedness

Introduction

Dermatology and the lesbian, gay, bisexual, and transgender (LGBT) community share a unique historical relationship. During the HIV and AIDS epidemic in the 1980s, dermatologists were commonly the first providers to identify AIDS in patients due to the skin manifestation of Kaposi sarcoma.¹ LGBT people today interface with dermatologists for many other reasons, including standard skin care that affects the general population, skin cancers,²⁻⁴ dermatological manifestations from sexually transmitted infections (eg, syphilis, gonorrhea, chlamydia, herpes simplex virus type 2, and human papillomavirus),⁵ side effects from gender-affirming hormones (including

^a Department of Psychiatry, Indiana University School of Medicine, Indianapolis, Indiana

^b Indiana University School of Medicine, Indianapolis, Indiana

^c Department of Dermatology, University of New Mexico School of Medicine, Albuquerque, New Mexico

D.Z.N. and S.G.-D. contributed equally to this work and shared co-first authorship.

*Corresponding author. E-mail address: dznawaskie@gmail.com (D.Z. Nowaskie).

Copyright © 2022 The Authors. Published by Wolters Kluwer Health, Inc. on behalf of Women's Dermatologic Society. This is an open access article distributed under the Creative Commons Attribution-NoDerivatives License 4.0, which allows for redistribution, commercial and non-commercial, as long as it is passed along unchanged and in whole, with credit to the author.

International Journal of Women's Dermatology (2022) 8:e030

Received: 7 November 2021; Accepted: 1 June 2022

Published online 8 July 2022

DOI: 10.1097/JW9.000000000000030

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

- Patients who identify within the LGBT community who seek dermatologic care often face disparities and biases.
- Members of LGBT community often see a dermatologist for many reasons, including management of standard skin care, skin cancers, dermatological manifestations from sexually transmitted infections, side effects from gender-affirming hormones, and noninvasive aesthetic procedures.
- LGBT women often have high rates of smoking and obesity and are less likely to engage in preventive healthcare screenings, which may lead to dermatologic consequences.
- Currently, there are no known studies that have assessed the LGBT cultural competency (ie, LGBT preparedness, attitudes, and knowledge) among dermatology residents.

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

- Dermatology residents (nearly two-thirds who identified as cisgender women) who reported more LGBT patients, LGBT curricular hours, and LGBT extracurricular hours also endorsed higher overall LGBT cultural competency.
- Incorporating more LGBT education and LGBT patient experiences into dermatology residency education may help improve LGBT cultural competency among dermatology residents and ultimately alleviate healthcare disparities for LGBT women.

changes in skin oiliness and hair growth, which can result in acne vulgaris and androgenetic alopecia),⁶ and noninvasive aesthetic procedures such as hair removal.⁷ In particular, there are many important intersections of dermatology and LGBT women. People who identify as lesbian often have high rates of smoking and obesity, which may lead to dermatologic consequences.⁶ Additionally, people who identify as lesbian are less inclined to engage in preventative healthcare services, including skin checks and cancer screenings.^{5,6}

With recent data estimating that 7.1% of the United States identifies as lesbian (1.0%), gay (1.5%), bisexual (4.0%), transgender (0.7%), and other sexual and gender minority identities (0.3%), the LGBT community represents a rapidly expanding population.⁸ Despite increasing numbers and visibility, LGBT individuals continue to experience discrimination and marginalization in the United States.^{9,10} Notably, LGBT individuals endure disproportionately limited healthcare access and overt stigma in healthcare settings such as provider bias, rejection, and abuse.^{11–13}

To alleviate known LGBT disparities and biases, providers should be culturally competent in LGBT health and provide adequate care, although competency in caring for LGBT individuals has been shown to vary based on medical specialty.^{14–17} Past literature has proposed that LGBT culturally competent care should start at the residency training level,^{5,18} and many different models on how LGBT health can be integrated into medical education exist.^{19–21} However, few studies have assessed the LGBT cultural competency of resident trainees, finding inadequate levels of LGBT education, preparedness, and knowledge among emergency medicine,¹⁴ internal medicine,¹⁷ and psychiatry²² residents. Some of these studies also demonstrated a desire by residents to receive additional LGBT-related educational hours.^{14,23}

At this time, there is a sizable gap in research in evaluating LGBT cultural competency in dermatology. In 2019, the Accreditation Council on Graduate Medical Education board approved a revision to add diverse patient groups as a core residency training requirement.⁷ However, there is currently no Accreditation Council on Graduate Medical Education requirement to integrate LGBT-specific health education into dermatology residency curricula.¹⁹ At the same time, currently, there are no known studies that have assessed the LGBT cultural competency (ie, LGBT preparedness, attitudes, and knowledge) among dermatology residents. To promote and ensure culturally competent care and outcomes for patients, it is critically important to initially identify gaps in dermatology providers. Accordingly, this study aimed to evaluate the LGBT cultural competency among U.S. dermatology residents to serve as a baseline and assist in the development of LGBT-specific training materials for dermatology trainees.

Methods

Study design, setting, and participants

A self-reporting, cross-sectional survey was emailed to program coordinators at all U.S. dermatology programs ($N = 143$) in November 2020, requesting that the survey be forwarded to current dermatology residents ($N = 1,710$). Two reminder emails were sent, one which included dermatology program directors as well, and responses were collected until January 2021. A study informational sheet was provided prior to the survey, and participation was voluntary and anonymous. This study was granted exemption by the Indiana University Institutional Review Board (Protocol Number 2011552290).

Variables

The survey consisted of demographic data (ie, age, gender identity, sexual orientation, race, ethnicity, level of training, degree, and region), LGBT experiential variables (ie, number of LGBT

patients, LGBT curricular hours, and LGBT extracurricular hours), and the LGBT-Development of Clinical Skills Scale (DOCSS).²⁴ Annual amounts of LGBT patients and LGBT curricular hours were computed by dividing total numbers of these experiential variables by level of training.

The LGBT-DOCSS is an 18-item, 3-factor (ie, Clinical Preparedness, Attitudinal Awareness, and Basic Knowledge), interdisciplinary, self-assessment tool for providers. Each 7-point Likert subscale (1 = strongly disagree, 4 = somewhat agree/disagree, 7 = strongly agree) is computed as the average of selected items, while an overall average (ie, Overall LGBT-DOCSS) is the average of all items. The subscale Clinical Preparedness explores respondents' LGBT clinical training and experiences; Attitudinal Awareness examines explicit biases about LGBT people; and Basic Knowledge assesses awareness of healthcare barriers and disparities. Higher scores suggest more preparedness and knowledge and less prejudice towards LGBT patients and care. The LGBT-DOCSS consistently has good internal consistencies (all $a > .80$ in this study).

Analyses

All results were computed on SPSS Statistics 28 (IBM Corp., Armonk, NY). Demographic and LGBT experiential variable means and frequencies as well as LGBT-DOCSS item and scale means were calculated. Differences in LGBT-DOCSS scores were determined via paired sample t tests. Differences in perceptions of LGBT subgroups were examined by comparing similar LGBT-DOCSS items that vary by patient type (ie, lesbian, gay, and bisexual [LGB] versus transgender) via paired sample t tests. To outline dermatology residents range of LGBT cultural competency as a function of LGBT experiential variables, LGBT-DOCSS scores were then stratified by 1-point increments, and means of experiential variables were computed per each stratification. Associations between stratifications and LGBT experiential variables were evaluated via Spearman rank correlation coefficients. Statistical significance was set at $\alpha = .05$.

Results

Dermatology residents ($N = 119$) across the United States completed the survey (Table 1). No participant data were excluded. Majority were in their twenties and thirties, cis-gender women, heterosexual, White/Caucasian, not Hispanic or Latino, and had a Doctor of Medicine degree. They represented all postgraduate training levels, approximately 7% of all U.S. dermatology residents, and 30% of all U.S. dermatology programs. Dermatology residents reported significantly higher Attitudinal Awareness than both Clinical Preparedness [$t(118) = 13.907, P < .001$] and Basic Knowledge [$t(118) = 10.020, P < .001$]; likewise, they reported significantly higher Basic Knowledge than Clinical Preparedness [$t(118) = 6.589, P < .001$] (Table 2). While dermatology residents reported significantly more awareness about institutional barriers [$t(118) = 2.860$] that transgender patients face compared to LGB patients, they reported significantly less adequate clinical training and supervision [$t(118) = -7.112$], experience [$t(118) = -5.203$], and competence [$t(118) = -5.235$] to assess transgender patients compared to LGB patients (Fig. 1). In general, dermatology residents who reported more LGBT patients, LGBT curricular hours, and LGBT extracurricular hours also reported higher Overall LGBT-DOCSS, Clinical Preparedness, Attitudinal Awareness, and Basic Knowledge (Fig. 2). Spearman rank correlation coefficients were significant (range: 0.193–0.437, at least $P < .05$) for most associations between stratifications and experiential variables except: Attitudinal Awareness (LGBT curricular hours: 0.019 and LGBT extracurricular hours: 0.180) and Basic Knowledge (LGBT patients: 0.102).

Table 1.
Demographic and experiential variables^a

Variables	Mean (SD) or n (%)
Age	30.54 (3.01)
LGBT experientials	
Patients	32.60 (30.47)
Annual patients	18.98 (22.58)
Curricular hours	2.40 (3.88)
Annual curricular hours	1.23 (1.80)
Extracurricular hours	12.98 (23.35)
Gender identity	
Cisgender man	43 (36.1)
Cisgender woman	75 (63.0)
Nonbinary	1 (0.8)
Sexual orientation	
Bisexual	1 (0.8)
Gay	4 (3.4)
Heterosexual	112 (94.1)
Other ^b	2 (1.7)
Race	
Asian/Asian American	25 (21.0)
Black/African American	4 (3.4)
White/Caucasian	84 (70.6)
Other ^b	6 (5.0)
Ethnicity	
Hispanic or Latino	5 (4.2)
Not Hispanic or Latino	114 (95.8)
Level of training	
First year (PGY2)	41 (34.5)
Second year (PGY3)	37 (31.1)
Third year (PGY4)	41 (34.5)
Degree	
DO	13 (10.9)
MD	106 (89.1)
Region ^c	
Midwest	45 (38.5)
Northeast	26 (22.2)
South	28 (23.9)
West	18 (15.4)

DO, Doctor of Osteopathic Medicine; LGBT, lesbian, gay, bisexual, and transgender; MD, Doctor of Medicine; PGY, postgraduate year; SD, standard deviation.

^aN = 119 for all variables except: number of LGBT patients (n = 103), number of LGBT curricular hours (n = 114), number of LGBT extracurricular hours (n = 114), and region (n = 117).

^bFor "other" categories: (1) sexual orientation: gay and queer (n = 1) and pansexual (n = 1) and (2) race: Alaska Native & White/Caucasian (n = 1), American Indian & Asian/American & White/Caucasian (n = 1), Asian/Asian American & White/Caucasian (n = 2), and other (n = 2).

^cAs defined by the U.S. Census Bureau.

Discussion

To our knowledge, this is the first study to formally evaluate the current state of LGBT cultural competency (ie, LGBT preparedness, attitudes, and knowledge) among dermatology residents. In doing so, this study is the first to present identifiable gaps in dermatology residents' LGBT cultural competency. Areas of improvement in dermatology residents' LGBT cultural competency were apparent. Dermatology residents reported caring for less than 20 LGBT patients per year and receiving less than 75 minutes of LGBT education per year. These numbers are not surprising, as 20% of U.S. dermatology residency programs have no LGBT topics within their curricula.²⁵ Likewise, a recent past study showed that U.S. psychiatry residents reported similarly low numbers of LGBT patients and LGBT education.²² Given that 7.1% of the general population identifies as LGBT,⁸ coupled with the fact that residents care for hundreds, if not thousands, of patients per year, residents are likely interacting with many more LGBT patients than they report. This discrepancy between assumed patient identifications and actual patient demographics may result from providers, in general, not routinely collecting sexual orientation and gender identity

information.¹⁶ Adequate and accurate data gathering is part of LGBT cultural competency, which may fall short when dermatology residents feel uncomfortable and unprepared in treating LGBT patients. For instance, while dermatology residents reported high positive attitudes towards LGBT people, they conveyed much less preparedness and knowledge about LGBT care, especially in treating transgender patients. These differences in cultural competency are very common among healthcare professionals, including students,^{15,26} psychiatry residents,²² and dementia care providers.²⁷ Moreover, while there is much attention given to HIV/AIDS care in U.S. dermatology residency programs, there is strikingly less integration of other important topics that are just as relevant to LGBT patients, including pronoun use, history taking and physical examination, skin cancer risks, puberty blockers, and gender-affirming hormones and surgeries.²⁵

Given the present circumstances, many LGBT patients are likely not receiving culturally competent care from their dermatologists. Consequently, more LGBT education and experience within dermatology residencies is absolutely warranted. Intriguingly, these 2 entities are equally important as both appear to lead to higher LGBT cultural competency.²⁸ Dermatology residents who reported more LGBT patient experiences, LGBT curricular hours, and LGBT extracurricular hours had also expressed higher overall LGBT cultural competency. Likewise, providing an online, 2-hour interactive didactic session on dermatological care of LGBT patients to dermatology residents has been shown to increase LGBT preparedness, knowledge, and overall cultural competency.²⁹

Integrating LGBT healthcare within dermatology residency curricula can be challenging. Topics and experience can be introduced via the ethics category of core requirements for residency training or through clinical skills sessions on gender-affirming treatments.¹⁹ Additionally, active support from faculty is essential, as 1 study found that 62% of programs perceived a lack of experienced faculty as a barrier in incorporating LGBT health in residency education.²⁵ Foundational material should include LGBT terminology in an active rather than passive learning style method, such as through computer-based training or small group participation.³⁰ The understanding and accurate utilization of LGBT terminology is the crucial base in building inclusivity, visibility, rapport, and positive patient-provider relationships. Advanced training should include particular dermatologic health concerns from infectious (eg, sexually transmitted infections) and noninfectious (eg, skin cancers) conditions that vary across LGBT subgroups.^{2-4,29} Online training formats provided by experienced LGBT organizations can easily be incorporated into dermatology training curricula. For example, OutCare Health,³¹ a nonprofit 501(c)(3) health equity organization, provides general and specialized LGBT training across the United States, including a dedicated series in partnership with La Roche-Posay to train U.S. dermatologists.³²

Likewise, supporting LGBT culturally competent care for dermatologists in their practice can be difficult. Prior to patient-provider interactions, patients' interactions with staff influence patient satisfaction. Visual cues, such as LGBT informational packets and gender-neutral bathrooms, can create overall welcoming environments.^{5,6,33} For providers, building a culturally competent, therapeutic relationship with LGBT patients is vitally important and may be accomplished by collecting sexual orientation and gender identity, performing accurate, thorough, and nonjudgmental sexual histories, using gender-neutral, inclusive language both in forms and verbally, providing affirming environments, participating in shared decision making, and offering appropriate patient-centered preventive services and care.^{5,6,18,33} Proper use of pronouns and names, avoidance of heteronormative language, LGBT concordant staff, and targeted educational materials are additional methods to establish and maintain rapport.^{5,6,34} As with dermatology

Table 2.
LGBT-DOCSS score means^a

Clinical preparedness	Mean (SD)	Attitudinal awareness	Mean (SD)	Basic knowledge	Mean (SD)
I would feel unprepared talking with a LGBT client/patient about issues related to their sexual orientation and/or gender identity. ^b	4.93 (1.54)	I think being transgender is a mental disorder. ^b	6.31 (1.47)	I am aware of institutional barriers that may inhibit transgender people from using health care services.	5.13 (1.38)
I have received adequate clinical training and supervision to work with transgender clients/patients.	4.20 (1.53)	A same sex relationship between 2 men or 2 women is not as strong and committed as one between a man and a woman. ^b	6.82 (0.90)	I am aware of institutional barriers that may inhibit LGB people from using health care services.	4.98 (1.46)
I have received adequate clinical training and supervision to work with LGB clients/patients.	4.76 (1.64)	LGB individuals must be discreet about their sexual orientation around children. ^b	6.25 (1.25)	I am aware of research indicating that LGB individuals experience disproportionate levels of health and mental health problems compared to heterosexual individuals.	6.07 (1.06)
I have experience working with LGB clients/patients.	5.13 (1.41)	When it comes to transgender individuals, I believe they are morally deviant. ^b	6.69 (1.06)	I am aware of research indicating that transgender individuals experience disproportionate levels of health and mental problems compared to cisgender individuals.	6.13 (1.15)
I feel competent to assess a person who is LGB in a therapeutic setting.	5.50 (1.38)	The lifestyle of a LGB individual is unnatural or immoral. ^b	6.63 (1.18)		
I feel competent to assess a person who is transgender in a therapeutic setting.	5.04 (1.48)	People who dress opposite to their biological sex have a perversion. ^b	6.72 (0.80)		
I have experience working with transgender clients/patients.	4.49 (1.55)	I would be morally uncomfortable working with a LGBT client/patient. ^b	6.90 (0.40)		
Total	4.86 (1.16)		6.62 (0.81)		5.58 (1.01)

DOCSS, Development of Clinical Skills Scale; LGB, lesbian, gay, and bisexual; LGBT, lesbian, gay, bisexual, and transgender; SD, standard deviation.

^aScores are averages on 7-point Likert scales (1 = strongly disagree, 4 = somewhat agree/disagree, 7 = strongly agree); for the Overall LGBT-DOCSS: Mean = 5.70, SD = 0.70.

^bReverse scored items.

residents, practicing dermatologists being involved in annual general and specialized LGBT training is paramount.

Limitations

There were study limitations. First, the cross-sectional and correlational nature limited longitudinal data collections as well as pre- and post-intervention evaluations. Second, the response rate was low and may have been moderately underestimated,

as surveys were emailed out to both program coordinators and directors without follow-up on email confirmation receipt. Third, biases towards LGBT people from program coordinators, residency directors, and dermatology residents may have limited participation. A larger national sample of dermatology residents is necessary for generalizability. Fourth, LGBT education was measured only quantitatively and not qualitatively. Fifth, LGBT cultural competency was measured via self-report and may have been inflated; self-assessed attitudinal awareness

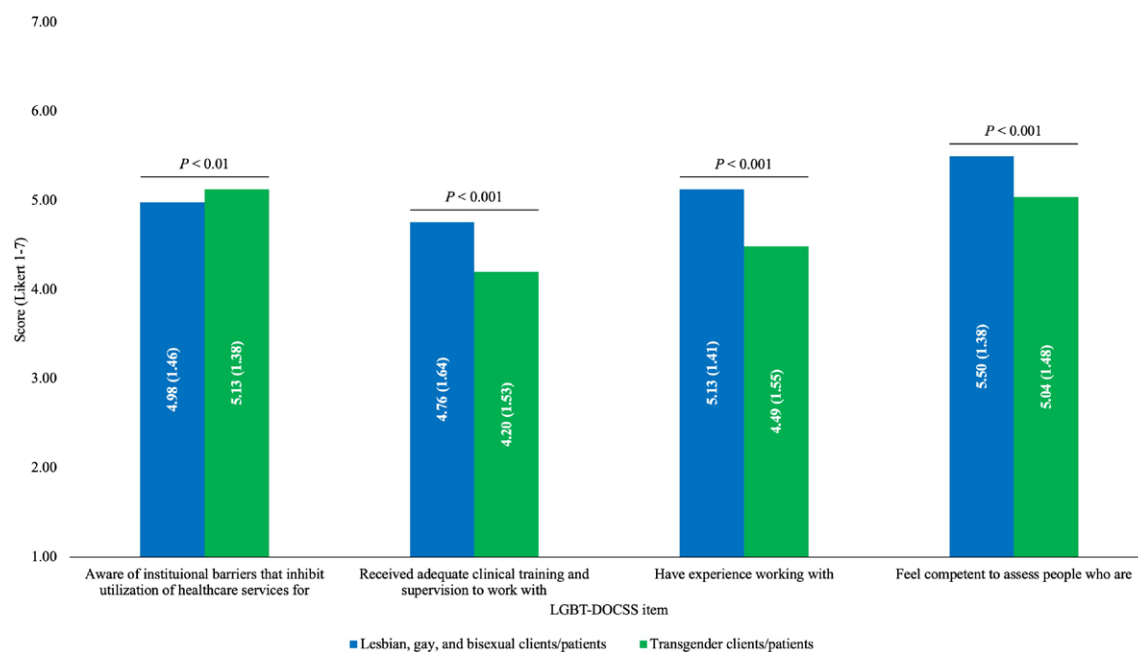


Fig. 1. LGBT vs transgender clinical perceptions. Dermatology residents reported significantly less adequate clinical training and supervision, experience, and competence to assess transgender patients compared to LGB patients. They also reported significantly more awareness about institutional barriers that transgender patients face compared to LGB patients. DOCSS, Development of Clinical Skills Scale; LGB, lesbian, gay, and bisexual; LGBT, lesbian, gay, bisexual, and transgender.

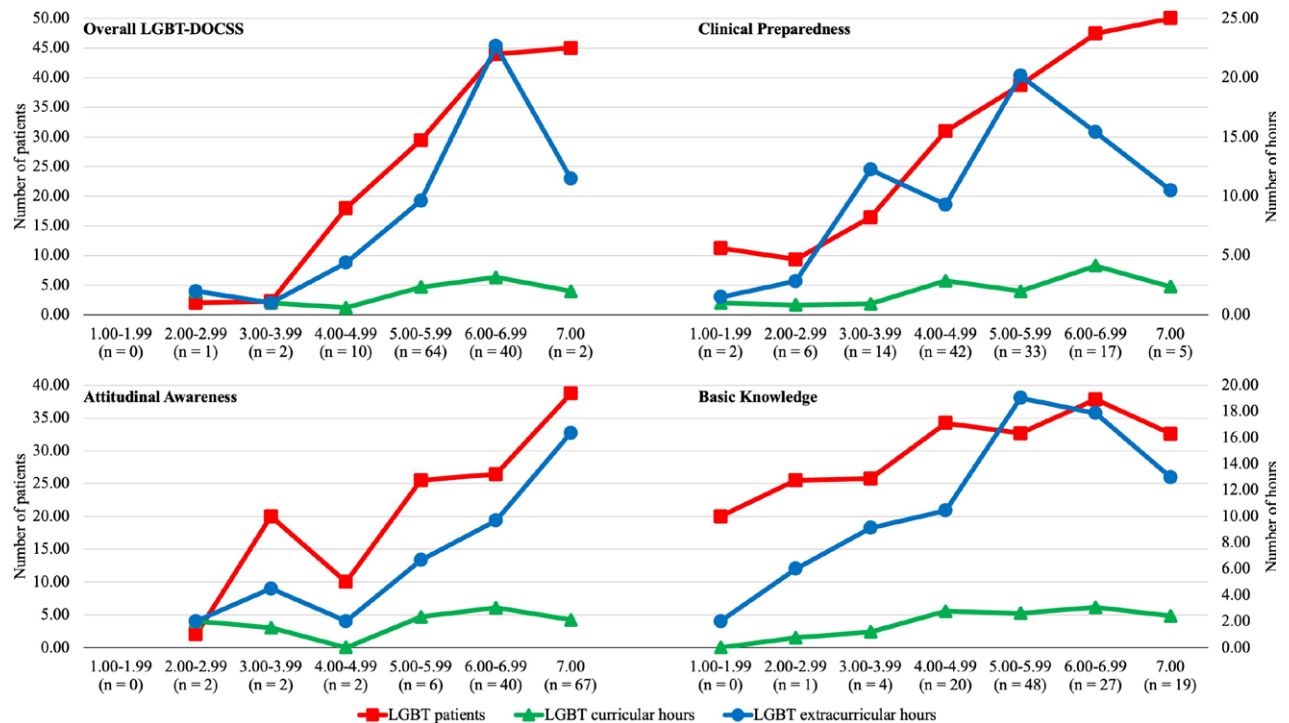


Fig. 2. LGBT experientials across LGBT-DOCSS stratifications. In general, dermatology residents who reported more LGBT patients, LGBT curricular hours, and LGBT extracurricular hours also reported higher LGBT-DOCSS scores. DOCSS, Development of Clinical Skills Scale; LGBT, lesbian, gay, bisexual, and transgender.

specifically implies explicit bias, which tends to skew positively.²² An interesting inquiry concerns the baseline of LGBT implicit biases, which tend to be less favorable,³⁵ among dermatology residents.

Conclusions

Currently, there is a substantial lack of LGBT education in dermatology residency curricula, which may further delay addressing the unique health disparities that exist in this patient population. Due to such dearth of standardized LGBT education, dermatology residents likely do not feel adequately knowledgeable or prepared to address LGBT needs. Both LGBT education and LGBT patient experiences may help alleviate these shortcomings and improve cultural competency. In doing so, LGBT patients themselves may feel safer, appreciated, and affirmed by dermatologists nationwide.

Acknowledgments

The authors would like to thank the U.S. dermatology programs who distributed the study survey.

Author contributions

D.Z.N. and S.G.D. contributed to study conceptualization, design, investigation, and analysis. D.Z.N., S.G.D., and J.L.C. contributed to data collection and interpretation, visualization, manuscript drafting, review, revising, and final approval.

Conflicts of interest

None.

Funding

None.

Study approval

The author(s) confirm that any aspect of the work covered in this manuscript that has involved human patients has been conducted with the ethical approval of all relevant bodies.

References

- Smith NP. AIDS, Kaposi's sarcoma and the dermatologist. *J R Soc Med* 1985;78(2):97–9.
- Mansh M, Katz KA, Linos E, et al. Association of skin cancer and indoor tanning in sexual minority men and women. *JAMA Dermatol* 2015;151(12):1308–16.
- Singer S, Tkachenko E, Hartman RI, et al. Association between sexual orientation and lifetime prevalence of skin cancer in the United States. *JAMA Dermatol* 2020;156(4):441–5.
- Singer S, Tkachenko E, Yeung H, et al. Skin cancer and skin cancer risk behaviors among sexual and gender minority populations: a systematic review. *J Am Acad Dermatol* 2020;83(2):511–22.
- Jia JL, Polin DJ, Sarin KY. Ways to improve care for LGBT patients in dermatology clinics. *Dermatol Clin* 2020;38(2):269–76.
- Yeung H, Luk KM, Chen SC, et al. Dermatologic care for lesbian, gay, bisexual, and transgender persons: terminology, demographics, health disparities, and approaches to care. *J Am Acad Dermatol* 2019;80(3):581–9.
- Pregnall AM, Churchwell AL, Ehrenfeld JM. A Call for LGBTQ content in graduate medical education program requirements. *Acad Med* 2021;96(6):828–35.
- Jones JM. LGBT identification in U.S. ticks up to 7.1%. 2022. Available from: <https://news.gallup.com/poll/389792/lgbt-identification-ticks-up.aspx>. Accessed March 3, 2022.
- Casey LS, Reisner SL, Findling MG, et al. Discrimination in the United States: experiences of lesbian, gay, bisexual, transgender, and queer Americans. *Health Serv Res* 2019;54(S2):1454–66.
- Nadal KL, Whitman CN, Davis LS, et al. Microaggressions toward lesbian, gay, bisexual, transgender, queer, and genderqueer people: a review of the literature. *J Sex Res* 2016;53(4–5):488–508.
- Akré EL, Boekeloo BO, Dyer T, et al. Disparities in health care access and utilization at the intersections of urbanicity and sexual identity in California. *LGBT Health* 2021;8(3):231–9.
- Ayhan CHB, Bilgin H, Uluman OT, et al. A Systematic review of the discrimination against sexual and gender minority in health care settings. *Int J Health Serv* 2020;50:44–61.

13. Perez-Brumer A, Nunn A, Hsiang E, et al. "We don't treat your kind": assessing HIV health needs holistically among transgender people in Jackson, Mississippi. *PLoS One* 2018;13(11):e0202389.
14. Moll J, Krieger P, Heron SL, et al. Attitudes, behavior, and comfort of emergency medicine residents in caring for LGBT patients: what do we know? *AEM Educ Train* 2019;3(2):129–35.
15. Nowaskie DZ, Patel AU, Fang RC. A multicenter, multidisciplinary evaluation of 1701 healthcare professional students' LGBT cultural competency: comparisons between dental, medical, occupational therapy, pharmacy, physical therapy, physician assistant, and social work students. *PLoS One* 2020;15(8):e0237670.
16. Nowaskie DZ, Sowinski JS. Primary care providers' attitudes, practices, and knowledge in treating LGBTQ communities. *J Homosex* 2019;66(13):1927–47.
17. Streed CG, Hedian HF, Bertram A, et al. Assessment of internal medicine resident preparedness to care for lesbian, gay, bisexual, transgender, and queer/questioning patients. *J Gen Intern Med* 2019;34(6):893–8.
18. Charny JW, Kovarik CL. LGBT access to health care: a dermatologist's role in building a therapeutic relationship. *Cutis* 2017;99(4):228–9.
19. Fakhoury JW, Daveluy S. Incorporating lesbian, gay, bisexual, and transgender training into a residency program. *Dermatol Clin* 2020;38(2):285–92.
20. Morris M, Cooper RL, Ramesh A, et al. Training to reduce LGBTQ-related bias among medical, nursing, and dental students and providers: a systematic review. *BMC Med Educ* 2019;19:325.
21. Park AJ, Katz KA. Paucity of lesbian, gay, bisexual, and transgender health-related content in the basic dermatology curriculum. *JAMA Dermatol* 2018;154(5):614–5.
22. Nowaskie DZ. A national survey of U.S. psychiatry residents' LGBT cultural competency: the importance of LGBT patient exposure and formal education. *J Gay Lesbian Ment Health* 2020;24(4):375–91.
23. Hayes V, Blondeau W, Bing-You RG. Assessment of medical student and resident/fellow knowledge, comfort, and training with sexual history taking in LGBTQ patients. *Fam Med* 2015;47(5):383–7.
24. Bidell MP. The Lesbian, Gay, Bisexual, and Transgender Development of Clinical Skills Scale (LGBT-DOCSS): establishing a new interdisciplinary self-assessment for health providers. *J Homosex* 2017;64(10):1432–60.
25. Jia JL, Nord KM, Sarin KY, et al. Sexual and gender minority curricula within US dermatology residency programs. *JAMA Dermatol* 2020;156(5):593–4.
26. Nowaskie DZ, Patel AU. How much is needed? Patient exposure and curricular education on medical students' LGBT cultural competency. *BMC Med Educ* 2020;20:490.
27. Nowaskie DZ, Sewell DD. Assessing the LGBT cultural competency of dementia care providers. *Alzheimers Dement (N Y)* 2021;7:e12137.
28. Sullivan P, Trinidad J, Hamann D. Issues in transgender dermatology: a systematic review of the literature. *J Am Acad Dermatol* 2019;81:438–47.
29. Barrett DL, Supapannachart KJ, Caleon RL, et al. Interactive session for residents and medical students on dermatologic care for lesbian, gay, bisexual, transgender, and queer patients. *MedEdPORTAL* 2021;17:11148.
30. Stratman EJ, Vogel CA, Reck SJ, et al. Analysis of dermatology resident self-reported successful learning styles and implications for core competency curriculum development. *Med Teach* 2008;30(4):420–5.
31. Nowaskie DZ. Development, implementation, and effectiveness of a self-sustaining, web-based LGBTQ+ National Platform: a framework for centralizing local health care resources and culturally competent providers. *JMIR Form Res* 2021;5(9):e17913.
32. OutCare Health. OutCare Health announces partnership with La Roche-Posay. 2021. Available from: <http://www.prnewswire.com/news-releases/outcare-health-announces-partnership-with-la-roche-posay-301306492.html>. 2022. Accessed August 27, 2021.
33. Cartron AM, Raiciulescu S, Trinidad JC. Culturally competent care for LGBT patients in dermatology clinics. *J Drugs Dermatol* 2020;19(7):786–7.
34. Ginsberg BA, Calderon M, Seminara NM, et al. A potential role for the dermatologist in the physical transformation of transgender people: a survey of attitudes and practices within the transgender community. *J Am Acad Dermatol* 2016;74(2):303–8.
35. Przedworski JM, Dovidio JF, Hardeman RR, et al. A comparison of the mental health and well-being of sexual minority and heterosexual first-year medical students: a report from the medical student CHANGE study. *Acad Med* 2015;90(5):652–9.