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The modern dermatology program director: A cross-sectional study on personal and professional characteristics

To the Editor: Program directors are responsible for maintaining professional and educational excellence, quality patient care, and a scholarly approach to practice.[1] Within dermatology, recent studies have analyzed the sex characteristics of leadership.[2,3] However, the profile of contemporary dermatology program directors, a critical leadership role within academic medicine, is largely undescribed. We herein report a cross-sectional analysis of dermatology program directors, with an emphasis on demographics, training, academic accomplishments, and sex disparities. Although the program director role has historically been predominated by men, with the increasing number of female dermatology residents, we hypothesized there would be no significant differences among program directors according to sex.[2]

A list of current US dermatology program directors was collected from Accreditation Council for Graduate Medical Education program listings. Programs with an osteopathic or military affiliation were excluded. Associate program directors were not included. Tracked variables included sex, age, professional degrees, training location, academic title, number of publications, receipt of National Institutes of Health funding while program director, and date of starting program director role. Publication data were collected at different intervals (total, before starting program director role, and after starting program director role) to assess for changes in productivity associated with becoming program director. Research productivity was obtained from PubMed by searching the program director's last name, first name, and middle initial. If the program director did not have a middle initial, the number of publications was taken from the most updated curriculum vitae or academic website information. All other information was obtained from the Accreditation Council for Graduate Medical Education program listings, faculty websites, and other available web pages.

Data were summarized with descriptive statistics. Differences among sex in continuous data were analyzed with a Wilcoxon rank sum test. Categoric data were assessed with χ^2 analyses. $P < .05$ was considered significant.

Program director information from 113 programs, representing all allopathic residencies, was collected. Most program directors were women (56%) with a median age of 47 years (interquartile rage [IQR] = 16 years). The median age of starting the role as program director was 42 years (IQR = 12 years). For men compared with women, there was no difference in current age (51 vs 46 years; $P = .11$) or age at becoming program director (42 vs 42 years; $P = .93$). The median time spent serving as program director was 5 years (IQR = 5 years). Most individuals attended medical school in the United States (95%) and 24% completed a fellowship. Fifty-seven program directors (50%) completed residency training at their current institution.

Eight program directors (7%) held an additional professional degree. Only 1 program director held an advanced degree in education (MEd). The median number of total publications was 20 (IQR = 43) per program director and was similar between men and women (20 vs 17; $P = .30$). The median number of publications while serving as program director was 6 (IQR = 15) and was similar between men and women (7 vs 5; $P = .16$). Six program directors (5%) currently work under National Institutes of Health–funded research grants. The current academic rank was evenly represented among assistant (32%), associate (32%), and full professors

Table I. Professional and personal profile of current US dermatology program directors

Characteristic	US dermatology residency program directors (N = 113)
Sex, % women	56
Age, median, y	47 (IQR = 16)
Age at starting PD position, median, y	42 (IQR = 12)
Attended US medical school, %	95
Additional professional degree (% of all professional degrees)	7
PhD	44
PharmD	22
MEd	11
MS	11
MPH	11
Total no. of publications, median	20 (IQR = 43)
No. of publications before starting PD position (median)	10 (IQR = 21)
No. of publications from starting PD position to present (median)	6 (IQR = 17)
Time as PD, median, y	5 (IQR = 5)
Completed residency or medical school at current program, %	50
Fellowship completed, %	24
Dermatopathology (% of all fellowships)	48
Pediatrics (% of all fellowships)	22
Surgery (% of all fellowships)	30
Current academic title, %	
Assistant professor	32
Associate professor	32
Professor	34

PD, Program director; *IQR*, interquartile range; *US*, United States; *PhD*, Doctor of Philosophy; *PharmD*, Doctor of Pharmacy; *MEd*, Master of Education; *MS*, Master of Science; *MPH*, Master of Public Health.

(34%). More male program directors were full professors (50% vs 21%; $P = .001$) (Table I).

At the same 113 programs, 6 chairs (5.3%) previously held the position of program director. Of those, 5 (83.3%) were men.

This study reports the profile of current dermatology program directors. Most program directors completed training at their current academic center. This outcome highlights the trend of appointing faculty who inherently understand the core values and culture of an institution.[4] Research productivity was variable, with a wide range of publications, but the lower median number of publications after starting as program director likely reflects the time commitment associated with the position, allowing less time for academic work and publications.

The sex disparity among physicians is widely documented.[3,5] The most recently published data from 2018 indicated that although 64% of dermatology residents were women, women held only 48% and 23% of program director and chair positions, respectively.[3,4] Our data reflect a promising trend of an increasing number of women in the program director role (56% of program directors are women). The sex inequality among program directors who are full professors may be due to a greater number of senior male dermatologists.[5] If that is true, given the trend of an increasing number of female dermatology trainees, this sex disparity should resolve over time. Nonetheless, this disparity requires further analysis to ensure equal opportunity for advancement in the field, given our finding that male program directors are more likely to be promoted to department chair.[5]

The primary limitation of this study relates to use of online data sourcing, in which only a narrow range of data exists, and information may be inaccurate or outdated. Program directors were not directly contacted or surveyed to avoid response bias. When possible, findings were confirmed with multiple sources. Additionally, information from osteopathic and military programs was not included, limiting the generalizability of these findings to all programs.

This study identified an evenly distributed demographic profile among dermatology program directors, with a propensity of programs to appoint those who trained at their institution. Continuing to observe the characteristics within dermatology leadership is paramount to ensuring a well-represented, diverse leadership cohort.

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Psoriasis: Knowledge, attitudes and perceptions among primary care providers

To the Editor: Psoriasis is often undertreated, despite the availability of effective therapies.[1] In 1 survey, 59% of 1.7 million insured patients with moderate to severe psoriasis were untreated in the prior year.[2] In another study of patients with a sole diagnosis of psoriasis, fewer than 60% had seen a health care provider in the past year.[3] Psoriasis is commonly initially managed by primary care with referral to dermatology subsequently occurring.[1] This study aimed to explore primary care providers' (PCPs') perceptions, practice, and referral patterns when managing psoriasis to determine where barriers to treatment might occur. PCPs included physicians, residents, and advanced practice professionals. Topics assessed included perceptions about psoriasis, perceptions about the patients with psoriasis, challenges in psoriasis assessment and management, obstacles in referrals to specialists, and knowledge and training on psoriasis.

Paper and electronic surveys, administered via the Research Electronic Data Capture (REDCap) application, were used. Survey links were e-mailed to internal medicine trainees at Brigham and Women's Hospital between January and March 2018. Paper surveys were distributed at 2 continuing education conferences held between October 2017 and March 2018, and data were entered into REDCap.

Tables I and II summarize participant characteristics and results, respectively. The majority of PCPs recognize that psoriasis is difficult to treat (80.9%) and affects quality of life (63.3%) and that patients usually comply with the treatment plan (68%). Perceived reasons for noncompliance included cost, patients' beliefs that treatment is ineffective, and difficulty using medications.

Table I. Demographics of primary care providers (n = 147)

Variable	Providers, n (%)	Subsets (n)
Educational background		
P	82 (55.8)	MD (77), DO (5)
R	20 (13.6)	MD
A	45 (30.6)	NP (43), PA (2)
Specialty		
Internal medicine	90 (61.2)	P (52), R (19), A (19)
Family practice	38 (25.8)	P (21), R (0), A (17)
Other*	19 (12.9)	
Years in practice		
>15	107 (72.8)	P (75), R (0), A (32)
5-10	10 (6.8)	P (6), R (0), A (4)
1-5	10 (6.8)	P (1), R (0), A (9)
Current resident or fellow	20 (13.6)	NA
Practice setting		
Academic institution	33 (22.3)	P (11), R (19), A (3)
Academic-affiliated institution	28 (18.9)	P (15), R (1), A (12)
Private practice	50 (34.0)	P (35), R (0), A (15)
Community health center	12 (8.1)	P (5), R (1), A (6)
Urban	15 (10.1)	P (10), R (2), A (3)
Suburban	26 (17.6)	P (17), R (0), A (9)
Rural	4 (2.7)	P (1), R (0), A (3)
Other	10 (6.8)	P (3), R (1), A (6)
Number of psoriasis patients seen per week		
None	36 (24.5)	P (14), R (13), A (9)
1-2	95 (64.6)	P (60), R (7), A (28)
2-5	11 (7.5)	P (7), R (0), A (4)
>5	2 (1.4)	P (0), R (1), A (1)
Frequency of new diagnosis of psoriasis made		
Never	12 (8.2)	P (1), R (7), A (4)
Rarely	76 (51.7)	P (45), R (11), A (20)
Sometimes	51 (34.7)	P (31), R (2), A (18)
Frequently	7 (4.8)	P (5), R (1), A (1)

APP, Advanced practice professional; *DO*, doctor of osteopathy; *MD*, doctor of medicine; *NA*, not applicable; *NP*, nurse practitioner; *P*, physician; *PA*, physician assistant; *R*, resident physician.
*Other includes obstetrics/gynecology: P (3), A (1); rheumatology: P (1), R (1); pediatrics: P (2); geriatrics: P (2); primary care, cardiology: A (2); adult NP: A (4); vascular surgery: A (1); ophthalmology, A (1); and not specified, A (1).

The majority (66.2%) of providers reported hesitation prescribing high-potency topical corticosteroids, especially in large quantities, given concerns regarding adverse effects. However, few (11.4%) used phototherapy, and the majority (93.7%) were