Empowering Residents to Address Socioeconomic Disparities in Dermatology

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RESIDENT **PEARL**

- Even while in training, dermatology residents have the agency to impact their communities by connecting their expertise to the patients in greatest need.

Vulnerable communities are in tremendous need of specialized dermatologic care. Through exposure to unique patient populations during medical school curricula and residency training, creation of partnerships with existing advocacy networks, and technological innovation, dermatology residents can harness their skill set to aid marginalized communities.

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Studding almost every inch of skin except the face are gray lichenified plaques coating a patient's body like worn leather. Raking his nails across his arm, the patient reminds me how long he had waited to receive this referral and how early he had awoken for this appointment. He was well acquainted with the value of promptness; in his world, it might make the difference between sleeping on a cot and a night spent on concrete.

Over the last year, the patient had cycled through the few safety-net clinics scattered throughout the city. He had accumulated numerous different diagnoses from atopic dermatitis to disseminated tinea corporis. A few minutes, one #15 scalpel, and mineral oil were all it took for us to unravel the mystery. As the attending and I peered through the microscope at the scabies ovum, I couldn't help but wonder about the alternative outcomes to his case. Left untreated, scabies compromises the skin barrier, paving the way for secondary infections such as cellulitis. Depending on the pathogen, this infection may in turn evolve into acute postinfectious glomerulonephritis.[1-4] An elusive diagnosis can quietly escalate into considerable morbidity for patients. This case highlights the dire consequences of dermatologic health disparities and places medicine's primordial function into sharp focus: the alleviation of suffering.

The Dermatologic Burden of Disease

As a major contributor to global disease burden, dermatologic disease is the fourth greatest cause of disability worldwide when mortality is factored out.[5,6] Among global rural populations, dermatologic disease constitutes one of the leading causes of death and/or loss of professional capabilities.[7] In the United States alone, nearly 27% of the population saw a physician for at least 1 dermatologic disease in 2013.[5] The tremendous prevalence of skin disease magnifies discrepancies in access to dermatologic care, which has been observed to be influenced by age, socioeconomic background, rurality, and sex.[8]

There has been growing focus on the national shortage of dermatologists over the last 2 decades.[9,10] With an aging population and rising incidence of skin cancer, this undersupply is projected to increase and disproportionately impact ethnic minorities as well as those from socioeconomically disadvantaged backgrounds.[8,9,11-14] These trends are of particular importance to residents and medical trainees. Multiple studies have demonstrated that the patient demographic of hospital-based resident clinics

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includes primarily minority and disenfranchised populations with poorer overall health.[15-17] In contrast to faculty clinics, residents treat patients who are more likely to be nonwhite and more likely to be reimbursed by Medicaid.[18] The unique demographic makeup of hospital-based resident clinics raises questions about the preparedness and comfort of resident physicians in managing the nuances of health care delivery in these settings.[10]

Providing equitable care to marginalized populations within the constraints of 15- to 30-minute visits can be challenging to physicians and trainees. Even clinicians with the best of intentions may be impeded by a lack of familiarity with the daily realities of impoverished living conditions, implicit prejudice against people living in poverty, and adapting recommendations to varying levels of health literacy among patients.[19,20] Contending with these daunting obstacles can be discouraging. Given how entrenched certain institutional barriers are, questioning them may seem an exercise in futility, yet history demonstrates that residents can and have been empowered to improve tangible outcomes for vulnerable populations. In reflecting on approaches of the general medical education system, The Josiah Macy Jr. Foundation President George E. Thibault, MD, observed that, "When appropriately trained, deployed and incented, [residents] can help achieve institutional goals to improve quality, safety and efficiency."[21]

Start Small But Dream Big

Action begins with awareness. Medical school and teaching hospital curricula are increasingly integrating educational exercises regarding the social determinants of health and populations with unmet needs. Medical training presents an exclusive opportunity to gain exposure to and familiarity with patient populations that one might not otherwise encounter. Immersion programs provide invaluable experience in tailoring health care delivery to the needs of vulnerable communities. Although opportunities for international rotations abound, domestic rotations among underserved populations can be just as transformative, including correctional medicine, homeless clinics, the Indian Health Service, and rural communities.

Create Partnerships to Broaden Impact of Service

Affecting the largest and most visible organ, skin disease often presents a substantial concern for patients and can herald systemic disease. The nature of dermatologic disease engenders close collaboration between general practitioners and specialists. For example, while resident-run or safety-net clinics characteristically center on providing holistic care for patients through internal medicine or primary care, these overworked and understaffed clinics often are in need of evaluation by specialists for specific concerns. Some clinic models feature dermatology faculty who volunteer routinely (ie, every 2 weeks, every month) to examine all the clinic's patients presenting with concerns pertinent to the specialty. Drawing on their respective areas of expertise, general practitioners and dermatologists therefore can collaborate to connect disadvantaged patients with the specialized care they need.

Challenges Present Opportunities for Innovation

Adhering to the social distancing requirements of the COVID-19 pandemic protocol has driven clinicians to utilize innovative approaches to patient care. The rural-urban misdistribution of the dermatologist workforce has long been established, with rural patients often experiencing lengthy wait times to see a specialist.[9] Both synchronous and asynchronous teledermatology modalities provide an ideal platform for triaging patients with dermatologic concerns who otherwise have meager access to a dermatologist.

Final Thoughts

Residency training is a prime opportunity to gain exposure to the broad spectrum of disease within dermatology as well as the diverse range of affected patients. Drawing on the aforementioned strategies, residents can leverage this knowledge in the service of underserved patients.

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