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Commentary

Addressing structural inequality in dermatology – where do we go from here?

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Dear Editor,

A recent podcast from JAMA Clinical Reviews titled “Structural Racism for Doctors – What Is It?” [1] accompanied by the caption “No physician is racist, so how can there be structural racism in health care?” received widespread criticism across social media. Prior to this particular incident, racial and ethnic disparities in vaccination, incidence, morbidity, and mortality rates of COVID-19 in the United States [2-6] raised concerns that systemic inequality was further contributing to disparities in American healthcare during one of the most devastating pandemics in modern day history. While the issue of structural inequality is not new, many physicians may be unaware of its presence or potentially uncomfortable with how it can be addressed despite wanting the best possible outcomes for their patients.

Unfortunately, the field of dermatology is no exception. Our group recently evaluated gaps in skin cancer prevention campaigns in popular social media platforms by top non-profit healthcare organizations with skin cancer prevention efforts [7]. We identified both a lack of diverse images representing skin of color as well as a lack of tailored education regarding clinical nuances specific to skin cancer in people of color. Although nail, acral, and mucosal melanoma are the predominant manifestations of melanoma in people of color, only 3.2% of images in the skin cancer prevention campaigns involved non-UV mediated sites. There were 0 images of skin cancer in patients with Fitzpatrick III skin type or higher. Patient outreach efforts in dermatology should be more inclusive of diverse patient populations, and the discussion around structural inequality warrants that we clarify areas of improvement.

First, disparities in patient education result in varied availability and quality of education. In addition to a lack of resources and targeted campaigns toward people of color, skin cancer education is failing to address appropriate protection measures in patients with darker skin. While UV exposure has long been implicated in the development of skin cancer in non-Hispanic white patients, it may not be the most salient risk factor in black and Hispanic patients, as evidenced by a recent systematic review of melanoma in skin of color [8,9]. As such, public health campaigns focusing on photoprotection such as regular use of sunscreen as a means of skin cancer prevention do not comprehensively educate patients of color on their unique skin cancer risk and prevention strategies, including how to perform a mucosal, nail, or genital exam to screen for melanoma.

Second, even when patients are able to surpass barriers to receiving clinical care, disparities in treatment within the healthcare system result in poorer outcomes amongst minoritized patients. For example, when insurance type, socioeconomic status, and tumor stage are accounted for, black patients with melanoma in the United States still have a higher mortality rate when compared to their Caucasian counterparts [10]. Implicit bias efforts in the workplace, including training of both medical providers and staff may be an important first step to addressing these disparities. Leaders in skin of color dermatology have called for the incorporation of training on antiracism efforts, implicit bias, social disparities, and cultural humility as components of dermatology resident education [11]. Implicit bias training should include clinical staff who are often the first to interface with patients. Despite having the same insurance status, when African-American and Hispanic patients call to request an in-person visit in the primary care setting, both have been offered later appointment times compared to their Caucasian counterparts [12]. Another solution may lie in utilizing quality improvement techniques to combat implicit biases in the clinical environment. Medical errors are often discussed as part of the Swiss cheese model, in which individual errors at various stages of a patient's clinical course in a healthcare setting can result in an adverse event. This approach may be useful in educating trainees in unconscious bias curricula by highlighting the individual barriers that patients of color face as they navigate the healthcare system.

Finally, improving equity research in both dermatology and medicine at large requires data that are representative of diverse patient populations. Influential datasets for studying population-based health have greatly impacted health policy, ranging from cardiovascular health to women's health guidelines. Both the Nurses' Health Study (NHS) and the Framingham Heart Study (FHS) were initially composed of almost exclusively white participants (97% and 100% in the NHS and FHS, respectively) prior to establishing explicit goals to diversify in later cohorts [13,14]. Examples of diverse datasets informing better treatment modalities and outcomes in minority patients abound. Despite albuterol being one of the most commonly prescribed medications for asthma patients, it was not until researchers studied a diverse cohort of pediatric asthma patients before it was determined that almost 50% of black children and two-thirds of Puerto Rican children with moderate to severe asthma do not respond to albuterol treatment [15]. Additionally, while many equity-focused dermatology researchers, including our own group, have utilized the Fitzpatrick scale to stratify patients, there are inherent limitations to this approach. The scale is skewed as it was developed to primarily focus on light skin tones, originally only containing four skin types (I-IV) and using white skin as the baseline [16]. The scale may soon be replaced with quantifiable methods that measure amounts of melanin or pigment for a given surface area. It is also critical that adequate funding for research in dermatology is directed towards diversity, equity, and inclusivity (DEI) initiatives as well as skin of color dermatology [17]. Funding opportunities indirectly set the agenda for research endeavors and shape the trajectory of future research for trainees and faculty alike.

Structural inequality remains one of the most pressing issues currently facing physicians and the greater healthcare system. Dermatologists can play an active role in addressing the consequences of systemic barriers by improving the quality and access of patient education to patients of color, increasing representation of underrepresented minorities in dermatology training, incorporating implicit bias and cultural humility training in medical education, and drawing upon diverse datasets to create a more comprehensive understanding of cutaneous disease in patients of color in order to inform effective therapeutics and reliable guidelines for patients of color.

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