Seeing Is Believing: How Social Media Is Challenging Physician Stereotypes

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e invite you to close your eyes and picture a surgeon. Who came to mind? Did an image of a black man, an Asian woman, or a surgeon in a wheelchair emerge? Although these representations are just as qualified, white, male, nondisabled surgeons tend to dominate the societal consciousness and, consequently, the minds of medical students and trainees as they make life-changing decisions about their careers. Since the launch of the #ILookLikeASurgeon movement in August 2015, social media has galvanized a virtual global community to upend the surgeon stereotype. More recent hashtags, including #BlackMenInMedicine² and #DocsWithDisabilities,3 have sought to expand the image of physicians, illustrating that their appearance should be as varied as humanity itself, and inviting students and trainees of all backgrounds to pursue their career goals with greater confidence. This perspective reviews models for stereotype change, summarizes recent social media initiatives, and offers suggestions for how individual physicians, graduate medical education training programs, and specialty societies can become involved in similar efforts to enhance diversity.

Stereotypes are widely held, fixed, and simplified images or ideas of a particular person or thing.⁴ Psychologists traditionally assumed that stereotypes were rigid and unresponsive to evidence because they were a natural consequence of our cognitive, affective, and social functioning.4 In the 1980s, researchers outlined possible mechanisms of stereotype change that might occur following exposure to stereotypedisconfirming information. In the bookkeeping model, stereotype change is an incremental process in which each instance of stereotype-relevant information is used to modify the existing stereotype.⁴ Any single piece of disconfirming evidence can elicit a minor change. Substantial change occurs with the accumulation of many disconfirming instances that deviate from the stereotype.⁴

Recent efforts by physicians on social media are consistent with the bookkeeping model. Mara Antonoff, MD, and Nikki Stamp, FRACS,⁵ believe that

promoting role models who contrast with our existing cultural ideal of a surgeon will help shape future public perceptions on who belongs in the operating room. Quinn Capers IV, MD, champion of the #BlackMenInMedicine campaign, recognized the ability to "flood social media with images of black men as physicians to try to turn the tide of this unconscious bias that black men are the face of danger." Lisa Meeks, PhD, #DocsWithDisabilities founder, similarly wanted to let people know there are not simply 1 or 2 unique physicians with disabilities but, rather, a multitude.³

Another more recent change model, one likely to resonate with physicians, is the stereotype inoculation model, introduced by Nilanjana Dasgupta, PhD.⁶ While individuals usually feel like they make a free choice to pursue one career path over another, she has found that this decision "is often constrained by subtle cues in achievement environments that signal who naturally belongs there and . . . who else is a dubious fit."^{6(p231)} In contrast, she proposes that exposure to in-group experts and peers who are successful in a high-achievement context act as "social vaccines" that inoculate individuals against self-doubt, especially in the early years of academic and professional development.⁶

This concept has also been propagated through physicians' recent social media efforts. Stanford Health Care general surgery resident, Auriel August, MD, started the Twitter account, @blackgrlsurgeon, because she couldn't find a popular black female surgeon to emulate.⁷ Now, she wants to be a visible face in academic surgery, so other young black girls have someone to look up to and say, "I can be like this." Leaders in cardiothoracic surgery believe that seeing images of surgeons of all genders, races, and backgrounds, with whom diverse youth can identify, will subsequently inspire future generations of trainees. Likewise, an aim for #BlackMenInMedicine is to provide visibility to how role models practice medicine, and perhaps more important, how they spend their time outside of the clinic or hospital.8

Therefore, one way individual physicians, including residents, fellows, and graduate medical education faculty, can catalyze stereotype change is by sharing images of themselves in the clinic, operating room, and even in their daily lives, to provide an expansive, holistic view of visible and positive role models. Research has documented that role models can be successful individuals who one knows only through media exposure.⁶ As a result, aspiring physicians can benefit whether or not they have had personal contact with these positive role models.⁶

Yet another way for physicians to become involved is to engage in mentorship. Social media provides a unique opportunity for individuals to connect and interact with experts and peers across geographic boundaries in ways unimaginable just 2 decades ago. In a recent editorial, Michelle Silva, BA, and Julie Freischlag, MD, 9 note that this is especially valuable for women, underrepresented minorities, and those in rural or remote communities who have far fewer role models in their home institutions. For these individuals, social media provides an avenue in which they can connect, engage, and be inspired by others who have the same professional passions and challenges. Research also confirms that "near-peer mentors" can be just as effective in fostering a sense of belonging, self-efficacy, and commitment as senior mentors.⁶ In this way, via virtual pairings, slightly more advanced peers in residency, fellowship, or early academic practice can form relationships with younger peers who are just beginning a similar career stage. This is especially promising, as it means that peers themselves can have a vast impact, which is important since the number of women and racial minorities in high-status, high-achievement positions available for mentorship still remain strikingly low.^{5,6,9}

Moving beyond the level of individual physicians, specialty societies are now starting to embrace the opportunities that social media present, including a far-reaching and rapid dissemination of ideas. 10,11 The American College of Gastroenterology (ACG) recently launched the #DiversityinGI campaign. One of its main objectives is to enrich the pipeline of trainees and providers from underrepresented populations. Darrell Gray II, MD, chair of the ACG Committee on Minority Affairs and Cultural Diversity, believes "If you can see it, you can be it." He staunchly recognizes, however, that this doesn't begin with residents and fellows but, rather, in elementary, middle, and high school. Dr Gray is part of a group that does yearly high-school visits during the ACG annual meeting to help promote visibility among young people, showing them there is a path to success. 11 The ACG also has a Summer Scholars Program to provide opportunities for underrepresented minorities to engage in research and clinical shadowing.11

Lack of equal representation in the medical field is a multifactorial problem that will require thoughtful collaboration among multiple stakeholders across several points along the pipeline. It is unrealistic to expect that changing the image of physicians via social media will cure all of the underlying cultural issues that permeate our society.⁵ However, the intentions and methods of the aforementioned social media campaigns are well supported by a large body of evidence from the psychology literature, which indicates that substantial stereotype change is possible. 4,6 Social media platforms reach a broad audience base, which not only increases the visibility of role models but also offers connectivity to establish mentoring relationships spanning geographic boundaries. While it may sound cliché, "seeing is believing," and current residents, fellows, and graduate medical education faculty, as well as specialty societies, have the opportunity to use social media, right now, to inspire and engage the next generation.

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