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Brief Report

Normalized "medical inferiority bias" and cultural racism against international medical graduate physicians in academic medicine

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A B S T R A C T

Socio-historical barriers remain a concern in Academic Medicine. Regrettably, despite the modern cultural era defined by increased recognition and response to such issues, widespread covert barriers and misperceptions continue to limit the advancement of many, in particular, international medical graduate physicians (IMGs) who represent a significant proportion of the US physician workforce. Adversity is experienced in the form of cultural racism, affinity bias, and underrepresentation in distinct specialties as well as in leadership roles. Often, these unnecessary hardships exacerbate pre-existing discrimination in Academic Medicine, further marginalizing IMGs. In this article, we discuss the prevalence of "medical inferiority bias" and the resulting impact on US healthcare, specifying considerations to be made from a policy perspective.

Keywords: Cultural, IMG, International medical graduates, Medical inferiority bias, Racism

The last several years have seen a reckoning in Academic Medicine (AcMed) to address the systematic barriers that have limited advancement and equity for women and minorities.[1,2] There is increasing recognition that socio-historical barriers (e.g. slavery, segregation, education and employment discrimination, voter suppression, stereotyping and prejudice, etc) limit entry to AcMed for minorities. After entry, a complex interplay of conscious and unconscious biases with attendant socio-emotional burdens, and devaluation of achievements limits advancement and causes attrition and underrepresentation in higher ranks of women and minorities.[1,3] Thus, in addition to efforts to address the socio-historical entry level underrepresentation in Medicine for women and minorities, there is effort to improve representation in upper-levels and to increase opportunity and support at lower ranks for these groups in AcMed.[2,4] However, one facet of structural discrimination in AcMed has gone relatively unacknowledged to date: widespread "medical inferiority bias" and neo-racism against the international medical graduate physician (IMG).

IMGs – physician graduates of non-US, non-Canadian medical schools – fill a critical gap in American healthcare delivery and represent ~23% of physicians nationally and up to 38% in some Northeastern states.[5] International medical graduate physicians disproportionately work in densely populated, low-income communities and are increasingly over-represented in primary care and the lowest paying specialties. A disproportionate number died from COVID-19 from caring for patients.[6] At entry into residency, approximately 60% are foreign citizens (fIMGs), and 40% are US citizens (US-IMGs)[5]; a plurality of fIMG come from lower- and middle-income countries, with nearly 40% from four countries: India (which alone contributes 23%), Philippines, Pakistan, and Mexico.[5] International medical graduate physicians complete the identical licensing examination sequence as American medical graduate physicians (AMGs) and a communication skills test to enter graduate medical education (GME) training in the US After completion of training, 75% of IMGs join the US workforce, with many joining AcMed, and many eventually become naturalized citizens.[7] However, despite (often repeated) US specialty training, the IMG faculty continue to face unjust barriers to advancement in AcMed, not unlike well-described racial and gender disparities in this arena.[8] We describe these barriers herein.

Cultural racism and inferiority bias against IMGs: subtle but prevalent

Historically, overtly,[9] and today, insidiously, physicians, staff, and patients – no doubt representative of the US population at large – have questioned the equivalence of IMGs (particularly fIMGs) licensed and practicing in the US For example, a recent study on assessment of diagnostic competency in Maintenance of Certification (MOC) examinations among American Board of Internal Medicine (ABIM) diplomates included IMG vs AMG status as *the* primary measure of "training characteristics" for a cohort of internists who had necessarily trained and practiced in the US for at least a decade.[10] Despite GME in an accredited US or Canadian

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program, successful ABIM certification a decade prior, required 2- and 5-year check-ins with ABIM within the decade; state- and institution-specific mandated licensure/credentialling/continuing medical education (CME), and a decade of practice in the US; authors in this study – and many like it – choose the country of medical training as the defining source of potential knowledge deficit or incompetence (unsurprisingly, IMG status was not a factor in physician performance). Surely, after upwards of 13 years of training and practice in the US, IMG physicians should be rightfully and properly categorized, as are their AMG counterparts, as "American Internal Medicine Graduates." After all, the very basis of GME, specialty board certification, MOC, and CME is that undergraduate medical education is inadequate to meet the needs of modern-day, rapidly changing, subspecialty-based practice of medicine.[9]

There is overwhelming evidence that IMGs who have undergone GME training and board certification perform no differently with respect to patient outcomes from AMGs.[7,11,12] Yet IMGs continue to be perceived as inferior in medical training and ability ('medical inferiority bias') by the greater North American medical community. This "medical inferiority bias" permeates medicine at all levels, including the residency-selection process, job market, and academia.[13–18] Some IMGs are forced to accept alternative careers.[19] fIMGs, unlike US-IMGs who are culturally "American," face, in addition, significant cultural racism – the "institutional domination and sense of racial–ethnic superiority of one social group over others, justified by and based on allusively constructed markers".[20]

A majority of fIMGs are non-white and face both the usual professional and socio-cultural transitioning challenges of immigrant physicians and also racialization-transitioning challenges (the adjustment to a newly acquired minority race status) as they move into practice in the US.[7,21] Despite selection pressures ensuring that only those with high adaptive assimilation skills remain as faculty, many traits continue to set the fIMG faculty visibly apart from like-race culturally US faculty including accents, verbal and nonverbal cues, and non-US cultural attributes that subject them to prejudice.[21,22] Numerous personal stories of fIMGs voice more hostile and overt encounters from colleagues, patients, and staff, and data suggest higher severity of disciplinary actions for like-transgressions.[23] There is potential intersectionality of fIMG status with race and gender. Nonwhite, IMG women may face greater disadvantage from stereotype bias ("little brown woman" syndrome) than like-race IMG men and like-race AMG women.[24,25]

It is likely that medical inferiority bias is intersectional with affinity bias and cultural racism and that it heightens the limitations for the advancement of IMG faculty in AcMed, especially into academic–administrative leadership roles.[26] Less than 3% of institutional leadership roles in the top 10 US medical schools (as ranked by US News and World Report) are held by IMGs. Professional societies also show significant underrepresentation of IMGs in leadership roles, including in subspecialties where IMGs represent a significant plurality, such as pathology or internal medicine.[27] For example, in internal medicine – a field where 43% of practitioners are IMG – only 11% of residency program directors are IMG.[28] International medical graduate physicians seem to be largely absent from some national leadership pipeline programs such as the National Clinician Scholars Program.[29]

Among the most prevalent and insidious communicators of the "inferiority" of the IMG faculty are the blanket exclusion policies for IMGs from some post-graduate medical training programs (it is worth noting that while some programs may choose not to have taken on the expense of H1b visa sponsorship, J-1 sponsorship occurs through the Educational Commission for Foreign Medical Graduates (ECFMG) and is not at cost to a residency program),[30,31] the annual ritualistic secreting of IMG faculty and trainees from residency applicants,[30] and the celebratory announcement of "matching of all AMGs".[21,32,33] Beyond creating dissonance for the IMG faculty with organizational messaging of equity, these practices delay socialization of AMGs to practicing and working with IMGs and perpetuate anti-IMG bias.[15,33,34] There is no formal publicly available data on promotion metrics for IMGs; however, IMGs report discrimination for advancement.[21,22] Indeed, it is plausible that the differential statistics for non-advancement of Asian and Hispanic faculty reflect the disadvantage of IMG status, rather than race, as these racial groups within Medicine have high IMG percentage.[35] In fact, immigrant bias may well explain the "illusion of Asian success" in science more broadly.[36]

Impact of cultural racism and medical inferiority bias on American medicine

Incongruence between "espoused" and "lived" institutional theories is a significant contributor to organizational malfunction and physician disengagement,[37] factors that directly impact on patient quality and safety, and institutional financial well-being. Incongruence of diversity between lower-level faculty and senior leadership rankscreates a sense of lack of "membership" and "meaning" in work, known factors that contribute to demotivation, disaffection, and departure from work. International medical graduate physicians report lower career satisfaction in jobs and perceive a lack of support from colleagues.[38,39] International medical graduate physicians are generally reconciled with this disadvantaged professional existence and see it as the "cost of being immigrant".[38] This may lead IMGs, expecting diminishment and non-advancement, to choose to concentrate their efforts to job-aspects with greater likelihood of success, e.g. publication efforts. This prioritization of selfish "generalizable capital" over investment in "organizational capital" (e.g. teaching medical students, participating in inclusivity work, supporting junior faculty) may be to the detriment of the parent organization. It reduces the individual's commitment to organization-building and increases the likelihood that competing organizations will successfully draw this individual away from their existing organization. Indeed, AcMed may need to consider whether the lack of equity and inclusivity for fIMGs might translate to early withdrawal from the workforce and possible emigration to the fIMGs to their native country for practice and retirement (the so-called "reverse brain drain" effect).[40,41]

Two factors need greater consideration. Although AcMed has committed to greater inclusivity, it faces an opposing force that undermines an inclusive institutional culture. Market-force-driven mergers and increasing subspecialization create fragmentation, which requires adopting increasingly hierarchical structures to get work done. This often requires organizations to propose "organizational cultures" that necessarily adopt values of the majority social culture, which, unfortunately is not as inclusive of immigrants and minorities and views many non-majority cultural traits as negatives.[15] Given that middle management – including in medicine – is largely locally drawn and US-born, the risks of sociocultural incompatibility or intolerance are greater.[42,43] This can result in greater disaffection and disengagement of minority workers. Thus, there needs to be a focused effort to ensure equity of opportunity and inclusivity for all, with consideration given to the overvaluation of the so called "soft skills" of management.

Second, and at a national level, consideration needs to be given to the distribution of IMG slots for residency. Discriminatory practices at entry into residency are a complex mix of several factors: (1) protectionism for the AMG – US citizens, perceived as the brightest and in whom the country has already invested so much;[15,44] (2) difficulty in accurately evaluating the medical competency of someone from a lower- or middle-income country;[45] and (3) concerns about socio-cultural competencies in the work place and with patients.[46,47] Thus, selective residency programs simply follow a seeming risk-mitigation strategy of excluding IMGs from consideration. This strategy, which is at least partially based in cultural racism and IMG inferiority bias, *de facto* segregates IMGs into certain specialties and practice environments. Some specialties now show large plurality fIMG (e.g. 40.4% of fellows in endocrine, diabetes

and metabolism [(2021 match], and 30.2% of entering residents in pathology [2023 match]).[48,49] This may not be of any consequence; however, it is worth noting that cultural divides in science are often the foundation for, a direct symptom of, and continued promoter of classism, intra- and extra-community distrust, physician marginalization, and lack of support for a given field.[50]

Intersectionality: cultural racism compounds other discriminatory factors in academic medicine

AcMed should consider multiple factors that marginalize the workforce, not only because it impacts productivity but indeed because it is innately unethical to ignore these factors. *Homo sapiens* are a complex and diverse species: arising from extreme backgrounds of varied socioeconomic status; genetically common yet showing variable phenotypes from birth onwards; nurtured by various mores and cultural identities; engaging with the world in a myriad of experiences; and developing arrays of opinions and personalities rooted in both the norm and absurd. One-size-fits-all solutions often do not work for this species known for advanced complex thought and reason. Particularly in AcMed – a marketplace of free ideas within medicine which seeks to drive knowledge by embracing novel thinking – we should embrace the elements of diversity that we contend are central to the advancement of thought.

Regretfully, this is simply not the case. In fact, the effects of exclusion are more severe with increasing differentiating factors for a given physician. Female physicians are markedly under-represented in AcMed and leadership roles, even in the modern era.[51] Gendered agism terminates women's options prematurely.[52] But imagine being an fIMG who must adjust with the aforementioned issues, compounded with being a female and/or of age? Forget representation in leadership roles or AcMed – basic elements of respect are often noted. It is challenging to create a "level playing field" for all physicians when those making decisions on the national level as well as the individual hospital level are of the same predictable, redundant demographic.

Conclusion

Should AcMed and legislative institutions seek IMG equality? Would requisite distribution of IMG residency slots across specialties and programs be a significantly unfair imposition? We know that the US healthcare system will be comprised of 40% of these physicians, after all. Addressing the disparity would certainly be beneficial in providing the much-needed diversity for certain specialties, such as dermatology. It may also be generally beneficial for patients as America embraces increasing immigration from low- and middle-income countries to offset the demographic deficit secondary by an aging population. These discussions will need thoughtful consideration.

However, at least as a start, it is imperative that broader academia stops treating IMGs as second-class physicians. Faculty, particularly IMG faculty in departments that categorically refuse IMG applicants for various positions, need to question this behavior. This is not to argue that departments actively or even consciously are quelling the advancement of IMGs – a glance at any given department's website will surely yield a statement of diversity and cultural embracement. But the follow-through of these statements does not match the reality of experiences of IMGs in AcMed. Institutional and organizational introspection is necessary. Change begins with engagement of IMGs and recognizing and embracing the critical role that they play, not just at the national "numbers" level.

Declaration of competing interest

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