



Diversity: The Changing Face of Anesthesiology

Diversity: Value, Barriers, and Solutions

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Diversity encompasses a broad range of characteristics, such as gender, race/ethnicity, sexuality, physical and mental ability, thinking styles, socioeconomic background, and national origin. Most health care systems aspire to having a diverse workforce that reflects the population they serve, particularly given extensive evidence that lack of diversity contributes to health care inequities and worse outcomes among underrepresented populations (*Public Health Rep.* 2014;129(Suppl 2):57-61). Nonetheless, progress in achieving that goal has been slow. Women, for example, remain underrepresented in leadership roles in anesthesiology and academic medicine (*Anesth Analg.* 2019;128:137-143), as authors of scientific studies (*Anesth Analg.* 2019;129:306-10), as keynote speakers (*Anesth Analg.* 2019;129:301-5), and on editorial boards (*Anesth Analg.* 2019;129:306-10). Women anesthesiologists continue to earn about 30% less than men, even when compensation data are corrected for potential confounders such as part-time work, age, race, hours worked, region of country, having dependent children, and type of and position in practice (asamonitor.pub/3g8W6kI).

There is extensive evidence that diverse groups produce higher quality work. Teams with higher diversity in cognitive styles solve problems more quickly (*Harvard Business Review* 2017.) In one study, although fewer than 30% of working group members were women, scientific publications with at least one woman as an author received 87% more citations (*PLoS One* 2013;8:e79147).

Diversity also drives better financial outcomes. Among 180 publicly traded companies in France, Germany, the United Kingdom, and the United States from 2008-2010, companies in the top quartile for gender and ethnic diversity on senior leadership teams had 53% higher returns on equity and 14% greater earnings compared with companies in the lowest quartile (asamonitor.pub/2XdI-GeG). Among S&P 1500 companies from 1997-2009, for each additional woman director, companies made 7.6% fewer bids and paid a 15.4% lower premium bid on acquisitions (*Journal of Corporate Finance* 2014;28:185-200).



There are a number of reasons that diversity improves such a broad range of outcomes. Diverse groups bring more perspectives and cognitive approaches to the table. When everyone agrees, less time is spent considering risks, opportunities, and options, leading to poorer decisions. Individuals prepare better when presenting to a diverse group (*Sci Am.* 2014;311:42-7). Members of underrepresented groups usually have had to be better-prepared and more qualified to be considered for the role. Women, specifically, more often follow guidelines and ask for advice, likely as an adaptive response to amplify their voices (asamonitor.pub/2zV998I). While this is often interpreted as demonstrating lack of confidence and leadership skills, it is actually adaptive behavior associated with better outcomes in numerous studies in both medicine and business (*Journal of Corporate Finance* 2014;28:185-200; *Crit Care Med.* 2019;47:e8-13).

Given the powerful evidence of benefit, why are diverse workplaces not the norm? Why is diversity so elusive? One reason is the tendency people have to feel more comfortable with people who remind them of themselves. This unconscious bias means highly qualified individuals may be overlooked in favor of candidates who are a “good fit.” Another reason is the persistent focus on recruitment without a simultaneous focus on creating an inclusive and equitable work environment. Recruited individuals who do not feel welcome are more likely to leave. While overt, conscious discrimination has become much

less common, unconscious bias remains a major contributor to lack of diversity.

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Unconscious (or implicit) bias is the term used to define the concept that individuals have preferences for objects and people at a subconscious level that unintentionally influence their behavior and decision-making. In a 2017 study of medical student performance during code simulations, observers assessing medical students rated women as demonstrating “inferior” leadership (*Crit Care Med.* 2017;45:1184-91). In a 2014 study of internal medicine residents, subjects perceived agentic behaviors (e.g., assertiveness, competitiveness, independence, and courageousness) as central to leadership during codes, but women often received negative feedback when they demonstrated agentic



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behavior (*Acad Med.* 2014;89:1276-81). These perceptions of inferior leadership, however, may not align with true performance. In a 2019 retrospective review of a prospectively collected cardiac arrest database, code teams on which both the physician and nurse were women had significantly better outcomes in terms of both return of spontaneous circulation and survival to discharge than all-male and mixed gender teams (*Crit Care Med.* 2019;47:e8-13). Similarly, in an analysis of 360-degree reviews of individuals in leadership roles in business, women, on average, were rated significantly higher than men on most leadership competencies by peers, bosses, direct reports, and other associates (*Harvard Business Review* 2012).

Unconscious bias is one of the major reasons for lack of diversity in recruitment, but other factors, which often stem from unconscious bias, are more important in reducing retention, including sexual harassment, discrimination, and microaggressions. Microaggressions are verbal, behavioral, and environmental messages, often unintentional or well-intentioned, based on group membership, that are experienced as hostile, derogatory, or negative (*JAMA Surg* 2019). For example, male introducers used formal titles 72% of the time when introducing male grand rounds speakers, but for only 49% of female speakers (*J Womens Health (Larchmt)* 2017;26:413-19). While such slights may seem small, the cumulative impact has been shown to have greater pathogenic potential than overt discrimination and is a source of dissatisfaction (*J Occup Health*

Psychol. 2001;6:64-80). Women who experience microaggressions at work are three times more likely to regularly think about leaving. And a majority of women report sexual harassment, discrimination, and microaggressions at work, with higher rates for non-white women (asamonitor.pub/3bW2JTX).

Many popular books – *Lean In* and *Nice Girls Don't Get the Corner Office* – provide solutions aimed at “fixing” women. But, “It’s not women who are broken; it’s society that’s broken” (asamonitor.pub/2zV998I). Hard work and excellence are required for success, but they cannot always overcome the negative impact of gender, racial/ethnic, and other biases on opportunity. The most effective solutions are focused on recognizing and interrupting unconscious bias in recruitment and building

workplace cultures where diverse ideas and contributions are encouraged and welcomed.

It is not easy to change long-trenched models of recruitment and advancement. Expanding the pool of applicants by reaching out beyond normal recruiting pools to encourage qualified candidates from diverse backgrounds to apply is effective, but only if those applicants are not immediately screened out by the search committee. This problem can be addressed by having a search committee that is broadly representative and trained in best practices. Clear, objective criteria should be established before files are reviewed, recognizing that bias often leads to different interpretations of “objective” information (*Psychol Sci.* 2005;16:474-80). Multiple studies have demonstrated that, given

identical CVs except for the name, women and people of color are consistently rated as less qualified. Distracted or rushed reviewers tend to make more stereotyped assessments, while attention to bias makes assessments more equitable. An equity advocate on the search committee, empowered to call attention to bias, can reduce the impact of bias on assessments.

Evaluation of the existing structure and culture for bias and barriers is necessary to build an inclusive culture. If, instead, new hires are pressured to “fit in” to the prevailing culture, it dilutes the value of diverse perspectives. In addition, the experience is exhausting, and the individual is likely to either disengage or leave. Connecting new hires with a cohort from across the institution creates a supportive network. All members of the department

have the responsibility to recognize and respond to sexual harassment, discrimination, and microaggressions; bystander and other training provides tools to meet that responsibility (*JAMA Surg* 2019). This is especially true for leaders, whose behavior and attitudes set the standard.

Increasing diversity in the anesthesiologist workforce, though challenging, is critical for addressing health care inequities and improving the care of all patients. Unconscious bias is a barrier to recruitment of a diverse workforce, and also reduces opportunities for advancement. Discrimination and microaggressions are barriers to creating an inclusive environment and lead to high turnover. Leaders have the power to interrupt bias and create a welcoming culture. That effort will pay dividends in performance. ■

New Initiatives in the Association of University Anesthesiologists: From Exclusivity to Diversity

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The Association of University Anesthesiologists (*Anaesthetists* was replaced with *Anesthesiologists*) formed in 1953 and was the brainchild of four distinguished academic anesthesiologists who, at the time, represented three Ivy League institutions on the Northeast coast of the United States (asamonitor.pub/2ZDvr9U). The initial exclusive nature of the research-focused organization was born out of necessity due to the economic, political, and social issues that impacted health care and the emergence of the then-new specialty of anesthesiology (*Anesth Analg.* 1992;74:436–53).

Over time, the organization that had a stringent set of nomination requirements and an absolute membership cap of 100 members or less in 1970 has relaxed its nomination criteria to limitlessly include candidates who have scientific achievements outside of the laboratory or primarily have achievements in education. Interestingly, embedded in the original 11 proposals written by Dr. Austin Lamont (co-founder of the University of Pennsylvania Department of Anesthesiology & Critical Care) for the foundation of the organization was prescient language that addressed the possibility of dealing with issues that would be recognized as falling under the umbrella of diversity and inclusion. Dr. Lamont wrote with parenthetical comments added by Dr. Emmanuel Papper:



“...consideration of other matters of interest (e.g., socio-economic relations, residencies, teaching, etc.) should have no place in the programs of the group’s meetings. There is no reason, however, why the members of the group should not decide informally among themselves to stay over an extra day to discuss these matters if they wish. Should the members of the group eventually prove to be sympathetic and congenial and should the matters mentioned above ... be still of moment at that time, consideration should then be given to enlarging the purposes of the group. But, at least as regards socio-economic matters, it seems likely that any stand this group might adopt would be supported by a considerable number of anaesthetists who would

not be eligible for membership in the group” (*Anesth Analg.* 1992;74:436–53).

Of note, one of the organizations with whom the original AUA was at odds was the American Medical Association (AMA), which was a segregated organization at that time. Ironically, at the time of the writing of this article, the president of the AMA is an African American woman. In essence, despite its regrettable history of segregation and lack of inclusion, the AMA seems to have responded to its 21st century diversity wakeup call.

Therefore, while the underlying good intention of the AUA has been to pursue a path of diversity and inclusion, it is apparent that the timeliness of enacting this change is overdue. In recognizing that in education



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as well as in industry, organizations that have diversity function better, the AUA formed a diversity task force, spear-headed by the immediate past president, Dr. Jeanine Wiener-Kronish and facilitated by Dr. Robert Whittington. The task force had its first session within the schedule of the 2019 AUA meeting in Montreal, Canada.

A major challenge in addressing issues of diversity and inclusion that has been identified among professional organizations such as the AUA is a lack of data to determine the scope of the task. Therefore, a survey of AUA members was conducted in October 2019 to determine the demographics of AUA members. The survey instrument was sent to 1,111 reg-

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