VIEWPOINT

The Conundrum and Opportunity of Gender Equity for Evidence Generators

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An evidence generator in medicine is a physician or scientist with specific knowledge or expertise, engaged by stakeholders to inform device and drug development through all phases of study. This can be accomplished by serving in local roles participating in preclinical and clinical research, as well as national roles that strengthen professional standing and provide great visibility and opportunity. Not surprisingly, such roles are highly coveted and place individuals in milieus where their expertise and ideas are on display, including sometimes lucrative service on advisory boards, speaking engagements, and networking opportunities among other influential key opinion leaders. Most importantly, these opinion leaders are often at the helm of practice-changing research, generating evidence that influences the development and deployment of drugs and devices that ideally go on to benefit millions of patients around the world. This often means partnering directly with industry given their dominant role in funding innovation in cardiology and therefore may also have a downside; one must be careful to avoid real or perceived conflicts of interest or manipulation of academic perspectives, and industry relationships may limit participation in professional society committees or guideline writing groups. Nevertheless, physician-industry partnerships are an established pathway that offers would-be evidence generators access to leadership roles in developing innovative drugs and devices, funding, authorship, and influence.

There are good reasons for the scientific enterprise to want to diversify decision-making through the inclusion of women. Companies that use gender diversity as a cultural norm generate more productivity in market value and revenue.[1] In medical research, the National Institutes of Health have long supported the recruitment of women as investigators and enrollment of female participants. More robust data sets with sex-specific evidence can yield important insights and advance medical science in meaningful ways. Examination of sex-specific treatment indications is a wide-open area for discovery but one that might be unexplored without diversity among the physicians who lead and influence research.

Given the coveted role of opinion leader, it is worth examining their selection process, historically led by industry owing to its heavy reliance on a physician-backed growth strategy. The process has evolved from what was once a subjective "who you know" list to a more metric-driven exercise. Nevertheless, it can be difficult to find women to participate on advisory boards or serve as principal investigators even if companies subscribe to an ethos of diversity. In fields such as cardiology where women represent about 13% of practicing cardiologists,[2] one might argue that there are fewer women in these roles because there are fewer women in the field. However, that pool gets even smaller when selection is based on opinion leader characteristics that emphasize areas in which women have faced significant headwinds and are therefore historically underrepresented. These areas include publication and presentation metrics such as prior trial leadership, publication impact factor, h-index, conference presence, and clinical productivity.[3,4] The Association of American Medical Colleges' recent statement on gender equity calls for improvements in multiple areas in which women researchers are disadvantaged, including underrepresentation in the workforce, funding, leadership, compensation, and recognition.[5]

The recent movement to embrace diversity and inclusion across industries has been transformative and must extend to evidence generation and leadership in cardiovascular research. Women's involvement with professional organizations, where participation can lead to reputation building and networking, has been increasing and may help to identify those physicians who hold influence in their field. The American College of Cardiology's (ACC) Diversity and Inclusion Initiative, which has created governance principles supporting inclusivity and cultural competency and published workforce health policy documents, offers leadership and clinical research training for women. The ACC's education policies' use of inclusion as a success metric has increased the proportion of women speakers at the ACC's annual meeting from 19% in 2017 to 34% in 2019, by our count. Similarly, the European Society of Cardiology's Women in the ESC led the increase of invited women faculty at their Annual Congress from 18% in 2014 to more than 30% in 2020 (B. Casadei, MD, Europe Society of Cardiology, written communication, March 10, 2020). The American Heart Association has followed a comparable path, recently announcing an organizationwide effort to balance gender representation across the organization's activities.[6]

These are great strides forward that hopefully will help promote more women into positions of leadership and influence. However, to truly cultivate a diverse and inclusive workforce and improve the quality of clinical science and ultimately patient care, these efforts must also be driven by those in positions of authority across all areas of medicine, including industry. Therefore, we call on our industry colleagues to support gender equity by acknowledging the limitations of current opinion leader selection processes and the social, scientific, and economic potential in revising them. We urge them to do so deliberately and expeditiously so that the advantages of physician-industry relationships can be recognized more equally across the field.

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Diversity efforts should be focused at all levels, from local site investigators to those presenting breakthrough findings at national meetings and in top-tier journals. As professional organizations and the National Institutes of Health have increasingly embraced the avoidance of all-male panels or speaker lineups, so should industry refuse men-only steering committees and other clinical trial leadership groups. In addition to revising metrics, solutions might include developing an open application process for physician participation in industry-organized scientific activities, rather than an internal identification process. Women who might otherwise be off the radar could then be more readily highlighted for consideration. Other changes might include developing mentorship and research training programs, which could match women in their early or mid career with potential with more well-established leaders.

Academia and professional organizations can help bolster the effort to bring more women to the forefront of clinical science and discovery. Department chairs and division chiefs should look to proactively nominate women for opportunities within their own organizations but also within professional organizations and industry. Following the examples of the ACC, European Society of Cardiology, and American Heart Association, smaller subspecialty professional organizations should champion efforts to set metric-based inclusion goals and ensure that assessments are unbiased. Academic journals should promote diverse editorial leadership, ensure fair manuscript review, and adopt mechanisms to reduce or eliminate unconscious bias from their invitation, review, and acceptance practices. All groups would also be well-served by making stronger efforts to understand the experiences and preferences of the women within these professional environments so that program design and development can be adjusted to match their needs and goals.

Collectively, all stakeholders must take responsibility for promoting equity in academic medicine because a diverse and inclusive medical workforce will generate the best possible evidence and result in a more innovative, high-performing, and ultimately, successful scientific enterprise.

ARTICLE INFORMATION

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