

# Gender (and other) equity, diversity and inclusion in surgery

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There remains significant concern that surgery as a field lags behind many others within medicine on topics such as diversity, inclusion and gender equity. This is not just a Canadian or North American issue, but a worldwide phenomenon. Even before discussing equity in surgery, there are often significant biases at play. Some of these are clearly inadvertent, but others are potentially intentional. In recent years, Japanese medical schools, for example, have been accused of rigging their admission processes by artificially scoring female applicants lower than male applicants.<sup>1</sup> This has kept the proportion of female medical students at 30%. In Canada, the number of women in medicine has finally exceeded parity; in fact, in many schools women outnumber men. Interestingly, however, this is not true in all surgical fields. According to the Fédération des médecins spécialistes du Québec (FMSQ), in 2019, 45% of medical specialists in Quebec are female, yet only 10% of cardiovascular and thoracic and 19% of orthopedic surgeons are female. Certainly, there are substantial socioeconomic and cultural differences around the world, as well as entrenched rites with implicit bias based on gender in every system. It is no surprise that, when examined, implicit and explicit issues are at work in surgical fields.

As outlined in the white paper by the American Surgical Association on equity, diversity and inclusion, this issue needs to be approached at all levels.<sup>2</sup> Recruitment, funding, resource allocation and granting are each potential areas for improvement. Even gender bias in patient study selection itself must be improved.<sup>3,4</sup> Clearly, advancements in diversity overall will also lead to improvements in patient care, productivity and collegiality.

We also need to measure our progress and strive for continued awareness and improvement. We have tried to be active in documenting this progress at the *Canadian Journal of Surgery*. More specifically, 50% of submitted

articles on gender bias in surgery have been accepted for publication. We have also encouraged lively debate and commentary within our Discussions in Surgery section. The question going forward is, how can we do even better? At the journal, we are trying to determine better methods of filling the knowledge gaps pertaining to gender and racial equity as well as additional inclusion issues for all high-quality and methodologically sound research. Suggestions for online discussion areas as a platform for the early dissemination of ideas and results — even before peer review — will be considered. Highlighting topics with an ongoing forum is another possibility. We would like to solicit feedback from our readers across all genders, races, and groups in regard to potential mechanisms for continued growth in this effort.

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**Competing interests:** E.J. Harvey is the chief medical officer of Greybox Solutions, the co-founder and head of medical innovation of NXTSens Inc., the co-founder and chief medical officer of MY01 Inc., and the co-founder and director of Strathera Inc. He receives institutional support from J & J DePuy Synthes, Stryker and Zimmer, and he is a board member of the Orthopedic Trauma Association and the Canadian Orthopaedic Association. C.G. Ball declares no competing interests.

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