



LIVES2017: Is there a critical care gender gap?



In critical care medicine, women are not proportionally represented as authors, conference speakers or on guideline panels, said Geeta Mehta, MD, of Sinai Health System, University of Toronto, speaking at LIVES2017, the 30th annual congress of the European Society of Intensive Care Medicine, held in Vienna last month.

Mehta is one of the 23 co-authors of the recent paper (open access) on gender parity in critical care medicine published in the [American Journal of Respiratory and Critical Care Medicine](#), which has the support of 15 societies.

"Our critical care community is interdisciplinary, interprofessional and international", said Mehta, adding, "The richness of our perspective, narrative and experience contributes to what we contribute to critical care medicine. It is implausible for a homogeneous panel to anticipate the environments and context and settings and patients whereby [clinical] guidelines will be applied."

The content of clinical guidelines changes when panels are diverse, and the evidence for diversity benefit stacks up, noted Mehta:

- Scholarship by diverse research teams may be of higher quality and more impactful ([Valantine and Collins 2015](#))
- When evidence is limited, experience and beliefs have the most influence on content of recommendations ([Hopthrow Int Rev Psych 2011](#))
- Diversity protects against dominance by a single group, and can balance individual biases (Antman et al. [JAMA](#) 1992) <https://www.ncbi.nlm.nih.gov/pubmed/1535110>
- Multidisciplinary involvement may generate a sense of ownership that facilitates implementation of the guideline (Field & Lohr, [IOM](#), 1990)
- Gender-heterogeneous working groups produce higher quality science ([Campbell et al. 2013](#))
- Inclusion of women improves gender responsiveness of the health sector workforce ([Langer 2015](#))

Possibly had the panels that produced the Berlin definition of [ARDS](#) and the [Sepsis 3](#) definitions been more diverse, they would have anticipated their limitations, she suggested.

Women are still poorly represented on clinical practice guidelines committees. A recent study of women's representation on clinical practice guideline committees (n=428) from January 2012 to June 2016 ([Merman et al. 2017](#)) found that 25% of authors were female. Critical care representation was lowest at 16% female.

There are many examples of the gender gap, including conference speakers at conferences ([Sleeman et al. 2016](#)), authorship ([Jagsi et al. 2015](#)) peer review ([Helmer et al. 2017](#)) and participation in grant rounds ([Boiko and colleagues 2017](#)). Katherine J. Janssen and colleagues looked at authorship in adult critical care published in high-impact journals ([NEJM, JAMA, and AJRCCM](#)). They found that 21% of first authors were women, and 11.6% of senior authors. Victoria Metaxa [analysed female representation of speakers at conferences](#). The range was from 6-35%. However, when nursing and allied health were excluded, leaving specifically female physicians, only 6-16% of speakers were women.

Benchmarking

Benchmarking is one way to ensure parity, said Mehta. To mirror the gender demographics of critical care medicine, female physicians would comprise 30-40% of conference speakers. For example, around 37% of critical care fellows in the U.S. are women. At the University of Toronto, 35% of faculty are women, in the UK 33% of physicians in anaesthesia and intensive care medicine are female, increasing to 41% in those under the age of 40. In Canada 28% of critical care graduates are women, 35% in Australia (2007-14) and France and 42% enrolled in Scandinavia European Diploma in Intensive Care Medicine programme (2001-2017). In the U.S. around 40% of physicians who took the American Board of Internal Medicine critical care certification exam were female (2011-2015).

Why is there a gender gap?

It's possible that more women decline invitations to speak, but we don't know, said Mehta. Are invitations gendered? Probably, but it's not due to misogyny, it's unconscious bias. It's not due to a lack of talented women, emphasised Mehta. Citing the example of the Canadian Critical Care Trials Group (1994-2016), 41% of 280 publications had women as first author, and 32% of 276 publications had senior women authors. 7/17 (41%) of articles published in the New England Journal of Medicine had female first authors.

Possible solutions

Quotas may work. In the UK FTSE 100 companies were given a target in 2011 of having 25% [female boards](#), and the target was reached ahead of time. In the UK, the [Athena SWAN charter](#) is an initiative to recognise women's contribution and increase representation in universities in science, technology, engineering, maths and medicine employment in higher education and research) and many universities have signed up.

Public reporting may lead to change. The [30 percent club](#) is aiming for 30% of women on FTSE company boards. Catalyst is an international organisation that aims to accelerate progress for women through workplace inclusion. [Biaswatchneuro](#) tracks the percentage of women speakers at neuroscience conferences, while you

can submit photos of all male panels to <http://allmalepanels.tumblr.com/>.

Gender limitations happen because women don't have enough sponsors, there are not enough women conference convenors and we all have unconscious bias, said Mehta. Sponsors help us get places, introduce us, suggest us for positions. Men are more likely to have sponsors, and sponsors increase success.

Recommendations

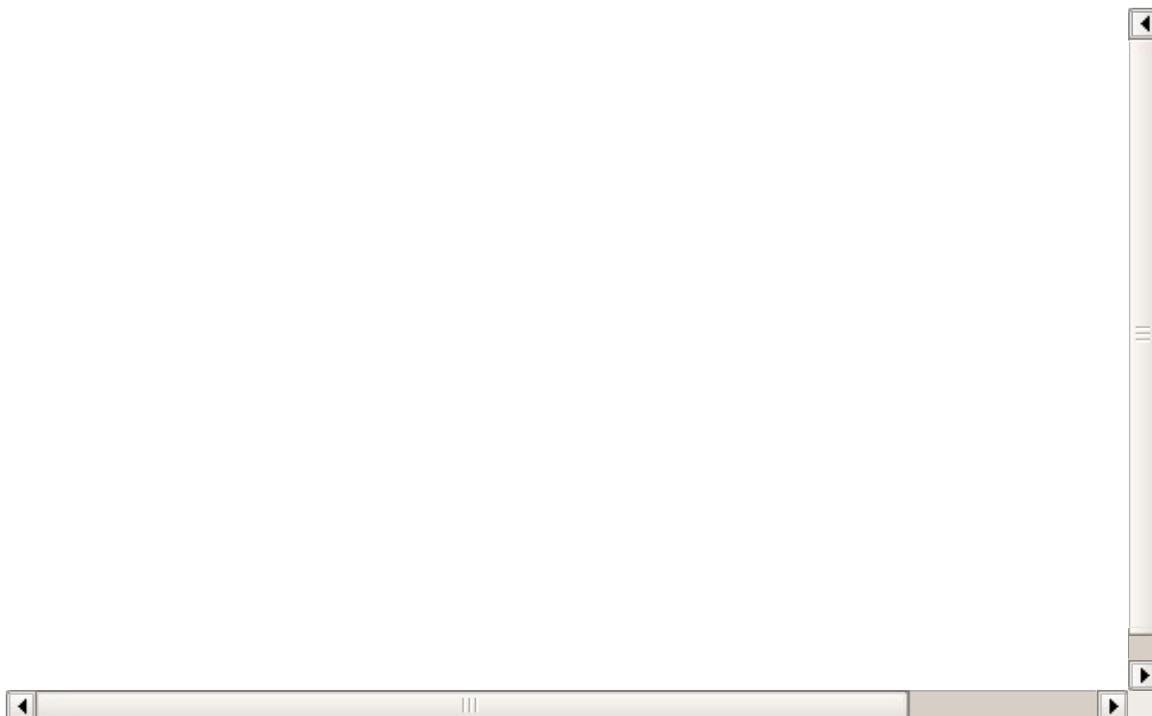
The authors of the gender parity article made 5 clear recommendations for critical care societies, to include establishing diversity policies for panels they commission, reporting of principles and methods of panel composition for professional document development, publically available metrics of women's representation on panels, gender parity policies for academic critical care with explicit targets to reflect the proportion of women in the specialty and training on diversity and unconscious bias for all critical care academics, particularly for those in leadership positions.

On unconscious or implicit bias Mehta recommended taking the [Implicit bias test](#) or [Canada version](#).

Mehta closed with two quotes:

Barack Obama: ["Imagine if you have a team and don't let half of the team play. That's stupid. That makes no sense."](#)

Justin Trudeau. Why do I have a gender balanced cabinet?



Published on : Fri, 6 Oct 2017