

Are there too few women presenting at emergency medicine conferences?

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ABSTRACT

Introduction There is a perception that women are under-represented as speakers at emergency medicine (EM) conferences. We aimed to evaluate the ratio of male to female speakers and the proportion of presenting time by gender at major international EM conferences.

Methods Conference programmes of the major English-speaking EM conferences occurring from 2014 to 2015 were obtained. The number of presentations, the gender of the speaker and the duration of each presentation were recorded.

Results We analysed eight major EM conferences. These included 2382 presentations, of which 29.9% (range 22.5%–40.9%) were given by women. In total, 56 104 min of presentations were analysed, of which 27.6% (range 21%–36.7%) were delivered by women. On average, presentations by women were 95 s shorter than presentations by men (23 vs 21 min 25 s).

Conclusions Male speakers exceed female speakers at major EM conferences. The reasons for this imbalance are likely complex and multifactorial and may reflect the gender imbalance within the specialty.

BACKGROUND

Historically, medicine was a male-dominated profession. In recent years, women represent an increasing proportion of the medical workforce.¹ Despite this, there is a perception that women are under-represented as speakers at scientific conferences.^{2 3}

We examined major emergency medicine (EM) conferences (English speaking associated with national bodies) to determine the ratio of female to male speakers and the proportion of time devoted to both male and female speakers in the published scientific programmes.

METHODS

Conference programmes between 2014 and 2015 were obtained from conference websites or conference organising committees.

We recorded the number of presentations, the gender of the presenter and the scheduled duration of their talk. For sessions with multiple speakers, we divided the time equally among those presenting. Sessions where the gender of the speaker could not be determined through local knowledge or Google search were not included. Session chairs were not included in the analysis. We excluded poster sessions, preconference and postconference workshops and industry-sponsored sessions.

We determined the proportion of EM specialists in each country associated with a national

Key messages

What is already known on this subject?

Concerns have been raised about the number of female presenters at medical conferences.

What might this study add?

This study demonstrates that a minority of speakers at emergency conferences are women.

conference through published data from representative bodies (eg, colleges).

RESULTS

We analysed eight conferences during the period 2014–2015 (table 1).

We found 2382 presentations, of which 741 (29.9%) were given by women. The proportion ranged from 22.5% (European Society of Emergency Medicine (EuSEM)) to 40.9% (Australian College of Emergency Medicine (ACEM)) (figure 1).

We identified 56 104 min of presentations, of which 15 495 (27.6%) were delivered by women. At every conference analysed, more speaking time was devoted to male speakers than to female speakers. The proportion of time devoted to female speakers ranged from 21% (EuSEM) to 36.6% (ACEM). Presentations delivered by women were on average 95 s shorter than presentations given by men (23 vs 21 min 25 s) (figure 2).

Table 2 shows the gender distribution of EM specialists in countries linked to the analysed conferences.

DISCUSSION

We found that women speak less frequently and on average for less time than men at EM conferences.

Gender differences in other professions are not uncommon, and reasons are multiple and complex.^{4–6} Conference organisers may seek to attract speakers who are renowned as academics, clinicians and those in visible leadership positions. Men, as a proportion, predominate in these roles² leading to an availability bias. Women may be less likely to volunteer to speak at conferences⁴ perhaps due to familiarity with public speaking, increased difficulty with finding time to attend conferences or even the perceived gender imbalance of the past conferences.

Table 1 Emergency medicine conferences analysed

Abbreviation	Title	Date of conference
SAEM	Society for Academic Emergency Medicine	13–17 May 2014, Dallas, Texas, USA
ACEP	American College of Emergency Medicine	27–30 October 2014, Chicago, Illinois, USA
AAEM	American Academy of Emergency Medicine	28 February–4 March 2015, Austin, Texas, USA
EuSEM	European Society of Emergency Medicine	28 October–1 November 2014, Amsterdam, the Netherlands
CEM	College of Emergency Medicine	9–11 September 2014, Exeter, UK
IFEM	International Federation of Emergency Medicine	10–14 June 2014, Hong Kong, China
ACEM	Australian College of Emergency Medicine	7–11 December 2014, Melbourne, Victoria, Australia
CAEP	Canadian Association of Emergency Medicine	31 May–4 June 2014, Ottawa, Canada

Figure 1 Proportion of speakers by gender. AAEM, American Academy of Emergency Medicine; ACEM, Australian College of Emergency Medicine; ACEP, American College of Emergency Medicine; CAEP, Canadian Association of Emergency Medicine; CEM, College of Emergency Medicine; EuSEM, European Society of Emergency Medicine; IFEM, International Federation of Emergency Medicine; SAEM, Society for Academic Emergency Medicine.

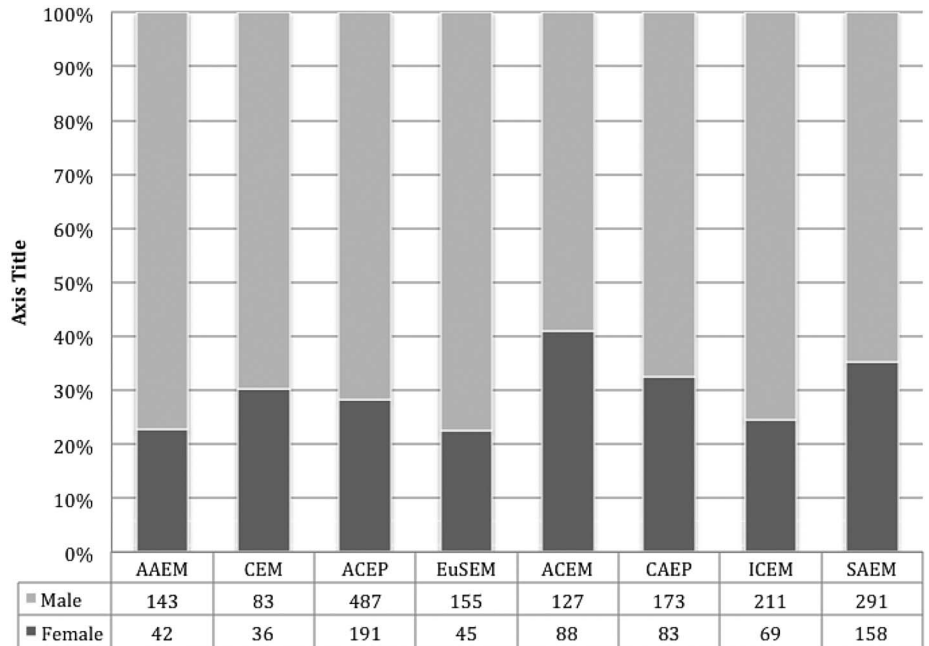
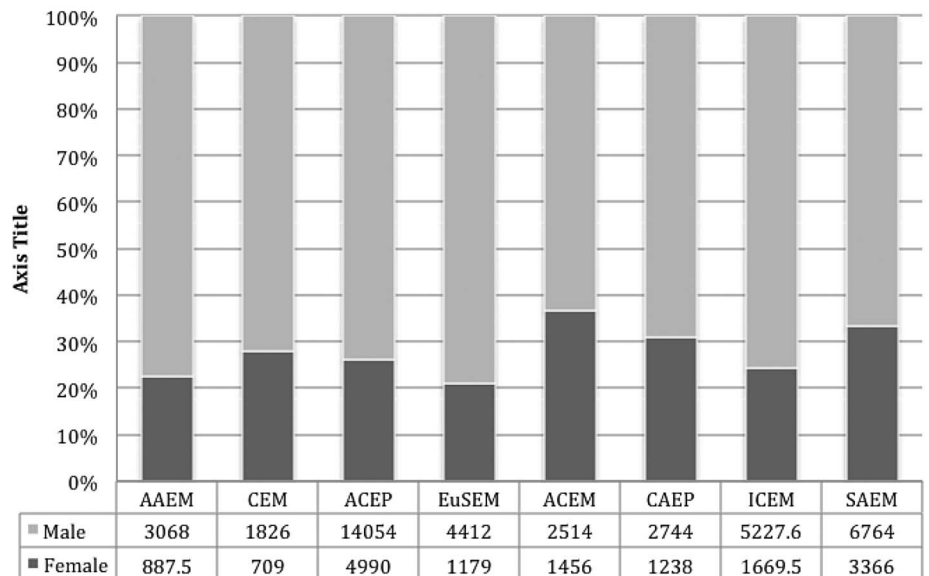


Figure 2 Proportion of time spent talking by gender. AAEM, American Academy of Emergency Medicine; ACEM, Australian College of Emergency Medicine; ACEP, American College of Emergency Medicine; CAEP, Canadian Association of Emergency Medicine; CEM, College of Emergency Medicine; EuSEM, European Society of Emergency Medicine; IFEM, International Federation of Emergency Medicine; SAEM, Society for Academic Emergency Medicine.



However, the finding that conference gender balance reflects the proportion of women accredited in the specialty argues that the ratios are a function of the workforce and not a result of the conference organisation process. This represents a more

fundamental gender imbalance in the medical hierarchy, the reasons for which are beyond the scope of this paper. However, it can be argued that a different gender balance at conferences may attract women to the specialty.

Table 2 Proportion of female EM specialists by country

Country	Qualified female EM specialists (%)	Female speakers (%)
USA ⁴	23.5	27.9
Canada ⁵	24.6	32.4
UK ⁶	26.5	30.3
Australia ⁴	30.0	40.9
Mean	26.2	32.9

EM, emergency medicine.

This study has limitations. We sampled a single year and thus we are unable to determine whether these findings represent a year with unusual findings or whether these data are part of an ongoing trend. The conferences samples represent the higher impact conferences in EM such that we cannot extrapolate to other national, local or regional conferences. We determined scheduled speaking time as opposed to actual speaking time.

Conferences should be aware of and monitor gender balance among invited speakers. A number of strategies have been suggested to achieve this including the ‘Ten simple rules’ as suggested by Martin.³ In addition, there is evidence that convening committees that contain women are more likely to invite women.^{7 8}

CONCLUSION

Women are in a minority as presenters at EM conferences. On average, a female speaker speaks for less time than a male

speaker. Those attending, speaking or organising major scientific conferences should consider gender balance.

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Contributors SDC, RB, IB, KH, MJ and NM conceived and designed the study. All authors sourced, analysed and recorded data. All authors contributed to the manuscript creation and revision. SDC takes responsibility for the paper as a whole.

Competing interests None declared.

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REFERENCES

- 1 General Medical Council. *List of Registered Medical Practitioners—statistics*. General Medical Council. (cited 30 May 2015). http://www.gmc-uk.org/doctors/register/search_stats.asp
- 2 Horton C. Female healthcare professionals held down by glass ceiling (cited 30 May 2015). <http://www.theguardian.com/healthcare-network/2012/nov/28/female-healthcare-professionals-glass-ceiling>
- 3 Martin JL. Ten simple rules to achieve conference speaker gender balance. *PLoS Comput Biol* 2014;10:e1003903.
- 4 Jones TM, Fanson KV, Lanfear R, et al. Gender differences in conference presentations: a consequence of self-selection? *Peer J* 2014;2:e627.
- 5 Isbell LA, Young TP, Harcourt AH. Stag parties linger: continued gender bias in a female-rich scientific discipline. *PLoS ONE* 2012;7:e49682.
- 6 Bismark M, Morris J, Thomas L, et al. Reasons and remedies for under-representation of women in medical leadership roles: a qualitative study from Australia. *BMJ Open* 2015;5:e009384.
- 7 Casadevall A. Achieving speaker gender equity at the American Society for Microbiology General Meeting. *MBio* 2015;6:e01146–15.
- 8 Casadevall A, Handelsman J. The presence of female conveners correlates with a higher proportion of female speakers at scientific symposia. *MBio* 2014;5:e00846–13.