

To be or not to be...

Fiona E Karet Frankl

Last year, at their request, I ran a session with a group of medical students who wanted to discuss potential career choices including craft specialties and clinical academia. I was dismayed when a female student recounted how she had been advised by a senior male surgeon not to choose a career in surgery—"surely you will want to have a family?" he asked. I have since heard almost identical stories from colleagues in several other medical schools, even including a similar conversation reported by a first year preclinical student.

In *PMJ*, Hui-Ling Kerr and colleagues have added some new data to the well-accepted body of evidence that women are less likely to choose a career in surgery than are their male equivalents.¹ The Royal College of Surgeons' (RCS) most recent statistics indicate that in 2014, while 30% of surgical trainees were women, this figure translated into only 11% of consultants. That said, the figure has risen from just 3% in 2001.² There is variability among subspecialties—for example fewer than 7% of neurosurgeons are women, compared with just over 26% in paediatric surgery.

The results from Kerr *et al's* questionnaire, while involving only a small subject set, add further colour to a much larger canvas: that of problems with recruitment and retention of women across all science, technology, engineering, mathematics and medicine (STEMM) subjects. Indeed, consideration of gender in the workplace is not confined either to academia or to the health professions. Dame Helena Morrissey's 30% club aims to see a minimum of 30% women on Financial Times Stock Exchange 100 company boards by 2020 (as I write this, the number is 26%, up from 12.5% in 2010).³

There cannot be a medical school or division across the country still unaware of the Athena SWAN Charter, to which higher education institutions have been able to sign up for over 10 years, and whose Bronze-level, Silver-level and

Gold-level awards are widely sought as a measure of institutional support for women's careers. Indeed, SWAN awards are already a requirement for some forms of National Institute for Health Research funding; the Research Councils have talked about making similar rules. University arts and social sciences departments now have a similar scheme, and membership organisations are about to become eligible.

Analysis of the demographics within an organisation, and its internal culture, are essential first steps to trying to remedy any unwarranted imbalances. For example, the tipping point at which women 'disappear' from career ladders may be different in different disciplines. The RCS suggests that longer career trajectories for women, who for family reasons may train less than full-time, can explain their gender imbalance.

'Time will cure the problem', say some. But when I started medical school in 1980, 52% of my class was female, but some 35 years later, only 13% of my professorial cohort is. We speak of a 'leaky pipeline', but further discussion often focuses on the water rather than the pipe. From the simple perspective of losing a significant proportion of talent in our future workforce, we cannot afford to maintain stereotypic attitudes and rigid regimens where they currently exist.

It is notable that the limitation of weekly working hours in the clinical world has done much less to change gender demographics in clinical specialties than many would have hoped. So what exactly *are* the factors that prevent women from achieving their full potential, whether in surgery or elsewhere, and in some cases not even be willing to engage with the 'establishment' that they encounter? It is undeniable that biology plays a part. Although the introduction of shared parental leave in the UK may well help, women's careers are likely to be interrupted for longer—though chronic sleeplessness in homes with small children will of course not just affect women!

The often unconscious (also termed 'implicit') biases that label women as somehow less able, committed or effective if they have a career break, or that affect

other diversities, may be lessened following specific implicit bias training, but there is no good evidence yet to suggest that the effects of such training are long-lived.⁴

It would also be a mistake to assume that having children is the only barrier. Good role models may be few in number or insufficiently visible. A lack of inspiring role models can have a big effect, and this makes the first steps towards changing trainee and student minds more difficult to achieve. In my organisation, we work hard to try and put together appropriately balanced seminar speaker lists, but find that women invitees may be less free to travel and therefore less likely to accept invitations. At the very least, we can ensure that sessions are chaired by as diverse a team as possible.

One thing that is universal, however, is that there is no single factor that if fixed, would make gender imbalance disappear. A long-hours working culture may not be easy to change, but increasing flexibility and or job-sharing may help. So also may schemes to provide more support for anyone who has caring responsibilities (which increasingly may be for older relatives) and to welcome returners from career breaks. We and others also put much effort into support (including peer-support networks) and mentoring for those at the mid-career level—in clinical academia, the 'leakiest' stage. In addition outreach activities, particularly to schools, can be important to lessen stereotyping at a much earlier stage.

But above all, those I talk to who are working on Athena SWAN-related initiatives within STEMM and in related organisations such as the Academy of Medical Sciences and the Medical, Dental and Veterinary Schools' Councils, all agree that senior male engagement with trying to effect cultural change has been, and continues to be, very important. The attrition of women (or any other form of under-representation) is not a women's problem to be solved by women. It needs all of us to work together. The worst outcome for an organisation thinking about trying to address diversity issues, which of course extend far beyond gender, is the assumption that it's all someone else's responsibility and that tackling these problems is just a tick-box exercise.

Recognition of missed opportunity and a real desire to change the culture in an organisation are critical. After all, many of us spend more of our waking hours in the workplace than we do in our own homes.

Correspondence to Professor Fiona E Karet Frankl, Cambridge Institute for Medical Research, Cambridge Biomedical Campus Box 139, Hills Road, Cambridge CB2 0XY, UK; fek1000@cam.ac.uk

Embedding new practices, new values and collecting feedback and impact data may not be straightforward, but to realise the potential for the greatest number, the investment is surely worth it.

Competing interests None declared.

Provenance and peer review Commissioned; internally peer reviewed.



CrossMark

To cite Karet Frankl FE. *Postgrad Med J* 2016;**92**:569–570.

Received 4 July 2016

Revised 7 July 2016

Accepted 9 July 2016

Published Online First 15 August 2016



► <http://dx.doi.org/10.1136/postgradmedj-2015-133273>

► <http://dx.doi.org/10.1136/postgradmedj-2016-134094>

Postgrad Med J 2016;**92**:569–570.

doi:10.1136/postgradmedj-2016-134346

REFERENCES

- 1 Kerr H-L, Armstrong LA, Cade LE. Barriers to becoming a female surgeon and the influence of female surgical role models. *Postgrad Med J* 2016; **92**:576–80.
- 2 Royal College of Surgeons. *Women in surgery statistics*. <https://www.rcseng.ac.uk/surgeons/supporting-surgeons/women-in-surgery-stats> (accessed 2 Jul 2016).
- 3 The 30% Club. <http://30percentclub.org/> (accessed 2 Jul 2016).
- 4 Equality Challenge Unit. *Unconscious bias in higher education: literature review*. <http://www.ecu.ac.uk/publications/unconscious-bias-in-higher-education/> (accessed 2 Jul 2016).

PRESS RELEASE

POSTGRADUATE MEDICAL JOURNAL

US female physicians reimbursed significantly less than male colleagues

Commonly held theories of why pay gap exists need to be revisited, say authors

Female physicians are reimbursed significantly less than their male counterparts, even adjusting for how hard a physician works, their productivity and years of experience, finds a new study—one of the largest carried out in recent times—published in the online edition of ***Postgraduate Medical Journal***.

Female physicians were reimbursed around US \$18,677.23 less than their male colleagues in 2012, and were paid less across 13 specialties, especially nephrology, rheumatology, and pulmonary medicine.

Pay inequalities have been shown for decades, but many theories and studies have focused on analyses of data—usually obtained from surveys—that are susceptible to bias and/or not adjusted for other factors that may have influenced results.

This latest paper, by researchers from North Carolina, focused on objective and non-self-reported data from Medicare—the largest insurer of patients in the US—on over 3 million publicly available reimbursement claims received by male and female physicians across 13 medical specialties in 2012.

In the unadjusted analysis, the overall reimbursement differential for female physicians was US \$34,125.68 less than their male colleagues, and they earned less in 11 of the 13 specialties.

Furthermore, the study adjusted for factors that have been proposed to be the reasons for gender pay inequality: number of hours worked, productivity, and years of experience.

In the adjusted analysis, the overall reimbursement differential was US \$18,677.23 less for female physicians, compared to their male colleagues, and they earned less in 11 of the 13 specialties.

Nephrology displayed the largest gap with a US \$16,688.96 pay differential, followed by rheumatology (–US \$15 405.54), pulmonary medicine (–US \$11,017.79), and internal medicine (–US \$10 850.34). The narrowest gaps were found for haematology (–US \$10 115.08), medical oncology (–US \$3,970.50), and critical care (–US \$4,360.05).

Even though the study is unable to answer why female physicians are reimbursed less than their male counterparts, the findings show that “the commonly held theories of why monetary disparities exist need to be revisited,” say the authors.

As with any observational study, no firm conclusions can be drawn about cause and effect. The authors also point to some study limitations, but say the size and type of data analysed strengthens their results.

They also call for more study of other data sets, but say they have no reason to believe that the ensuing results would be any different.

Only then, they conclude, can we have “the most accurate understanding of the reimbursement inequity, and perhaps be guided towards a solution that can reverse this decades-old injustice.”

A second article published in *Postgraduate Medical Journal* shows that surgery remains an unpopular career choice for female junior doctors and medical students in the UK, mainly due to work-life balance issues, followed by few female surgical role models and some perceived sexual discrimination.

The authors say the results from the small survey—that involved 96 medical students and junior doctors at two UK hospitals in 2012—provides a snapshot of the main reasons why females are less likely to pursue a career in surgery, compared to their male colleagues.

In a linked editorial, Professor Fiona Karet Frankl from the University of Cambridge says that despite the small sample size, the results “add further colour to a much larger canvas” on problems with recruitment and retention of women across STEMM (science, technology, engineering, medicine and maths) subjects.

She explains that “there is no single factor that if fixed, would make gender imbalance disappear,” and stresses the importance of “senior male engagement with trying to effect cultural change.”

She recommends increasing flexibility or job-sharing, providing schemes to those with caring responsibilities, welcoming returners from career breaks, and supporting and mentoring women at mid-career level, the ‘leakiest’ stage.

Outreach activities, particularly to schools, can be important to lessen stereotyping at a much earlier stage, she adds.

Journal: *Postgraduate Medical Journal*

Research paper 1: Equal Work for Unequal Pay: The Gender Reimbursement Gap for Healthcare Providers in the United States doi 10.1136/postgradmedj-2016-134094

Research paper 2: Barriers to becoming a female surgeon and the influence of female surgical role models doi 10.1136/postgradmedj-2016-133273

Editorial: To be or not to be... doi 10.1136/postgradmedj-2016-134346