Letters

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Women in medicine

Amanda Howe's editorial in February's Journal[1] raises and discusses important issues around the implications of the 'feminisation' of the GP medical workforce. However, I think she over-emphasises the benefits of women doctors over men. A recent careful meta-analysis[2] of women in medicine concluded that there were no gender specific competences, and there is conflicting evidence that men and women practice medicine differently. However, patients may have gender-shaped expectations that could interfere with doctor–patient communications.

Most GPs in the third age (over 50 years) are men working full-time, while newly qualified GPs are men and women (30:70%) wishing to work flexibly and hold a portfolio of roles.[3] A pilot survey of third-age female GPs in Wessex has shown a striking intention to retire by 55 years of age. We are enlarging the survey, but, if confirmed, it could have a significant impact on workforce planning.

Amanda is right to bring the gender issue to the fore, especially after the widely published recent comments of the President of the Royal College of Physicians, but both sexes must be careful to look at these complex and important issues without allowing personal perception to overly influence the debate.

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Conflict of interest

A man.

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3. Scallan S, Smith F. National workforce demographics: the challenge for educational planning and deaneries. *Educ Prim Care* 2006; **17(6):** 535–540.

We read with interest Amanda Howe's response[1] to the papers by Gravelle[2] and Rossdale[3] in February's Journal. Our own survey of all GPs in Scotland based on a relatively high response rate (67%) found that women GPs at all stages of their careers work significantly fewer hours than men.[4] As importantly, they were much less likely to become involved in non-GMS educational and managerial activities (0.73 versus 1.1 sessions weekly, $P<0.01$) with serious consequences for the development of the speciality.

Additionally, if the Rossdale's findings on out-of-hours referrals are also mirrored in-hours then the impact on secondary care is likely to be significant.[3] Empathy and communication skills are important, but so is the ability to live with risk in general practice as is the ability, under pressure, to 'clear the decks'.

We found the median age of GPs in Scotland to be between 45 and 50 years. They were mostly male and working full-time, as are those aged between 50 and 60 years. This 'wave' of full-timers is shortly to crash on the shores of retirement, with those behind them increasingly part-time. While we agree that it is very important to have women in general practice, someone will have to look after the patients 10–20 years from now. On current recruitment and retention, given the likely female work pattern and without big imports from other countries our feminised workforce will not cope with future demands.

We need to accept that we will either need to employ more doctors in primary care in the future to make up this demographically-induced shortfall, find ways of allowing women to work longer hours and partake in the full range of general practice activities, or encourage more men to consider a career in primary care.

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2. Gravelle H and Hole A. The work hours of general practitioners: survey of English GPs. *Br J Gen Pract* 2007; **57(535):** 96–100.
3. Rossdale M, Kemple T, Payne S, *et al*. An observational study of variation in general practitioners' out-of-hours emergency referrals. *Br J Gen Pract* 2007; **57(535):** 152–154.
4. McKinstry B, Colthart I, Elliott K, Hunter C. The feminization of the medical work force, implications for Scottish primary care: a survey of Scottish general practitioners. *BMC Health Serv Res* 2006; **6:** 56.

Author's response

The strategies suggested by McKinstry and Colthart have my support — the issue of encouraging women and men to be GPs is a duty of all those who advocate for the discipline, and enabling women to take part in the full gamut of possibilities of their chosen career is only fair. I also accept Smith's point that 'women and men are different', but the position of the editorial was to counteract the oversimplistic argument that 'more women equals more problems'. Planning for fewer hours in front-line practice over a working lifetime for all doctors fits the current preferences of younger doctors for a portfolio career. Mentoring students and junior doctors to aspire to a full professional application of their training

needs to develop women as well as men, especially in a situation where the majority of national leaders are still male. The main point is that the system needs to make the best of us all.

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Survival statistics

The article by Neal *et al*[1] looking at survival from cancer by fast track referral is of considerable interest. It has some nice looking survival curves. However, we feel that they raise some issues around the appropriate interpretation and display of survival data, particularly when there are many censored observations, as is the case here.

The main points about the data display are:

- Table 2 contains mean survival times with standard errors and confidence intervals. We appreciate that the statistical package SPSS produces these as routine, but that does not mean they should be quoted, as this raises the question of how to interpret a mean when some of the data are censored? This is particularly apparent in the case of the urgent referrals for prostate cancer, in which there was only one death, and yet somehow a standard error and confidence interval was calculated. It would perhaps be more appropriate to refer to this as mean follow-up time. For this group the mean survival is given as 755.7 days, and yet Figure 3 suggests this will be exceeded by no more than 3 (out of 45) censored survival times.

- The survival curves have different starting points for the y-axis, giving the impression, for example, that mortality from prostate cancer is comparable to the others. A better plot is to show the cumulative mortality curves showing increasing curves, which all start at zero and have the same scales.[2]

- While it is a good idea to show the censored data on the survival curves, in the paper one of the labels for the curves is an open box, which is not used in the figures.

- Figures should always indicate sample sizes, and these do not. In order to improve the plots one suggestion is to give the numbers at risk along the x-axis. This would then make apparent why some of the curves drop suddenly to zero, the reason being the longest survival time is a death.

At a more fundamental level is the issue of when is a non-significant result indicative of no difference. Lack of evidence to support a difference is not evidence of no difference. A non-significant difference in, say, prostate cancer survival, does not necessarily mean 'no difference' as stated in the abstract. One should present an estimate of the hazard ratio and a confidence interval, and if this confidence interval is narrow enough to exclude a clinically meaningful difference, only then one can conclude there is no difference.

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Authors' response

We are grateful to Campbell and Freeman for raising issues relating to the presentation of data in our paper.[1] Interestingly, their comments do not change our findings or their interpretation. We would like to respond to the points they raise in turn.

We acknowledge that survival data are positively skewed and therefore reporting a mean survival time is not always the most helpful statistic. We do not necessarily agree that this is best called 'mean follow-up time' as they suggest, but feel that a median survival time may do more justice to the data.

We agree that the four figures showing survival have different starting points for the y-axis, which can cause confusion. However the axes were clearly labelled and should therefore be easy to interpret. It is a question of style for a particular journal as to whether this is the norm or not. We originally chose to start the axes at different points in order to demonstrate the data as clearly as possible and because we did not directly compare differences between the four cancers. We are not convinced that there is consensus within the statistical community that cumulative mortality curves are better as they suggest.

We are grateful for their diligence in spotting the absence of open boxes on the figures. These appear to have been lost in final production of the paper, but their absence does not detract from the main messages from these data.

Again we are grateful for their suggestion of including the number of patients along the x-axis, and agree that in some circumstances this can add clarity to survival curves. However we do not believe that it has become routine practice. A quick look through recent similar papers has confirmed these beliefs. Perhaps it is time for journals to lay down explicit guidelines about the presentation of such data?

Lastly, they raise the issue of when a non-significant result is indicative of no difference. Certainly it is possible to calculate a hazard ratio and a confidence interval, but this should not detract from the more important question of when a statistical difference equates to a clinically meaningful difference.

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